Theoretical conceptions on the theory on health education. Systematic review

Abstract

Objective. To identify the theoretical conceptions of health education (HE) reported by recent scientific literature.

Methodology. Systematic review without meta-analysis of the scientific literature published on the theory on HE between 2000 and 2010 in Spanish, English, and Portuguese in PubMed, Elsevier, and SciELO. This included publications developing at least the theoretical categories on HE: conceptual development, history, current situation, as discipline, teaching and research.

Results. Some 58 articles on HE were analyzed. The main categories contained in the articles were those of current situation and conceptual development. The definition and conceptualization of HE are diffuse. Most authors state that the term HE lacks identity and that tension exists between this concept and that of Healthcare Promotion.

Conclusion. Processes in HE are not sufficiently qualified.

Key words: health education; review; journal article.

Concepciones teóricas sobre la teoría en Educación para la Salud. Revisión sistemática

Resumen

Objetivo. Identificar las concepciones teóricas de la Educación para la Salud (EpS) reportadas por la literatura científica reciente.


Resultados. Se analizaron 58 artículos sobre EpS. Las principales categorías contenidas en los artículos fueron los de situación actual y desarrollo conceptual. La definición y la conceptualización de EpS son difusas. La mayoría de los autores afirman que el
Introduction

We educate for health with the purpose of accomplishing a healthier and more equitable society, where its individuals can reach and enjoy well-being, experience health and happiness, which permits their enjoyment of physical, mental, and social capacities, remaining the greatest amount of time possible free of disease or of its sequelae. Accomplishing well-being is fundamental to manage individual and community development, amid respect for life, culture, environment, and society. However, in spite of how important Health Education (HE) can be to accomplish these purposes, there are indications that HE is encountering poor development and conflict or confusion is often present with the term Healthcare Promotion (HP), a situation that limits the potential of HE as a promoter in accomplishing and maintaining the well-being of individuals in their society. One way of understanding the current concept of HE is by identifying the theoretical development of the HE concept in scientific publications during recent years.

Methodology

Study design. A systematic search was conducted of scientific literature to select articles that develop some theoretical component (see inclusion criterion) on “Health education” published between January 2000 and June 2010.

Data sources. Identification of publications was made through worldwide data bases; Medline through the PubMed search system and Elsevier via Science Direct, as well as the search of regional and Latin American publications through the SciELO data base accessing from the interface of the Salud Colombia Virtual Library.

Description of the bibliographic search. The equation of information search in Science Direct considered in all fields the topic: health education AND (theory OR curriculum [Title]). The search was refined by the categories: ‘education educational research’ OR ‘education scientific disciplines’, by subareas: ‘education educational research’ OR ‘health care sciences’, and by type of document: article or review. For the search in PubMed the
following equation was introduced: “Health Education” [Mesh] AND (theory OR curriculum [Title and Abstract]). Finally, for the search in SciELO the following equation was used: [Health education AND theory OR curriculum]. In the three data bases, the search was restricted by language of publication, in English, Spanish, or Portuguese and by time of publication between January 2000 and June 2010. Additionally, inquiries were made with HE experts on representative authors in the area, who had theoretical developments on the conceptualization of HE; thus, specific searches were made without the restriction of publication period to include some from relevant publications by authors like Whitehead D, Tones K, Gazinelli M, and Nutbeam D.

Article selection process. Source of information references were selected by searching in indexed publications in the data bases mentioned. Publications were included if they developed at least one of the following theoretical categories on HE: conceptual development, history, current situation, HE as discipline, teaching of HE, and research on HE. The bibliographic search was concluded by excluding publications where the main interest was HE as a tool for interventions, strategies, or programs of education in health, or evaluation of methodologies employed in HE, for example, this review did not seek to consider articles of the following nature: ‘Perceptions of mothers premature infants about the experience in a health education program’, or ‘Results of the Cuban strategy of education on diabetes after 25 years of experience’, among others. The bibliographic search yielded a total of 3952 articles (without excluding duplicate references, finding 1951 references in PubMed, 1722 in Science Direct, and 279 in SciELO). The article selection process consisted of reading the title, followed by the abstract, and – if justified – the complete text. Based on the reading of the title and abstract, 130 articles were preselected, which potentially satisfied the inclusion criterion. The final selection of the articles was made by verifying exclusion criteria; finally, upon verifying inclusion criteria of the complete texts obtained, it was determined to include 68 references, 56 of them the product of the systematic review; the rest were considered conceptual frame or background and were not part of the systematic literature search.

