
Continuing Education and Lifelong Learning: Contributions to Individual and Organisational Performance in Latin America

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INTRODUCTION

The need for “continuous learning” in the life of health professionals is undeniable. Nevertheless, the promotion of highly efficient and impact production learning processes continues to require special attention from both the conceptual and operational standpoints. The quality of the training provided to health workers is the subject of continuous discussion and debate in the context of efforts to formulate and implement policies on human resources development in health.

“Lifelong learning” and “continuing education” are expressions that denote two different aspects of education and respond to the need for professional updating, development, and career progress throughout an individual’s lifetime of professional practice (1). Lifelong learning suggests willingness to learn and to direct one’s own learning. In this sense, it can best be understood as a professional characteristic or attitude of the individual, who demonstrates commitment to his or her own development. Continuing education refers more concretely to the formal and informal activities in which professionals can participate in order to acquire new knowledge after completing their basic training (2,3):

As an instrument for updating and expanding professional competencies, continuing education has been subject to many criticisms that are based on its evident low level of response to needs in the context of health services delivery (4-6). In Latin America and the Caribbean, there is a need to implement mechanisms capable of improving learning as an essential part of services in order to respond to specific service needs and at the same time fulfill the personal and academic expectations of health professionals. This need has led to the establishment of an important initiative for the continuing education of health workers from the standpoint of the demands of health sector reform. This initiative can be

thought of as an important movement; it has guided many projects and is known in the Region as the *Programa de Educación Permanente del Personal de Salud* (Permanent Continuing Education Programme for Health Workers or PCEPHW). It is an ongoing participatory process the aim of which is to articulate learning with ongoing delivery of health care within health sector reform.

This report analyses several issues and trends related to efforts to improve the individual, collective, and organisational performance of health professionals in the light of experiences with continuing education in the Americas. From this perspective this paper could not be thought of as trying to assess teaching methods as an isolated aspect of the continuous education processes or a systematic evaluation of the results of these processes in the current literature. It is an account of a process of the search for meaning and strategic answers according to needs emerging from the Health Reform projects in Latin America. The literature review upon which it is based mainly includes general articles about the process, its conceptual frameworks, strategies and assumptions; it also includes internal reports of working groups held by the countries and the Pan American Health Organisation (PAHO/WHO), who can be regarded as the principal creator and promoter of this movement (7-9). The articles and reports were selected on the basis of their contribution to the definition of principles and fieldwork strategies.

The first part of the paper addresses basic information and background foundations of the movement; this is followed by a section that reflects project experiences in the context of health sector reform. A third section puts forward considerations about continuing education programmes and organisational performance seen as the center of contextual problems emerging from health reform. The conclusion points to the urgent need for design and implementation of more reliable evaluation tools and the conduct of research enabling comparison and further development of these experiences.

BACKGROUND: EDUCATIONAL CHANGE PROJECTS IN THE HEALTH SERVICES

The effort to revamp the continuing education of health workers is aimed at developing an ongoing process that is articulated with health work and the main purpose of which is to transform health practices with a view to health sector reform. This project began in the 1980s as a collective effort by the Region, with the participation of several countries (10-15).

The central issues discussed in the launching documents were the health labour process as a whole, the specific needs for service development, the prevailing health problems, local or regional, the need to take into account reform principles such as universal access under the pressure to expand services and maintain the desired equity. The proposal also sought to strengthen the multidisciplinary professional teams by increasing their autonomy in the decision-making process that affects services and performance. The basis for achieving these goals was the construction or reconstruction of knowledge through a critical review of practice as a whole.

All the literature generated since the onset of the movement, whether monographs, reports, analyses of experiences, or studies, took a matrix of strategic and methodological alternatives including in-service training, short-term updating, training in priority areas, short and midterm professional formal training, as well as advanced training in health (16).

A 1991 report on continuing education presents the first discussions of concrete experiences in Brazil, Colombia, and Cuba, as well as some initiatives carried out under PAHO's regional programmes (malaria, environmental health, maternal and child health, and health services development). Brazil's experiences are diverse, ranging from institutional projects developed within health care units to projects on a national scale and including the training of direct care providers, auxiliary health workers, and managers (17-19). In Brazil too, the *Larga Escala* project for training health technicians and nursing aides emerges as an important example of an educational process that is part of a much broader endeavor to reorganize the health sector (20). Brazil's experience with this project is adapted and applied to the training needs of service personnel in several countries in the Region. In Colombia the main thrust is a primary care programme in the departments of Valle, Cauca, and Nariño, where the

