Permanent education in healthcare services: educational activities developed in the state of Minas Gerais, Brazil

Educação permanente nos serviços de saúde: atividades educativas desenvolvidas no estado de Minas Gerais, Brasil

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ABSTRACT

Objective: To analyse educational activities carried out in the state of Minas Gerais, Brazil, considered permanent education in healthcare. Method: This is a mixed methods study with a qualitative approach and the participation of 492 municipal health departments. Data were collected in March and October 2014 through interviews available online. The data were tabulated using Excel software. The data were subjected to thematic content analysis and statistic descriptive analysis. The study was approved with opinion 22830812.5.0000.5149. Results: Data analysis revealed the following nine categories: type of practice, theme, method, technological resource, motive, healthcare level, public, financing, and status of the described practice. The activities were not related to a specific educational concept. The researchers found that the subjects that motivated the education activities were based on work and the diagnosis of problems faced by the workers. These principles are characteristic of permanent education in healthcare. Conclusion: In some municipalities, permanent education is being incorporated into the healthcare service routine. Keywords: Education, continuing. Public policies. Unified Healthcare System.

RESUMEN

Objetivo: Analizar las actividades educativas desarrolladas en el estado de Minas Gerais, Brasil, consideradas Educación Permanente en Salud. Método: Se realizó una investigación tipo mixto de enfoque cuantitativo-qualitativo, con participación de 492 Secretarías Municipales de Salud. Los datos fueron recogidos a través de encuestas online. Los datos fueron tabulados con el software Excel. Para el análisis de los datos, se utilizó el análisis de contenido temático y estadístico descriptivo. El estudio fue aprobado con el parecer 22830812.5.0000.5149. Resultados: Se generaron nueve categorías: tipo de práctica, temática, metodología, recurso tecnológico, motivo, nivel de atención, público, financiamiento y status de la práctica descrita. Las prácticas no guardan relación exclusiva con un tipo de concepción pedagógica. Por otro lado, se constataron temas ancrados en el trabajo, siendo el diagnóstico de los problemas cotidianos vista como motivación para su realización, los cuales caracterizan a la Educación Permanente en Salud. Conclusión: En algunos municipios, la educación permanente está siendo incorporada en la vida cotidiana de los servicios de salud. Palabras clave: Educación continua. Políticas públicas. Sistema Único de Salud.

RESUMEN

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INTRODUCTION

Permanent Healthcare Education (PHE) was established as a National Policy through Ordinance 198/2004, which was reformulated by Ordinance 1996/2007, with new guidelines and strategies for the implementation of the PHE policy, in order to adapt them to the operational guidelines and regulation of the Healthcare Pact\(^1\). It was proposed by the Ministry of Health as a strategy to enhance the work and workers, improve the quality of healthcare provided to the population, strengthen the SUS, and support the integration of teaching and service.

PHE focuses on the learning-work relationship produced on a daily basis in the healthcare services, where learning and teaching are incorporated into the work process. One of the adopted concepts is significant learning, which proposes the transformation of professional practices from a methodology that questions based on knowledge and experiences\(^2\). In the PHE process, workers become the protagonists of their routine work, transforming contexts, and building and deconstructing knowledge\(^2\).

Thus, PHE aims to facilitate reflection and intervention in the work process, starting from an existing situation in order to overcome it, change it, and turn it into a different, desired situation\(^3\).

Since PHE seeks to develop educational practices based on questioning the work scenario, considering the micropolitics of live work, it is necessary to identify whether the educational activities that are being developed in the SUS are enabling the rearrangement of the work process. Its formulation as a national policy sought to overcome the overload, repetition, and fragmentation of training courses that are created from a vertical and programmatic logic\(^4\).

The study is based on the need to elucidate the results of PEH implementation, considering it was formulated as a policy more than a decade ago and contributes to the construction of educational proposals and, consequently, improves the care and management of the SUS. Although PHE is thought to be a strategy that transforms and qualifies actions and services, formative processes, and pedagogical and healthcare practices, its implementation has numerous limitations.