Information Extraction. Information extracted was consigned in a data base constructed on Microsoft Excel version 8.0. The information grid included the following variables: article identification code (assigned by the author for purposes of information management), title of the article, author, place and year of publication, journal, type of article (research results, theme discussion, review), key words described in the article, main categories, and comments.

Results

The articles selected were classified according to the base categories and emerging categories arising from the review of the texts. The category of HE conceptual development included the emerging categories: pedagogical models in which HE is inscribed, the concept of education and the concept of health; the category current situation of HE: discussion of the theoretical development, results, identity, importance given to HE, postures regarding HE, importance given to the evidence in HE and to the contents of HE; in the category of teaching of HE the emerging categories appeared: programs where HE is given, curriculums, didactics, content and target population. For the rest of the categories: history of HE, HE as a discipline, and research on HE, no emerging categories were found in this review.

The following presents a description of the theoretically relevant findings encountered during this review by following the categories described. Organization of the contents was conducted with pedagogical purposes; it does not answer to value judgments on their importance. The first part describes the generalities and definitions of HE; the second, poses the tension existing between the concepts of HE and HP; the third, describes the main pedagogical models employed in HE; the fourth, states what the authors recognize
as the ‘duty of being’ of HE; the fifth, describes the purpose of HE; the sixth part proposes some considerations on theory Vs. practice in HE; the seventh, the curriculum of HE; and finally, the eighth part challenge some methodological alternatives employed in HE activities.

**HE Generalities and definition**

Health Education originated from the hygienist movement of the mid 19th century. According to some authors, social changes and studies on childhood have given way to what we now call Health Education. In 1998, Nutbeam defined the term of Health Education in the Glossary of terms of the WHO: “HE comprises a conscious construction of learning opportunities involving some form of communication destined to improving health education, improving knowledge (health literacy), and including the development of abilities for life conducive to individual and community health”. Tones (2002) introduced the importance of healthy public policies on HE and marked a clear difference between HE and HP, proposing that the technical definition of HE could be: “an intentional activity designed to elevate health, or learn about the disease, seeking individual behavioral changes”.

However, the author clarified that this last part is not the fundamental purpose of HE. In contrast to Tones, Breton et al., (2007) warn that in the “new Public Health”, the rush to promote strategies centered only on policies may be taking away importance to health education, given that these movements are centered on modifying the individual health determinants, but leave aside strategies aimed at the social and environmental determinants that can be greater and which should also be addressed with strategies of HE. Other authors also warn that the inclusion of international collaboration should be promoted toward maintaining the health of individuals and populations, preserving the sensitivity for the cultural diversity, society, and history of societies. An example of international collaboration is the conformation of one of the world’s leading HE organizations: the International Union for Health Education (IUHE), today called the International Union for Health Education and Promotion (IUHEP); each year, this entity gathers global experts on HE and HP, and currently proposes the operationalization and challenges of HE and HP. In this organization, the Ottawa Charter continues defining the guidelines of HP actions in all IUHEP member states.

On the importance of HE, in general, it is suggested that HE is an essential Public Health component, and – in this sense – it has been stated that: “Education of the individual, family, and collectivity on health problems is an essential condition for all public health professional action”. And where the public health conscience is conceived as a general human competency that enables the development of personal and community autonomy.

**Tension between two paradigms: Health education and Healthcare Promotion**

Evident tension exists between the concepts of HE and HP. Several authors state that HE is of great importance; however, many of them criticize the lack of identity because of the way the definitions for HE and HP are intermingled. For example, an investigation conducted with the participants of the 16th World Conference on Health Promotion and Education, a conference gathering global HE and HP experts, indicated that only seven of 11 members identified HP and HE as different from one another. On the contrary, the remaining group proposed integrating into one same definition HP, HE, and patient education. In light of this panorama, many authors criticize the lack of identity of HE and HP, among them Caraher (1998) warned that “Healthcare Promotion is an umbrella term” and Whitehead (2007) declared that “Healthcare Promotion in many cases is dead script”, alluding to the little importance currently given to HE and HP principles, and suggests that the lack of identity between HP and HE is not adequate to develop [nursing] health activities.

Rather, the author proposes seeing them as complementary issues, but warning that these
concepts are not inter-dependent, but instead should be seen in inter-related manner. An additional aspect on the concept of HE is that it has remained relatively constant along the decades, but not so for HP, a situation that implies additional challenges when seeking to integrate them, without affecting each of their identities; more so remembering that both concepts are universal constructs related to health. In general, the academic community requires greater clarity around the theoretical construction of the concepts of HE and HP, given that many consider HE a purely instrumental matter of HP, where it is seen as: a) a tool to accomplish Healthcare Promotion, b) a potential resource to accomplish HP, c) a component of HP designed to accomplish learning related to health or to disease, or d) a strategy to implement “Education for Health”.