multidisciplinary teams receive their training (21). Cuba launched its efforts within the framework of a programme of family physicians and nurses as part of its National Health System Agenda known as *Salto Cualitativo* (22). Initiatives carried out under the PAHO regional programmes included helping Brazil to provide critical training to the multidisciplinary team that carried out its anti-malaria programmes; a series of training activities for environmental health workers; support for countries in the strategic administration of local services; and training projects in maternal and child health in some countries (23). The School of Health Sciences of the *Universidad Autonoma de Santo Domingo*, in the Dominican Republic, extends these efforts to teacher education with a view to strengthening practices that integrate teaching and service delivery (24). Those accounts do not describe specific programmes or make any assessment of the results; they only focus on changes in the conceptual and structural framework of continuing educational projects.

As a result of this first analysis, the PAHO Advisory Group for Continuing Education recommended a series of monitoring and reorientation strategies for the PCEHW: to provide advance support for “nuts and bolts” definitions of continuing education based upon specific needs of the health care delivery system; to develop specific research in order to analyse and assess the processes and favor the advancement of a new conceptual and methodological framework; to enhance the articulation between continuing education processes and strategic planning in health.

Between 1991 and 1995, several countries reviewed their projects through qualitative assessment procedures based only on a description of PCEHW’s advancement; it was possible to consolidate some of the basic principles and underscore the importance of a participatory and dynamic approach to health care (25-27).

The principles that emerged were: work is the pivotal element that unites and connects performance and knowledge; thus, new knowledge (learning) is generated from this base; learning in this process implies a dynamic continuum of action, reflection, and new action; the assessment of training needs must be a participatory process.

The definition of training needs through a participatory approach has made it possible to establish priorities, goals, and strategic objectives for a set of actions. These include the transformation of practice based on the criteria of coverage, objective, and flexibility, linked to the specific context

within a vision of viability. PCEHW practices requires a thorough context analysis, both from a broader perspective and in relation to the specific health situation, aligned with a concrete health service delivery proposal that considers work and population demands. The need for greater conceptual precision was also apparent (28).

The literature points out an increase in job motivation, enhanced quality of primary care services, and renewed interest of health professionals in reaching a higher level of technical and professional development (29-31). It is important to note that these statements (the ones in the literature related to the matter in this paragraph) are not supported by empirical evidence.

Nonetheless, it was only in 1995 that the literature started to systematize the theoretical contributions as well as some of the PCEHW project experience. This point in time marked the turning point of this movement as a concrete response to change; recurrent observations presented in the literature even though of a scattered nature provided evidence of discontinuity, lack of direction, low institutional priority, and low coverage of these programmes; most important of all, the failure to identify the knowledge and abilities needed to give the necessary response to real health care needs, for the provision of higher-quality service delivery, the basis for the educational doctrine undergirding most continuing education programmes.

The experience gained laid the foundation for some important theoretical contributions in the areas of adult education, health labour process, and health institutional development (32-35). Continuing education is understood as being “a technical-political intervention by virtue of its capacity to broadly distribute knowledge and power” – a vision that raises important issues for human resources management (36-38).

Davini (39) maintains that the PCEHW project contributions add up to a strategy for changing the technical and social practices of health workers. When the health labor process is taken as the core of the learning process, the result is the generation of a new pedagogical model in which questioning and critical thinking play a major role, in contrast to the traditional practices of transmission of knowledge.

Understanding the regulatory, social and technical dimensions of the health labour process also makes it possible to rethink the institutional mission and move forward to improve quality. Accordingly, continuing

education becomes an instrument for the critical review of institutional culture, the appropriation of knowledge and the strengthening of the professional team (39).

From the standpoint of adult education, participatory methods can ensure active involvement from all individuals and self-guided learning; this in turn advances and mobilizes strong leadership thus making it possible to highlight the importance of criticism for the transformation of practice (40). Critical learning is considered indispensable for the understanding of global processes and the development of cognitive abilities that are essential if health workers are to function adequately in the complex and changing environments of the health services (40,41).

The theoretical and methodological framework of PCEHW is based upon the elements of critical pedagogy proposed by Apple, Ardoino, Ausubel, Bernstein, Bleger, Bourdieu, Bruner, Candau, Freire and Chosson, among others (42-52). Adult education aims at increasing responsibility and self-reliance, and uses the learning principles of active participation. The pedagogical method is rooted in problem-solving and linked to the realm of the learners, taking into account their life histories and critical learning tools for knowledge building. Critical thought is a tool for learning and for capacity building.