Considering this scenario, the question that arises is: Are the educational activities carried out in the state of Minas Gerais grounded in the precepts of permanent education in healthcare? It is assumed that several obstacles permeate the implementation of PHE, hindering the modification of professional practices in the complex context of healthcare work. Therefore, most educational activities are far from the concepts and propositions of the national policy of permanent education in health (“PNEPS”).

This study seeks to contribute to the strengthening of the SUS by providing a profound analysis of the coverage of an idea and the incorporation of a concept to a daily practice. Thus, the aim of this paper is to analyse the educational activities developed in the state of Minas Gerais, Brazil, considered as permanent education in healthcare.

METHOD

This study contemplates the exploratory phase of research into permanent education in healthcare and the ways of thinking and doing management, assistance, training, and participation in and for the SUS. It is a study of a mixed nature, considering the combination of predetermined methods of quantitative research with emerging methods of qualitative research. We used data collection scripts with open-ended and closed-ended questions, with multiple forms of data, including statistical analysis and textual analysis\(^5\). The choice of approach considers that the antagonistic characteristics of these methods combine in a manner that one takes precedence over the other and that they can complement one another in the presentation of results.

The scenario was the state of Minas Gerais, southeastern region of Brazil, with a population of more than 19 million inhabitants, distributed in 853 municipalities.

A total of 492 municipal health departments participated in this study through the municipal secretary or assigned delegate. The inclusion criterion for research was to be one of the municipal departments of health of the state of Minas Gerais. The participation was voluntary, with the sole criterion of belonging to health management of the municipality of Minas Gerais. The sample calculation was established with a margin of error of five percentage points and 95% reliability to define a representative sample (that should be at least 435 respondents). The municipalities were grouped by population – up to 10,000, from 10,000 to 20,000, from 20,000 to 50,000, and more than 50,000 inhabitants – and the answers of the managers were organised using this grouping as reference.

Data were collected from March to October 2014, by means of a questionnaire with open and closed-end questions, available online, requesting information about educational practices identified as PEH over the past five years, regardless of the type of healthcare service. The questions contemplated the description, the goals, the resource used to finance the practice, the healthcare level, the motiva-
tions behind the development of the practice, the target audience, and the current situation of the informed practice. This set of information was given the title of Permanent Education Practice informed by the municipality.

To create and make the questionnaire available online, we hired a professional who was responsible for purchasing and configuring the domain “educacaopermanentesaude.com.br”; hosting some files, in particular the informed consent statement; leasing and customising a questionnaire platform – Form Assembly (http://www.formassembly.com/); and creating an HTML page for embedding the survey – which was hosted for free on GitHub.

The study was disclosed to the municipalities through regular post, in the form of an invitation letter to the municipal health departments. At the same time, we sent an invitation via e-mail and reiterated the importance of participating in the study every week after submitting the invitation. In August, we started calling the municipalities that had not responded to the invitation or e-mail messages. The study was also disclosed in conferences and meetings of the Permanent State Committee of Education-Service Integration and the Bipartite Intermanagers Commission of Minas Gerais.

The data from the questionnaires were exported and tabulated with Microsoft Excel 2007. The open-ended fields of the questionnaire in the worksheet generated with the consolidated answers were reread to create successive aggregations of elements that comprises similar units of meaning, considering the thematic content analysis technique proposed by Bardin.

This analysis allowed the identification and organisation of categories and subcategories. The fields title, objective, and description of the educational practice were used to identify and organise four categories: type of practice, theme, methodology, and technological resource. To describe the results, the fields motive, healthcare level, public, financing, and practice status were considered as categories and they were all broken down into subcategories.

The categories and subcategories were subjected to descriptive statistical analysis. It is important to mention that some of the fields of the questionnaire allowed multiple answers. The answers relating to each category were distributed in frequencies and proportions.

The research was approved by the ethics committee of the Universidade Federal de Minas Gerais on December 9, 2013, with opinion of the CAAE – 22830812.5.0000.5149. The anonymity of the participants and non-identification of the municipalities was guaranteed. All the participants signed an informed consent statement.