Pedagogical models employed in health education teaching-learning processes

It was evident that two predominant pedagogical models exist in HE teaching-learning processes: the traditional and the critical. The traditional educational model seeks the transference of experiences, knowledge from the educator to the pupil; the greatest importance lies on the contents taught: “as more is taught, more is known”. In contradistinction, critical pedagogy emerges as an alternative model widely developed by Latin American authors; it is based on dialogue and understands HE as a sensitivity process where change or transformation is conceived as a philosophy of the emancipator subject. For many authors, tendencies in HE should be aimed at this second model, evidently influenced by the pedagogy of Paulo Freire, also known as critical pedagogy, renovated, problematizing, or liberating.

The importance of educational proposals of this nature are based on reflection, critique, involvement, and awareness of individuals in their health disease processes. A pedagogical model that permits students active participation in the learning process, which may contribute to the development of human abilities of both as users and workers within health services. Calvatti de M et al., also found that this type of pedagogy is useful for participative planning and decision making as HE strategies to promote autonomy, valorization, technical competency, and the construction of team work, within its own learning path; it has even been used as a tool for conflict resolution. Additionally, “the knowledge dialogue”, described in some articles, is also inscribed within the critical pedagogy, understanding HE as another alternative communicative process, centered on the human being as a conscious being, capable of understanding, critical, autonomous, free, and creative.

The ‘duty of being’ of Health Education

Diverse conceptions were found of the ‘duty of being’ of HE, many of them complementary: a) HE must offer education focused on the patient (a process that permits individuals to make informed decisions related to their health and behavior), counting on the participation from groups involved or object of the intervention in HE, b) HE must be seen as a strategy to guarantee the dignity of the human being through Healthcare Promotion with dialogical strategies of education in health, respecting human beings in their dignity, liberty, and autonomy, observing and guaranteeing the fundamental human rights and contributing to the humanization of the spaces where health services take place, c) HE must be conceived as education for life; a concept that implies the collective construction of knowledge and the life project, bearing in mind that HE should not be separated from the medical action, d) HE must be a health educational gathering, this being a quintessential cultural meeting that requires permanence and insistence on actions to accomplish the sense of belonging due to health, finally, e) HE must be considered as the guiding core of the development of the ‘public healthcare conscience’, conceived as a general human competency that enables the development of autonomy and personal and community empowerment, in other words, self-care, frameworning current efforts of preventive health.
In general, HE is understood as a transverse process to the condition of human being, which transcends the purely operational and instrumental conception of HE. According to the points mentioned, ‘the duty of being’ of HE is not only a tool to prevent disease or improve health. HE is part of a much broader concept aimed at the search for individual and collective well-being, where the subject and the social groups assume active and leading roles.

**Purpose of Health Education: between change of behavior Vs. liberty and autonomy**

The articles addressing the purpose refer that HE is aimed at improving health, protecting health, and promoting the quality of health services. Also, it is mentioned that the purpose of HE is to contribute to overcoming barriers in the multidimensional promotion of well-being. This is how the existing discussion is perpetuated between HE seen as an opportunity to promote behavioral change or as a strategy promoting the development of liberty and autonomy.

On HE as promoter of behavioral change, Lenth proposes that HE is: “the set of learning experiences planned to facilitate voluntary change of behavior”. Most theorists in favor of this position retake the classic models of behavioral change and suggest different approaches to accomplish it, like education, persuasion, manipulation, and promotion of healthy life-styles. On the contrary, critics of the concept of “life style”, like Korp (2008), suggest that the interpretation of HE as a simple tool to promote behavioral change is reductionist, making the nature of health and the priorities of Healthcare Promotion seem insignificant and superficial. He also states that the concept of HP that began in 1980 has been directly responsible for the critiques of HE centered on blaming people for their behaviors, basing itself on a preventive model of HE, ignoring the need to propose broader determinants of health, like – for example – equity. In the same sense, Corina et al., (2000) explain that HE is a part and parcel of the dominant medical model. And, hence, in the current model, HE has its reason for being in the disease; it is in this sense that HE has been employed as a mechanism of social control by virtue of its action on society, once more, blaming the subject for his disease. For this reason, according to Corina, HE must transform into another: into an “education for life” and stop being merely training for the disease. Thus is how the author insinuates the need to change the current biomedical model. The discussion is joined by promoters of the application of the principles of ethics [bioethics] to HE, which refer to the necessity of including universal principles like justice in health systems, only accomplished according to León C. (2008) when what is sought is to promote autonomy, liberty, and personal responsibility.