The analysis of the health labour processes is a key step to diagnosing the work situation; the methods of action research help build the group consciousness and teamwork necessary to the learning process. In this sense, PCEHW processes create a new meaningful learning paradigm strongly molded by social interaction where learning means waking up and understanding a reality which previously lacked meaning for the individual (52-56).

By the late 1990s, PCEHW had spread throughout Latin America as a movement to reorient continuing education. Changes observed in the social context because of political and economic pressures have dictated new moves and the reorganisation of health systems and of health services delivery. These reorganisation have affected continuing professional education projects, even though the guiding principles put forth by the movement have been maintained (57-59).

CONTINUING EDUCATION IN THE HEALTH SERVICES IN THE CONTEXT OF THE REFORMS

Health sector reforms have produced a new scenario for PCEHW development. Investment projects for development and strengthening of the health sector have led to changes in the orientation, possibilities, and conditions of use for educational strategies within the system. This new scenario was present in almost all the countries of Latin America. Some of these projects had international financing.

Most of the projects included in-service training components. At first, these training components posed an enormous challenge to the institutions because of these institutions' past history or sporadic, reactive and vertical experience in the management of learning processes. The culture of a highly bureaucratic central process, usually managed with very few resources, was the challenging factor.

For many countries external financing was a first opportunity to have specific training funds available. Never before had so much money been available for training so many people under such time constraints and in such a complex and changing political-institutional context. For the human resources groups at national level the biggest challenge was to be able to show the impact of training in the reform process.

The review of experiences in the Andean Area and Central America in past years has identified some common features of training proposal components: target populations of trainees were large (hundreds or thousands), heterogeneous (different professional categories), scattered at various levels of service, and, in some cases, there was even an attempt at nationwide coverage; personnel cannot be moved to a training centre away from the services where they work, either because work demands in a changing situation will not allow this or because of the huge numbers of personnel involved and because of the costs that such transfers would entail; the educational objectives and content are defined considering specific changes in services targeted; new educational approaches and dynamic methods must be appropriate to the condition of the personnel and the situation and dynamic of the services. Traditional concepts and practices related to education in the health services are considered ineffective; in many cases those who identify the needs and plan the educational activities are not (or will not be) the same persons who

implement these activities; and local service personnel are seldom involved in this process. This is a new context for the Ministries of Health, where training traditionally moved from the centre to the periphery, under the direct responsibility of the central units; in practice it is apparent that the capacity for managing project components is just as crucial as educational capacity, given the objectives, time frames, resources and actors involved.

A key aspect of the regional experience is the need to improve the capacity for comprehensive assessment of these components of all projects. Indeed, the most important problem in the management of educational projects is precisely the lack of assessment, which affects the entire project cycle. There is no practical approach towards assessing the outcomes and impact of training activities (60).

The above outline was used to evaluate 13 health sector reform projects containing a relatively significant human resources development component (61,62).

Most training contents related to skill development for leadership and for the management of local services, as well as for the delivery of direct patient care at primary level. Some projects also included regional and central policy management, as well as direct patient care at secondary level and specialized care.

Project development managers stated that training objectives were fulfilled and, from the perspective of services transformation, results were positive. In addition, there was unanimous consensus regarding the improvement of interpersonal communications and the strengthening of teamwork. Nevertheless, at this point there is no empirical concrete evidence of significant changes in the work process or of increases in management capacity, except in the area direct care to the population.

Preliminary analysis showed some indication of the usefulness of the research instrument (questionnaire) for the purposes defined by the Human Resources Observatory. This allows for recollection of rich and precise data and allows additions of supplementary material, such as reports and other project documentation that can facilitate in-depth analysis of each project. Investigators believe the instrument will play an important role in the launch of an information system for the Human Resources for Health Observatory.

The main findings of this preliminary report can be summarized as follows.

GENERAL CHARACTERISTICS OF THE PROJECTS

Projects fit within the framework of health sector reform. Four of them were concluded in 2000, and the remaining nine are in the intermediate or initial phase. Programmed financial resources ranges from US\$700 000 to US\$350 million, and it is expected that implementation costs should match the programmed sums. World Bank and the Inter-American Development Bank are the major financing agencies and all projects have significant national counterpart financing. All reviewed projects except one have a well-defined training component. The projects include both investment and institutional development, which are considered complementary.

The projects' central objects are: direct maternal and childcare, specific training of health workers, health services management, direct primary care delivery and management of primary care services.

