Permanent education in mobile pre-hospital care...

Laprovita D, Fernandes FC, Almeida LP de et al.



# PERMANENT EDUCATION IN MOBILE PRE-HOSPITAL CARE: EMERSON MERHY'S PERSPECTIVE

## EDUCAÇÃO PERMANENTE NO ATENDIMENTO PRÉ-HOSPITALAR MÓVEL: PERSPECTIVA DE EMERSON MERHY

### EDUCACIÓN PERMANENTE EN EL ATENDIMIENTO PRÉ-HOSPITLAR MÓVIL: PERSPECTIVA DE EMERSON MERHY

Daniel Laprovita<sup>1</sup>, Fabiola Chaves Fernandes<sup>2</sup>, Lidiane Peixoto de Almeida<sup>3</sup>, Marcos Paulo Fonseca Corvino<sup>4</sup>, Elaine Antunes Cortez<sup>5</sup>, André Luiz de Souza Braga<sup>6</sup>

#### **ABSTRACT**

**Objective:** to reflect, theoretically and philosophically, on the importance of permanent education as a transforming action of individual and collective practices in emergency pre-hospital care services, from the perspective of Emerson Merhy. **Method:** a descriptive study, like reflexive analysis, on the Permanent Education Policy in Health, based on the concepts established by Emerson Merhy. **Results:** reveals that the permanent education happens in the daily practice, in a constant movement of training in the world of work. The process of worker training occurs in the world of work and the work itself and is a formative act in pre-hospital care. **Conclusion:** in Merhy, the permanent education acquires potentiality, since it is identified in the various ways of producing health. Pre-hospital mobile care is a field of possibilities for the implementation of this educational practice. **Descriptors:** Education, Continuing; Inservice Training; Emergency Medical Services; Philosophy.

#### **RESUMO**

Objetivo: refletir, teórica e filosoficamente, sobre a importância da educação permanente como ação transformadora das práticas individuais e coletivas no serviço de atendimento pré-hospitalar móvel de urgência, sob a perspectiva de Emerson Merhy. *Método*: estudo descritivo, tipo análise reflexiva, sobre a Política de Educação Permanente em Saúde, a partir dos conceitos estabelecidos por Emerson Merhy. *Resultados*: revela que a educação permanente acontece no cotidiano da prática, em um movimento constante de formação no mundo do trabalho. O processo de formação do trabalhador ocorre no mundo do trabalho e o próprio ato do trabalho e é um ato formativo no atendimento pré-hospitalar. *Conclusão*: em Merhy, a educação permanente adquire potencialidade, visto que é identificada nas várias maneiras de se produzir saúde. O atendimento pré-hospitalar móvel é um campo de possibilidades para a implementação desta prática educativa. *Descritores*: Educação Continuada; Capacitação em Serviço; Serviços Médicos de Emergência; Filosofia.

#### RESUMEN

Objetivo: reflexionar teorica y filosóficamente, sobre la importancia de la educación permanente como acción transformadora de las prácticas individuales y colectivas en el servicio móvil de atención prehospitalaria de urgencia, sob la perspectiva Emerson Merhy. Método: estudio descriptivo, de análisis reflexivo, sobre la Política de Educación Permanente en Salud, desde los conceptos establecidos por Emerson Merhy. Resultados: muestra que la educación permanente ocurre en la práctica diaria, en un constante movimiento de formación en el mundo del trabajo. El proceso de formación del trabajor ocurre en el mundo del trabajo y el acto mismo del trabajo y es un acto formativo en atención pre-hospitalaria. Conclusión: en Merhy, la educación permanente adquiere potencialidad, una vez que es identificada en las varias formas de se producir salud. La atención prehospitalaria es un campo de posibilidades para la implementación de esta práctica educativa. Descriptores: Educación Continua; Capacitación em Servicio; Servicios Médicos de Urgência; Filosofía.