**Theory and practice of Health Education: two sides of the same coin unknown to each other**

According to Whitehead, a “war” paradigm exists between HE theory and practice; however, this has to do with an unhealthy and unfavorable tension for the activities carried out in [nursing] health. This tension is attributed to the traditionalist orientation of the educational activities in HE, generally aimed at accomplishing behavioral changes, and instituted by the predominant positivist biomedical model. On the contrary, currently the HE theory and the new HP strategies are associated to empowerment strategies and socio-political intervention, seeking the freedom and autonomy of the subjects, a situation that is fulfilled in practice. Some investigations conclude that HE practices have been inconsistent and ineffective, for example, a recent investigation conducted at a Colombian healthcare institution indicates that HE activities are precariously planned, developed by poorly trained personnel (generally nursing aides), in activities where there is no compliance with the guidelines that guarantee meeting the objectives proposed and that, additionally, the processes lack evaluation.

Likewise, warning has been made of the existence of poor theoretical development of HE and scarce
mention in scientific literature.\textsuperscript{12,13} Gazzinelli et al., enter the discussion by arguing that the differences between HE theory and practice are framed within a notion of hegemony, given by five 5 axioms: 1) the notion of superiority of knowledge over practice, 2) the determination of social representations in the practices, 3) analysis of those representations within a traditional framework, 4) representativeness among the representations and the practices, and 5) the importance of considering the practices docile to re-elaborate them from the representations, liberation, and autonomy of the subjects.\textsuperscript{13} In this last point, Gazzinelli also highlights the importance of integrating the social representations and the disease as experience in HE practices; a situation that can contribute to the integration of the HE and HP concepts.\textsuperscript{42} Another aspect to consider are the roles assumed during the HE educational process. Generally, educators and pupils assume an inclination toward behavioral change. This is how for health professionals (educators), HE is understood as actions to guide and teach to prevent disease, while for the users (pupils) participation in HE activities means only listening and paying attention.\textsuperscript{43} According to the aforementioned, the need to promote individual and collective reflection spaces is evident between health personnel and users of the health systems, on the purpose and implications of HE, as well as the importance regarding the roles that must be assumed when practicing HE activities.

**Inclusion of Health Education in the curriculums of the health areas**

Research conducted by the Health and Society group at Universidad de Antioquia (2010), in the city of Medellín,\textsuperscript{1} found that HE has poor theoretical development at institutions in charge of the formation of health personnel. This situation is, finally, reflected by a deficient formation of the professionals involved in Public Health activities at the undergraduate and graduate levels. In this same direction, other investigations like that by Martínez-Hernáez (2009) criticize that a principle of unidimensionality exists in HE, given by academia and by the hierarchy principle from the Frankfurt school.\textsuperscript{44} Some authors propose incorporating new dimensions to the HE and HP concepts proposed in some curriculums, like the social, economic, political, and ecological curricula,\textsuperscript{12,45} among others.

Additionally, they highlight the importance of discussing the presence of curricular components that address the pedagogy and didactics of HE, disciplines in which HE is founded from the theoretical and methodological.\textsuperscript{46,47} In general, it is necessary to reflect on how HE has been included in the curricula of the health areas and which is what is actually sought when educating for health; accomplishing this understanding is fundamental, more so now than when recognizing that the future of education of the health sciences require including HE as part of the study plan in Public Health education and perhaps proposing HE as a new career of the health area.\textsuperscript{48}

**Methodological alternatives of Health education**

*Learning based on experience.* Some investigations propose including novel transformations to curricula of the health sciences in programs where HE teaching-learning takes place, based on the research findings, and with them propitiate “learning scenarios based on experience” from the development of the experiential learning theory (Kolb’s Experiential Learning Theory). According to this theory, students in the health areas are formed to assume the role of educators for health. Stemming from a contextual learning that permits advancing on the theoretical knowledge of HE, where pupils develop abilities with practical knowledge, promoting the self-regulation of knowledge and independent thought; thus, promoting in students personal growth and development of responsible behaviors in society.\textsuperscript{47}

An investigation that compared this method to the traditional method to evaluate an intervention in palliative care, demonstrated that experiential learning is most successful when trying to educate for health. This methodology includes a
sequence of interactive learning steps that can be summarized in the following manner: 1) present a concrete experience, 2) perform a reflexive observation, 3) conceptualize the situation, and 4) carry out active experimentation; thus, retaking the theory and making generalizations applied to new situations; thereby, producing new results of concrete experiences that feedback the learning circle.49