ORIENTATION OF THE TRAINING COMPONENT

Training components are consistent with general and specific purposes as well as with the objectives identified for training activities. Stated purposes reflect the importance of training components for the reform project as a whole, even if in some cases this declaration of principles stays at the level of discourse. Training activities focus on leadership and management of local health services, on aspects of policy and programmes at the regional or central level and on direct care at the secondary and tertiary levels. Development of abilities towards a better performance of current functions is the primary training focus, orientation of new personnel is the secondary focus; training for changes of function or upgrading of categories of personnel is seldom present. It is considered an essential aim to improve the quality and efficiency of care delivery to the population. It is also expected that training should affect political-institutional aspects of the reforms on the assumption that this can contribute indirectly to improving service delivery.

EDUCATIONAL APPROACH

Only three of the projects stated the educational concepts used, this suggests that training managers may find it difficult to identify the paedagogical approach to be used.

METHODS, INSTRUMENTS, FIELDS AND STRATEGIES

The educational objectives were defined at local level with the participation of the project coordinator and were expected to be consistent with government policy. The project coordinators and supervisors identified educational needs. In addition to visits and observation, focus groups were the methods most commonly used to identify needs. The process involved problem analysis and the search for solutions to concrete problems in the context of specific competency development. Training processes were implemented on-site as in-service activities. Strategies included capacity-building supervision, study groups, internships, workshops, study days and independent study. The projects also generated specific instructional materials.

EDUCATORS

Professionals with different educational backgrounds participated in the training programmes. These professionals were linked to the projects in different ways; in most cases, project coordinators were hired through special contracts. Teaching was shared with in-house professionals who acted as facilitators or supervisors. Projects also led to specific training for tutors, facilitators and supervisors. The staff who took part in the formulation of projects did not always participate in their implementation.

RECIPIENTS

Leadership and service manager training brought together inter-services groups while direct provision of health care was organized by service and professional category. Participants were mainly public sector workers; only one project dealt with community-based staff from nongovernmental organisations and with personnel from the Social Security system. The number of participants per project ranged from 600 to 160 000. Selection criteria were described as appropriate, attendance at activities as continuous and high, but the high mobility of health workers, especially those involved in direct care, limits results and impedes formative evaluation of the process and of its impact (62).

EVALUATION

The majority of the projects reviewed included evaluation procedures; covering the complete educational process, training management and impact on health care delivery. Evaluation procedures were present in all projects funded through reimbursable bank loans. Evaluation instruments were designed for external evaluation, self-evaluation, and mixed processes. In the Chile project, for instance, the department of sociology of a Chilean University conducted a study of participants' views. The results indicate that trainees thought that training led to an improvement in their job performance, improved the quality of their work and introduced new principles, approaches and values. They said that the most important impact was on the improvement of their individual performance and also the increase of interest for one's own work. Those aspects reported as weakest were the lack of impact on upgrading of wages and the advancement of professional careers.

OBSTACLES AND LIMITATIONS

The study highlights the need to identify the nature of the problems before adopting intervention strategies. Training processes cannot be an answer to every challenge or problem in the health services. The analysis suggests, explicitly or implicitly, that one of the principal shortcomings of the project's educational component is the limited capacity of training to affect those dimensions that need other approaches to be addressed.

In addition, it is often expected that changes will occur immediately, that one can "apply what has been learned" even when institutions do not supply the conditions for using the new abilities and skills. These are persistent drawbacks, even in projects where the educational component has been defined beforehand as part of a series of activities aimed at investing in and developing personnel.

Other significant limitations and obstacles include those of a political nature – the authorities may have facilitated or impeded the process by blocking meetings, rotating personnel in the teams, hindering specific activities, etc. In many cases, weak management is evident: there is no strategic analysis, marketing of the training component within the organisation, or identification of the political gains that can be expected from the training. Other weaknesses are: a low level of competency among

the coordinators for the management of the training processes, poor communication mechanisms and deficiencies in the methods used to identify problems.

RESULTS

Preliminary analysis indicates that the objectives proposed have been or are being achieved. However, it is important to bear in mind that some positive results can only be observed in a medium and long-term time range. Evaluation respondents in all projects acknowledged a significant increase of specific work abilities and skills. There is also mention of positive institutional changes. The major question remains whether the institutions will be able to take advantage of these new abilities and skills in order to maximize their efficiency and quality aims. This would ask for continuity in targeting the development of authentic and permanent learning communities.