1,3Nurses, Master's student, Post-Graduation Program in Nursing, Profesional Masters in Health Teaching: Interdisciplinary Teacher Training in UHS, Federal Fluminense University/UFF. Niterói (RJ), Brazil. E-mails: <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">lidianelpa@hotmail.com</a>; <a href="mailto:laprovita2@gmail.com">Denetio:laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">Joctor, Lecturer, PhD, Department of RJ)</a>, Brasil. E-mail: <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">focturer</a>, PhD, Department of Planning in Health of the Institute of Collective Health of the Federal Fluminense University/UFF. Niterói (RJ), Brasil. E-mail: <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">focturer</a>, PhD, Department of Maternal and Child Nursing and Psychiatry, Aurora de Afonso Costa School of Nursing, Federal Fluminense University/EEAAC/UFF. Niterói (RJ), Brazil. E-mail: <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">focturer</a>; <a href="mailto:laprovita2@gmail.com">focturer</a>, PhD, Department of Maternal and Child Nursing and Psychiatry, Aurora de Afonso Costa School of Nursing, Federal Fluminense University/EEAAC/UFF. Niterói (RJ), Brazil. E-mail: <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail.com">focturer</a>, PhD, Department of Nursing, Administration Basics, Aurora de Afonso Costa School of Nursing, Federal Fluminense University/EEAAC/UFF. Niterói (RJ), Brazil. E-mail: <a href="mailto:laprovita2@gmail.com">laprovita2@gmail.com</a>; <a href="mailto:laprovita2@gmail

#### **INTRODUCTION**

The diversity of situations and care that professionals face in the pre-hospital mobile service makes the service an important space for the construction of learning from the experiences at work.

Mobile pre-hospital care is characterized by providing assistance to trauma victims or clinical, psychiatric and obstetric emergencies quickly and safely. <sup>1</sup> It has, as a peculiarity, the conformation of its teams that are inserted in the extra-hospital environment, providing multi-professional care. In the context of the actions, the teams are divided into basic life support (BLS), manned by technicians or nursing assistants, vehicle drivers and the Advanced Life Support Unit (ALSU) team, which is manned by physicians, nurses and vehicle drivers. Such mobile units make up the Mobile Emergency Response Service (SAMU).<sup>2</sup>

justified This study is because understands that the permanent education has great relevance in the environment of the pre-hospital care, making it a space of great possibilities of knowledge, because considers the learning to be significant, that is, that the individuals, from the problems that are present in the work environment, can reflect and brainstorm educational needs in order to improve the work process.<sup>2</sup> The idea is to untie the nodes and explore a number of reflective possibilities that can contribute to the creation of a new way of producing health, day to day<sup>3</sup> of mobile pre-hospital services.

In addition, this reflection was part of the construction of the theoretical reference of dissertation elaborated in the Professional Master of Teaching in Health (PMTH) of the Federal Fluminense University (UFF).

In view of the above, the following guiding question arises: How can lifelong education be understood as a process of training at work, from the perspective of Emerson Merhy?

#### **OBJECTIVE**

• To reflect, theoretically and philosophically, on the importance of permanent education as a transforming action of individual and collective practices in the emergency pre-hospital care service, from the perspective of Emerson Merhy.

#### **METHOD**

A descriptive study, a reflexive analysis, about the Permanent Education Policy in Health, in the mobile emergency pre-hospital

Permanent education in mobile pre-hospital care...

care service, based on the concepts established by Emerson Merhy, who carefully observe the work process from the perspective of the author, emphasizing its close relationship with permanent health education, its history and its challenges.

#### **RESULTS**

First, it is necessary to make a brief history about the construction of permanent education in health until its last legal configuration.

The Federal Constitution of 1988, in its article 200, item III, emphasizes that it is the attribution of the Unified Health System - UHS to organize health education.<sup>4</sup>

This need, which is justified by the characteristics of the health work process, has a relational character, happens in the worker-user encounter (intersubjectivity), is reflexive, endowed with uncertainties and discontinuities, where it is impossible to completely standardize, and *a priori*, activities to be developed.