### RESULTS AND DISCUSSION

Data analysis allowed the mapping of 929 permanent education practices from the responses of 404 municipalities (47.36%). This is because 88 municipalities (10.32%) responded that they did not practice permanent education or did not have information on permanent education practices promoted by the municipal administration.

The municipalities with the larger populations, i.e. more than 50,000 inhabitants, had the highest response (67.65%), which was 13.71% higher than the municipalities with the lower response rate (53.94%) and up to 10,000 inhabitants. This may indicate that the municipalities with larger populations have a greater power of organization and potential to implement public policies, probably due to the technical capacity of the administrations and their healthcare and management operations.

In relation to the informed practices, they are mainly distributed among the municipalities with the highest populations, i.e. more than 50,000 (35.60% of practices) and up to 10,000 inhabitants (34.80% of practices).

In relation to the category “type of practice”, the analysis showed that the permanent education practices notified by the municipalities did not have an exclusive relationship with the kind of pedagogical design. In other words, there is evidence that the municipal administration is not very concerned with relating a specific pedagogical design with a particular term that is conceptually loaded with meaning: PEH as a reflection for intervention to overcome practical service problems, transforming the reality. Terms such as capacity training, qualification, continuing education, permanent education, course, update, training and activities that involve the community were used interchangeably, naming similar practices even in the same municipality.

Without denying the possibility of using different types of practices for the advancement of health workers, it is necessary to ensure that PEH is not limited to a mere change in the name of educational healthcare activities since, “many traditional training processes simply changed the term that referred to their practice to more closely identify with PEH”.

In the process of reviewing the category “type of practice”, we qualitatively observed the following subcategories: Capacity training, appeared in 53.5% of the municipalities that informed the development of practices (contained in 65.7% of the descriptions of the municipalities with more than 10,000 and up to 20,000 inhabitants) and Permanent Education, included in the descriptions of 28% of the municipalities (contained in 51.1% of descriptions of the municipalities with more than 50,000 inhabitants).
This finding provides one more clue of the indistinct use of terms; although the municipalities were explicitly asked to notify PEH practices in the past five years, they did not select the practices they notified. In the statements of the participants, there was a predominance of the term Capacity training, which, analysed with a detailed description of the practice, shows that the concept is more oriented toward techniques and the recovery of health in specific areas, with the use of traditional teaching strategies.

We also found the indistinct use of the terms continuing education, in-service education, and permanent education to define educational practices in healthcare. However, some authors point out the distinctions and stress the difference between permanent education and continuing education, for example.

A study found that the notion of PEH is still oriented toward the continuing education model, with a strong tendency toward banking education, which contradicts the recommendation of the PNEPS. To ensure meaningful learning, and consequently comprehensive care, it is essential to question care practices, teaching, management and popular participation, and coordinate efforts between these sectors.

Understanding that this ambiguous situation does not favour changes in behaviour (change of conception), ten years after the definition of a PNEPS, the Ministry of Health instituted guidelines to implement the policy within the Ministry itself, by means of Ordinance No. 278 of 27 February 2014. This instrument reaffirms the transforming nature that was intended for PEH, defined as “learning at work, where learning and teaching are incorporated into the daily routines of organisations and work, based on meaningful learning and the possibility of transforming the practices of healthcare workers”.

Still referring to the category “type of practice”, in the subcategory “permanent education” we considered the Permanent Education Programme (PEP) for family health practitioners launched in 2004 in the state of Minas Gerais, present in all 13 extended healthcare regions of the state, and mentioned by most of the municipal governments. This programme considers the theoretical framework of the PEH and proposes to identify the professional weaknesses and priorities identified by physicians and managers.

In relation to the category, “theme”, the results showed a range of content such as: care actions – geared toward the different phases of the life cycle and health conditions; managerial aspects – related to professional experience, planning, evaluation, among others; health inspection; and aspects of social participation and citizenship.

The fact that the municipal managers (11.6% of municipalities) informing that the choice of the themes addressed in the practices is based on a survey of the difficulties and doubts of the professionals and epidemiological aspects to answer the specific needs of services was a significant finding, from the standpoint of searching for evidence of the incorporation of a given design. This is because they recognise that the topics or themes covered in permanent education must come from the every problems experienced at work and the healthcare needs of the population, thus contributing to changes in professional training and development. Therefore, if the municipalities are discussing the needs that emerge from work, we can consider that PEH is occurring in these municipalities.