This study can be considered the first systematic evaluation of PCEHW projects in the Region. The preliminary report does not allow for the analysis of all empirical evidence collected. There is a need to further analyse these findings and to evaluate the capacity of the instrument in exploring the impact of training interventions. From the preliminary report it is clear that the instrument provides a very broad overview of the projects and allows the analysis of training context and development conditions. The report also points out the need for preparation of project leaders and management. Facilitators and supervisors need capacity building not only in management but also in terms of educational process.

The analysis of these projects shows that PCEHW processes bring about important challenges and raise a variety of questions, such as, to name but two: what are the strategies that can be used to create environments that facilitate learning? This refers to spaces that encourage learning within the actual work setting by identifying problems and questioning existing practices; how and physicians and other reluctant groups of professionals as well as leaders be integrated at all levels of the process? Action research methods make it possible to use evaluation as an instrument for institutional learning and for the development of true learning communities. Including the entire team in the process implies crossing the boundaries between groups and service units to create the

conditions for an exchange of experiences and the formation of learning networks within the system.

This preliminary report should be used as a generative tool for an evaluation model for PCEWH training in the context of health sector reform. There is a need to improve control and to be aware of the heavy reliance on self-reported behaviour change conveyed by the instrument; in addition, the validity of findings must be assessed critically. Nevertheless, it can be said that PCEWH has developed capacity to build up, systematize, maintain and expand its core knowledge base.

Training in the context of health reform needs to ensure effectiveness as an instrument for the transformation of practice. In this regard, health sector reform will only have meaning when one can confirm its impact through the improvement of quality of life and health of the population. Health workers' continuing education can only be justified if it covers all the workers, competencies, and levels of performance required to achieve this aim within the budgetary, resource and time constraints of health systems and new profiles of practice.

In summary, continuing education in the context of health sector reform should ensure: performance improvement for all personnel; management of the enhancement of training processes; systematization of evaluation processes to reorient training and generate new knowledge; expanded knowledge of the work process, with deeper understanding of its complexity; promotion of changes in institutional culture; creation of the conditions for health promotion.

CONTINUING EDUCATION AND ORGANISATIONAL PERFORMANCE

The experience of the continuing education project as an instrument for health services development within the framework of health sector reform in Latin America has led to important reflections on the conditions and circumstances affecting the organisation of health services and the need to create conditions to facilitate the development of human resources. Efforts are currently under way to develop more comprehensive projects using organisational learning approaches developed by researchers such as Argyris and Schön, Bateson, Drew and Smith, Pedler *et al.*, Revans, and Senge (63-68).

The central issues are how to change institutional practices and to what extent the context can be an element that facilitates lasting change. Health systems, seen as organisations, are complexes that adapt dynamically to social demands and identified health needs. Ultimately, the political arena plays an important role and is pressured by immediate events, ad-hoc solutions and unforeseen or last minute developments. The extraordinary growth of knowledge and information as a whole observed in recent years especially in health, together with the pace of technological and scientific advances, provides a unique opportunity to develop new ways to deliver health care and organize health systems. An intensive knowledge base mediated by new communications and information technologies should soon gear health sector reform in the Region.

There is a need for flexible organisations capable of leading processes of change. Organisational transformation requires an intense and critical debate, both internal and external, capable of producing new knowledge and learning. As Grieses (69) points out, credibility and learning will be the dominant elements in the future of organisations.

From this perspective, an entrepreneurial approach, decentralization and motivation are essential for the health reform process; all of these elements influence the continuing education of health personnel (70).

Davini (71) observes that implementing or modifying organisational practice has implications for the onset of specific new skills and also reinforces the cultural substrate that is sustaining and encouraging maintenance of previous practices. Thus, organisations can generate, preserve, and expand the level of individual and collective learning in order to improve the performance of the system.

In the case of health systems, the need to change the essence of organisations in their contexts implies recognizing training processes as real instruments of institutional intervention (72), the design of which incorporates both criticism and questioning of knowledge and learning strategies. Furthermore, if learning is to have individual meaning, there must be a process for "coordinating behaviors with others." This requires a rethinking of the standards and rules of the organisation and necessarily leads to institutional change (73).

In organisational learning processes, it is important to create conditions for reflection on the construction of a network of logical

reasoning based on the identification of concrete problems through a cycle of action-reflection-research-action. This makes it possible to deepen understanding of the problem through access to specific data, specialized references and other sources of pertinent information. With the participation of the entire team, it further facilitates the definition of specific new competencies for problem solving. In this regard, organisational learning is less prescriptive than intuitive as an attempt to solve problems of individual alienation and isolation and to promote the attainment of institutional objectives.