The National Policy on Continuing Education in Health (NPCEH) was launched by the Ministry of Health through decree 198, February 2004, making possible the training and development needs of health workers. In this ordinance, the proposal of the creation of Poles of Permanent Education in Health appears in every country.<sup>6</sup>

However, GM/MS No. 1,996, published in 2007, redefined the guidelines and strategies for the implementation of the National Policy on Continuing Education in Health, adapting them to the operational guidelines of the Pact for Health. In the organizational sphere, the creation of the Permanent Teaching-Service Integration Commissions (PTSIC), together with the Colleges of Regional Management, assumed responsibility for the preparation of the Regional Action Plan for Permanent Education in Health, as well as for the development of the PEH in the space of each region <sup>(7)</sup>. More recently, on 27 February 2014, in order to institute the National Policy on Permanent Education in Health, the Ministry of Health published MS 278/14, which reaffirms the Established concepts of lifelong learning: Learning at work, where learning and teaching are incorporated into the daily life of organizations and work, relying on meaningful learning and the possibility of transforming the practices of health workers.8

In this context, Emerson Elias Merhy shows, through his trajectory in health education, the same proposal of permanent education. For this theorist, "To share knowledge freely ... is

to be accessible and knowledge is not owned by anyone, because it is the patrimony of all and always the result of collective actions.<sup>9</sup>

Merhy was born in 1948 in the city of São Paulo. Sanitarista doctor, since 1976 he acted in the social movements of the Fight against the Carestia Popular of Health and For the Amnesty during the dictatorship. As a sanitarist. he has been working neighborhoods in the East and West Zone of São Paulo. He has a master's degree in Preventive Medicine at FUSP, Doctorate and Free Teaching at Unicamp. He was a professor at Unicamp for 25 years. He is currently Professor of Collective Health at UFRJ-Macaé. Since the early 1990s, he has learned, with health workers and users, that everyone is known and has the power to act in the world of work. He has been developing reflective materials and researches on his experiences, writing articles, books, and lectures on his most publicized book "The micropolitics of living work in action and the power to generate in the world of work new senses for existence, beyond structural determinations of society ". He has been investigating the micropolitics of encounters collectives and their stocks and the invention of new worlds for themselves. 10

In this sense, the National Policy on Emergency Care (NPEC), constituted by Ministerial Order No. 1863/03, proposes the establishment of systems of attention to state, regional and municipal emergency services, with the objective of complying with the directives that guide the SUS, with the prioritization of the program with the implementation of the Mobile Emergency Care Service - SAMU 192 - as the first element of the program.<sup>11</sup>

The SAMU 192 is a free 24-hour service that provides guidance and the sending of manned vehicles by trained personnel. It is accessed by the number "192" and activated by an Emergency Regulation Center. SAMU carries out the services anywhere: residences, workplaces and public roads. It has teams that bring together doctors, nurses, nursing assistants and lifeguards.

The implementation of regionalized and hierarchical service networks, besides allowing a better organization of the assistance, articulating the services and defining flows and resolute references, is an indispensable element to promote the universality of access, equity in the allocation of resources and integrality attention.

This feature in emergency care follows federal legislation and is not globally uniform. In the case of Ghana, the first group of

Permanent education in mobile pre-hospital care...

emergency medical doctors graduating from the end of 2012 and representing a significant step in the country's development of sustainable, interdisciplinary and emergency provider base teams designed to retaining skilled workers in health care in Ghana, and can serve as a model for developing nations.

The effect of a national quality improvement collaboration on pre-hospital care for acute myocardial infarction (AMI) and stroke in England in 2014 has been shown to have led to significant improvements in ambulance care for AMI and Stroke, offering opportunities for learning and interaction within and between organizations, which helped in collaboration to achieve their educational goals.<sup>14</sup>

On training, emergency medical service leaders have an interdisciplinary role because, in their training, they must be prepared for future responses in an environment where there is uncertainty about what the work process may require.<sup>15</sup>

In this way, one can see the importance given to emergency pre-hospital care, considering its interdisciplinary and resolute trait and its convergence with Emerson Merhy's thoughts on living work, in line with the national policy of permanent education in health that finds, in the workplace, a place of constant educational exercise.