Themes based on the healthcare needs of the users and the daily work were reinforced in the category “motive”, which featured the origin of the demand for education. The data revealed that the main motivation for these practices is the need to diagnose problems, mentioned by 59.9% of the municipal administrations that informed the development of permanent education practices.

This category was followed by the subcategories “Service demands” (55.2% of municipalities) and “Opportunity based on the permanent education policy of the Ministry of Health” (54.0% of the municipalities).

Again, this shows concern for education that is related to the routine work, that is, that the problems of practice motivate the themes that are addressed in education, indicating the purpose to qualify the services using the PEH strategy. It is considered that, in view of the implementation of the PNEPS, the demands of educational activities for healthcare workers should not arise solely from the individual needs to remain updated or central and regional guidelines, but from questioning the organisation of work, considering the responsibility in providing comprehensive, quality care to users.

Since the foundations of education emerge from routine work and the interaction of workers during the provision of care, and PEH is created from reflection on work, we can affirm that fragmented, vertical, punctual, and individualised practices are unlikely to change the daily life of workers.

To overcome the problems workers face in healthcare, all the workers must be able to analyse their own work processes and the inventions they perform in their routine work. In other words, the events of everyday life in the field of practices are based on encounters between people and the exchanging of ways of acting and doing, are permanently producing and reaffirming knowledge, and enabling a critical, reflective, and innovative stance in relation to forms of intervention in the health-disease-care process.
In the analysis of the category “methodology”, the data showed that, of the 46.50% municipalities that reported the practices, the preferred method included discussions, classes, workshops, practical activities, and lectures. We also noticed the combination of teaching methods identified as traditional – classes, lectures, and guidance – and innovative – discussions, talks, case studies, questioning, practice activities. Although use of these methods was not widely reported, those that were used tended to be more interactive and reflective, and powerful to approach the problems of practices. This finding is important because PEH proposes the reorganisation of practices based on the gaps between the real scenario and the ideologies of the health system.

In the category “technological resource”, there was a predominance of audio-visual resources and distance learning (DL), although most of the practices were not described in a way that reveals the use of technological support (71.40%). In literature, DL has been gradually incorporated as an important strategy for PEH in the SUS. However, it is important to highlight that for DL to support the much needed changes in the professional praxis, the educational practices must ensure interaction between students and should be used with other more local and classroom support strategies.

As for the category “financing”, it was identified that municipalities use funds from different sources. In 77.0% of the records, the PEH practices were funded by the local governments. Resources from the state government of Minas Gerais (39.4% of municipalities) was the second most mentioned subcategory. Resources from the Ministry of Health appeared in 21.0% of the municipalities. Other types of funding were provided by the “council” or “consortium” (0.74%), “civil society organisation” (2.48%), and resources from “company” (0.74%).

According to Ordinance No. 1996/2007, the form of financing of PNEPS became automatic and regular, extending the responsibility of state and local administrators to the management of financial resources. In this regard, financing is a key issue for the development of the policy, including the fact that this decentralisation allows the autonomy of action, the breaking away of verticalisation of the educational activities, and adaptation to the needs of the services.

During the analysis of the category “financing” and its relationship with “motive”, it was noted that the municipalities own resources mostly funds practices that were motivated by service demands and the diagnosis of problems observed in everyday relationships between professionals and users. In the case of state and/or federal funding, the main motivation was linked to the permanent education policy.

The category “healthcare level” contemplated the subcategories “primary care”, “medium complexity”, and “high complexity”. Data analysis revealed a prevalence of informed practices that focused on primary care. This level of care is a privileged space for the development of PEH, considering that the proposed care model includes assistance, health promotion, prevention of illnesses and diseases, treatment and rehabilitation, and references to health services of greater complexity, depending on the healthcare needs of the population.

The prevalence of practices that target primary care may be related to the role of this point of care in the coordination of the healthcare network, to ensure the integrated continuity of care in the different levels of the system. It should also be noted that, regardless of the size of the population, the organisation and execution of primary care are the direct responsibility of the municipal administration.