To consider continuing education processes tied to institutional development, as envisaged by the continuing education movement proposed by the PAHO, requires conceptual and methodological adjustments to reverse our deeply rooted tendency to organize training processes according to traditional paedagogical models of simple knowledge transmission and activities.

Organisational learning implies: an integration of the teaching/learning process into the day-to-day experiences of the health services; a change in paedagogical strategies by taking concrete practice as a source of both knowledge and problems in order to ensure a continuous process of critical investigation; an understanding of health workers as active actors, thoughtful and critical as regards their own practice, with the capacity to build their own knowledge and to propose alternative courses of action for the solution of institutional problems; a vision of the team or working group as the basic structure for interaction.

This requires that health systems be equipped to identify, develop and evaluate workers' performance according to specific competencies defined in the institutional context and based on the needs for programme response. It implies developing the capacity to motivate and support workers so that they can maximize their productivity and improve the quality of their practice. It is also important to develop skills to facilitate the processes of transition to new organisational forms.

As Grieses indicates, health system authorities must come to understand the keys to learning in the process of human resources development, which include: communication and interaction with organisational learning processes in other entities and contexts; research and action with the participation of working groups or teams; an organisational climate based on tolerance that fosters motivation for work

and promotes the sharing of experiences, producing an environment of mutual trust where workers can express themselves openly; an institutional commitment to monitor and support continuous learning; the development of planning methods that encourage strategic thinking and learning.

In short, organisational learning (73) can be regarded as the systematic response to operational issues that present themselves in the day-to-day context of the health services and that cause dysfunctions in the work process.

CONCLUSIONS

In the last two decades there have been important conceptual and operational changes in the training of human health resources. These changes fit within the framework of the continuing education movement and the context of health sector reform. Many of the projects have received help and support from agencies and from the countries involved. Evaluation shows that it is possible to adopt new strategies to control and evaluate human resources training. In addition, systematization of evaluation methods will permit a much greater theoretical and methodological knowledge of the pedagogical processes carried out by the health system.

Preliminary research has confirmed important changes in the conception of personnel training processes. Countries are developing definitions of continuing education that are much closer to reality, stating real needs for developing specific competencies that are meant to have an impact on health system results and thus benefit the population. In all the countries studied, health sector policies acknowledge the importance of training, at least officially, and their plans of action include budget allotments for human resources development.

All previous discussion points to an ever-increasing need to closely examine the training of human resources in health as an ongoing process necessary to set priorities according with the needs and advances of the system. For health institutions to become learning communities and to ensure their continuous improvement, they must take up a transformation challenge. Institutional and individual capacity building depends on the level of the competencies that the workers achieve (74).

This paper is an attempt to analyze a movement of continuing education within the health sector reform in Latin America. The

continuing education impact debate seems to be endless and still legitimate questions, problems and side issues can be raised anew, irrespective of previous conclusions, findings and experiences. Without a doubt, there is a healthy part to it theory building and testing – and this is an open end of the experience.

The evidence so far only highlights some elements for successful projects. There is still a need for evidence to show that continuing education is a crucial element in change and development; evaluation indicators must be better-defined, quantitative as well as qualitative aspects must be considered in order to unveil what continuing education interventions have helped to achieve. Experiences must be validated, data cross-examined and methods compared.

The literature reviewed did not always provide empirical data obtained through methods and procedures of evaluation research. Project descriptions and theoretical construction made through the CEWH movement show that continuing education within the health sector reform can be effective as a transformation tool and anecdotal accounts have an important value for further development.

The influence or impact of the continuing education process and its results in the health care delivery system are obvious. The evidence from research, using the process of evaluation, analysis and meta analysis undertaken in other contexts points to another important question: What makes programmes work better? What methodological tools, practices and strategies bring best results? How much does continuing education influence behavior vis-à-vis other interventions”. Those are open questions and must be answered under the realm of educational theoretical and methodological frameworks of professional continuing education. Continuing education problems should not be seen in isolation; the broader spectrum of its context and practice are important elements to be considered.

Edgar Morin (75) has stated that recently there is a need to underscore “teaching fragmentation” in formal education. Applying this idea to the continuing education projects, we also must “replace thinking that separates and reduces with another way of thinking that distinguishes and connects.” Taking the complexity and uncertainty of health systems into account, we must forge a connection between the population’s real health care needs and the skills that can respond to these needs and

establish that connection, in turn, as the guiding force for training processes.

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