#### **DISCUSSION**

Analyzing the micropolitics of living work in the act and the technologies involved, we have the very common view that technology is a modern machine and has made it very difficult for us to understand that when talking about health work, it is referring only to the set of machines that are used in the intervention actions carried out.<sup>16</sup>

It should be understood that health work is centered on living work in a permanent act, somewhat similar to education, so it cannot be captured globally by the logic of dead labor expressed in equipment and structured technological knowledges.<sup>3</sup>

The living work consists of processes of intervention in the act, operates with technologies of relations, of encounters of subjectivities, in addition to the structured technological knowledge, with a significant degree of freedom in the way of doing this production.<sup>3</sup>

For this reason, one should consider the actions performed by the health worker and their intercessory relationship as the user is produced by living work in action, in a process

of relations, of encounters between two people who operate a game of expectations and productions of interesting moments.<sup>16</sup>

In order to better understand the way in which they operate and are embedded in the health work process, it is worth describing the classification of these technologies, as recorded in Emerson Merhy's book "Health, the cartography of living labor", in the fourth edition. In this book, we have the following classifications of technologies in health work: light (relationship technologies / autonomization, production, reception, management as a way of governing work processes); (Structured knowledges operate in the health work process such as medical clinic, psychoanalytic epidemiology, Taylorism, faylorism) and hard (such as technological equipment of the type, norms, organizational structures).

The "light technology" of "living work in action", in health, is expressed as a process of production of "intercessory relations" in one of its key dimensions, which is its encounter with the end user, ultimately health needs as their intentionality and therefore who, as their particular interest, 'publicize' the distinct intentions of the various agents in the health work scene.<sup>3</sup>

It is through the work process, that is, of formative meetings in the permanent action of the world of work, the ways of producing health translate into an important challenge for the health services that does not refer to the institution of education policies in the work, aiming at a better interaction between the subjects-workers-users and the perception that their productions are, in themselves, essences of knowledge produced in the individual, collective and shared daily knowhow.<sup>17</sup>

In this movement, we stress not only the knowledge production of new collectively, but also training processes, without being formally designated as a place of training or training of the worker for the exercise of their functions. Rather than questioning what happens in the services from an a priori model of organization of the work process in health, one must develop the capacity to create questions about what is happening, opening possibilities of the worker in the collective, invent ways and to carry out health work in concrete situations (18).

When it is invaded by new regimes of visibilities and dictations, by fields of affectations not predictable in many cases, but predictable in others, new possibilities are created. In many of them, a fragmentation is

Permanent education in mobile pre-hospital care...

potentialized: from the de-production of life, one turns to the contrary.<sup>17</sup>

Immobility has the potential to generate in us mobility, from the moment our gaze turns on ourselves, opening new lines of possibilities, forming movements of visualizations and verbalizations.

In the health work process, the meetings of the various subjects in the world of work and for execution, the work promotes meetings that allow the reinvention and reorganization of the various work processes at different levels. The collective action and look comes with possibilities generated in the world of from the workers' subjects. This construction considers, and for that reason alone, significant learning. To consider the other and their experiences is to establish, from the existing reality in the other, is to build a permanent movement. This movement is not instituted. It is instituted as a process that can take place in informal meetings in the work world, in the corridors, in the kitchen, in the conversation circle in the cafe. He does not apologize, but it happens in the "live work in action" of each and everyone. 17

As a permanent school, the world of work implies formative and necessary processes for the actual realization of the practice of certain groups of workers.<sup>17</sup>

The act itself is formative, leading to the production of new knowledge, or updating some, in the act of caring. In this territory, the applied knowledge comes from the collective, the experiences, the senses, the intercessory encounters.<sup>17</sup>