One of the main challenges of workers and municipal administrators is to promote PEH in various healthcare networks. It is also perceived that PEH must be addressed with the primary care teams, and that it is essential to reflect on the micropolitics that is developed in all the places that produce care.

In relation to the category “public”, the subcategory “nurse” was mentioned by 71% of the municipalities that reported the implementation of practices. The other subcategories were “community health agent” (63.9%), “nursing technician or assistant” (53.2%), “physician” (51.5%), “dental surgeon” (28.7%), “other top-level professionals” (28.7%), and “oral health assistant or technician” (27.2%). The percentages of the other subcategories were less than 10%. These seven prevalent occupational categories were the same in all municipalities, regardless of the size of population, with a variation only in the order in which they were cited.

The significant participation of nursing professionals may be related to the importance of this category in the points of care, including primary care (priority level in relation to the practices), which involves several activities and dynamics, such as assistance, planning, organisation, evaluation, and education.

The most frequent subcategories were related to occupational categories within the multidisciplinary team of the family health strategy (“ESF”), regarded as a strategy of expansion, qualification, and consolidation of primary care since it promotes a reorientation of the work process.

An integrative review of PEH in the reality of the ESF found that nursing stands out in relation to the number of
studies, and that the image of the nursing professional is directly linked to PEH\textsuperscript{10}.

Considering the complexity of the health-disease process, we believe that the participation of the different professional categories is related to the need to improve the developed actions and practice in a broader, more significant and qualified manner.

In relation to “status” of the informed practice, the completed practices were prevalent, corresponding to 67.71%. Moreover, 274 of the informed practices were in progress (29.49%) when the data collection instrument was completed, and the status was not notified for 26 PEH practices (2.80%).

\section*{FINAL CONSIDERATIONS}

According to the purpose and assumptions established for this study, there are signs of the incorporation of PEH as a differential concept in the routine healthcare practices in the state of Minas Gerais. Our review of the educational activities informed by the local administrations as being permanent education in healthcare suggests that there are several obstacles for the implementation of PEH that prevent changes in the professional practice and the complex context of healthcare.

However, although most of the municipalities of Minas Gerais in this study did not have a systematised proposal grounded in the PEH policy, which was considered one of the obstacles, they informed educational practices that are continuous and consistent with the principles of PEH, indicating that the professionals that directly provide healthcare services to user are attempting to incorporate these practices in Minas Gerais.

The mention of the term PEH to define the performed activities and the fact that the choice of topics and the main motivation for carrying out the practice are linked to the needs of the service are some of the aspects that signal attempts to incorporate PEH, considering that this strategy stipulated reflection on healthcare practices in collective discussion spaces for the improvement of these practices. Although detected to a lesser degree, the reference to innovative teaching strategies signals attempts in the same direction.

Therefore, the PEH practices are used to facilitate the service; however, they require a prolonged and constant structure, with questioning throughout the professional practice of workers. Consequently, the idea of innovation and constant questioning must be continuously stimulated, and PEH must be considered a strategy to change the organisation of work and the quality of healthcare management and practices.

The prospect is that the mapping of PEH in the state of Minas Gerais, which enabled us to know whether these practices are occurring and identify the inductive nature of the PEH policy in the municipalities of Minas Gerais, may serve as stimulus. Hopefully, the dissemination of these results will encourage other studies that help to overcome the obstacles that permeate the implementation of this strategy and strengthen the processes that are enabling PEH as a process of social transformation.

According to the results, this study brings contributions to nursing, which appears as a key profession in the participation of educational activities in the four dimensions of PEH – teaching, research, service, and management. It indicates the important role of this professional category in the consolidation of health services and educational practices that transform professional practices with sensibility, responsibility, and quality.

The limitations of the study particularly refer to the fact that the information on the reported practices is linked to open-ended questionnaire fields, which makes the systematisation of the responses more complex, and consequently created the need to analyse the object in a more detailed and correlated manner. Further investigations should be carried out on this subject to understand the dynamism of education activities in the context of the SUS.

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