Community learning. Community learning uses a mix of learning techniques recurring to traditional values, like popular communication media and cultural norms of the community added to modern educational techniques.50 Likewise, from the development of the so-called popular education reflection may be propitiated on the importance of the insertion of theoretical-methodological aspects of popular education in the curriculum of the health sciences programs.51 Participative pedagogies and theoretical-practical courses have also managed to motivate students in performing analyses of the real world, through interviews of community members about viewpoints related to health and joint work with the health services agencies.51

Health literacy. Health literacy is aimed at students in middle school to promote health in young adults from this level. Among the themes considered, we must include analysis of messages to promote behaviors of risk and the influence of HE perceptions and practices.52 In this same sense, references that propose including HE in the study plan of undergraduate students from programs in health areas, suggests analyzing – among others – the description of the functions of the HE theories and models, the difference among several HE intrapersonal theories, and the application of theoretical constructions to HE scenarios.53

Competency-based approach. Another HE methodology used in some nursing curricula is the Competency-based approach.54 Said model is based on the constructivist theory that incorporates learning based on problems, learning cooperation, and pedagogical narrative. Within this context, competency is a ‘Know-how’ complex (knowing how to do something) and it is based on the combination and mobilization of knowledge, abilities, attitudes, and external resources for nursing professionals.55

Some alternative didactics. Some novel didactics on the HE theme include "story telling" as a tool to promote in students comprehension and integration of the art and science of nursing.56 Likewise, "reflective writing" has been used to motivate students to ponder on four aspects: a) what data do I have on this case? b) What other data do I need to understand the situation? c) What provisional hypotheses do I have on the problem or necessities? Finally, d) What have I learnt from this case? Part of this experience may include evaluative scenarios considered in terms of integrative thought, which comprises thought habits and cognitive abilities that can be guided and improved.57 Technology does not lag behind as a didactic of HE teaching, using novel “internet-health” (e-health) techniques aimed at the education of health professionals and patients.58

Discussion

The review of the scientific literature presented on HE reveals the importance of HE; however, vagueness persists in the theoretical conceptualization of HE. In the first instance, an apparent diversity of HE definitions exists, but when trying to integrate them, different levels are identified: a) individual, who promotes development of abilities for life and self-care, b) collective, who propose the integration of healthy public policies and the inclusion of the social and environmental determinants specific for each region, c) global, where international collaboration aimed at undertaking joint Public Health actions is fundamental.

In general, the concept and purpose of HE during recent years has begun an evolutionary and dynamic path that permits seeing HE as a dimension of Healthcare Promotion benefiting the well-being, freedom, and la autonomy of subjects and communities, beyond being a passive promoter of behavioral changes; however,
the road HE must travel is still long and for now incipient. Among other aspects, some authors suggest that HE should include dimensions like the social determinants of health. Retaking Nutbeam, health continues being significantly determined by individual and collective social, economic, and environmental differences to which a society’s members are exposed. In this sense, Brazil is working to include social determinants of health and seeking to reduce social gaps in healthcare, by implementing a unique public health system, with a social and universal perspective, operating with decentralized resources but with federal responsibilities, and which stems from constitutionally recognizing health as a fundamental right of the people. New discussions on the work on health, the role of technology, and institutional dynamics have been proposed and have dared to propose permanent health education as a proposal to improve and maintain the population’s health, with very satisfactory results at this moment.

On the contrary, in Colombia a study conducted in Medellín revealed that the current health system (Legislation 100 of 1993) became for some educational processes of the Growth and Development Program an opportunity and for others a threat, but in general, more limitations than strengths were encountered, as well as the presence of environments not well suited for education.

The challenge remains for the academic community to assume a theoretical debate on HE, aiming to agree on what should be the its purpose or object, the methodological and pedagogical approach, both in the community with the subjects object of HE, as with students from health areas at higher education institutions teaching HE courses: what HE and HP concept will be retaken, if the HE identity be claimed or will its dilution be promoted in the broad field of HP, these are some of the reflections to propose. In this regard, an investigation conducted in the city of Medellín on the importance of HE in programs of health areas found that poor development of HE can be explained in part by: an incipient notion of HE in the environment, a diffuse identity overlapped by other Public Health actions, differences in the object of HE, uneven curricular development among different areas of formation, and predominance in the lack of importance of HE in study plans, as well as scarce investigation in the area. Due to reasons like the aforementioned, and to conclude, it is important to qualify theoretical and practical processes on HE and promote the development of accredited teaching programs in HE at undergraduate and graduate levels, with highly qualified professors, so that HE complies with the difficult challenges that have been imposed and so it can effectively contribute to accomplishing the well-being of individuals and communities.

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