It must be thought that this training territory does not match that of existing education in continuing education. This, marked by exposure to *a priori* knowledge, to prepare for action.<sup>17</sup>

As a matter of course, lifelong education has to produce new pacts and collective agreements, strengthening the actions of the teams, generating institutional changes and transformations, as well as professional and social technical practices.<sup>18</sup>

With regard to the Mobile Pre-hospital Care Service, this is a field of possibilities for the employment of permanent education, because one cannot ignore the theoretical aspects of thinking about acting, knowing why it is being done, so that the actions are not limited to repetitive automations without reflection, questioning and understanding.<sup>19</sup>

The understanding that care is the result of quick decisions that, when effective, potentiate the rescue of more victims, justifies actions that improve care through

established protocols.<sup>14</sup> There is a possible way of acting in these places, With the intention of sharpening possibilities and recognizing this process as an act in the world of work which, in itself, is already a training school of the most fundamental.<sup>17</sup>

As already mentioned, the pre-hospital setting, which is characterized by multiple visits, is in itself a field of great relevance for the incorporation of the concepts of permanent education in health, as a strategy for learning in the service.

Wealth comes through the operation of multiple skills that, inserted in the productive act, are collectively aligned intentionally: it is the relationship in the service and for the service in health.

Continuing education in health is a broad approach that not only refers to the technical-scientific, but to the human inter-related to its work, able to analyze, evaluate how it performs, and improve through this analysis, building improvements and, thus, qualify the his work through work. 9,17

In a study $^{20}$  that aimed to analyze the professionals' perception about permanent and / or continuous education in the Mobile Emergency Care Service of a city in the State of São Paulo, some difficulties for the execution of the work were evidenced: of protocols; Inefficient absence communication; Failure to supervise; Lack of training for the care of psychiatric patients; of humanization and lack psychological support to professionals.

Permanent education for health teams, especially for emergency care teams, is fundamental, as it provides a critical rereading of working conditions, established relationships and health needs, taking into account the particularities of each region, the users and workers involved.<sup>20</sup>

definition of training a development policy for the Unified Health System, whether at the national, state, regional or even municipal level, should consider the concept of Permanent Health Education and articulate the needs of health services. Health, the possibilities development of professionals, the resolving capacity of health services and social management over public health policies.6

Incorporating teaching and learning into the daily life of organizations and social and labor practices, in the real context in which they occur, is one of the focuses of the National Policy of Permanent Education in Health.<sup>7</sup>

Permanent education in mobile pre-hospital care...

#### CONCLUSION

The concepts established by Emerson Merhy allow the understanding of the logic of the National Policy of Permanent Education in Health, since it describes the relations in the work in the production of the practice, from the perspective of micropolitics.

The permanent education has, in the act of work, its institution in the work practices, even if it is not instituted, since it emanates from the actors in the world of work in a living act, in the daily and collective action with its technologies.

The mobile pre-hospital care service is an important space for the incorporation of permanent education actions in the workplace, given its peculiarity and actions of several actors, always considering their experiences that transform and refine the practice.

In view of the above, health practices must be built in a constant process, guided by the different knowledge, relating theory and practice, with the purpose of offering a better quality of care and enabling the participation of the various actors involved in care.

In Merhy, permanent education acquires potentiality, since it is identified in the various ways of producing health. Pre-hospital mobile care is a field of possibilities for the implementation of this educational practice.

Finally, the choice of Emerson Merhy as a theoretical reference, in a research that addresses Permanent Education in Health, is adequate and coherent, given the proximity of the referential to the aspects of politics.

#### **REFERENCES**

1. Ministério da Saúde (BR). Portaria 2.048 de 5 de novembro de 2002. Aprova o Regulamento Técnico dos Sistemas Estaduais de Urgência e Emergência [Internet]. Brasília: Ministério da Saúde; 2002 [cited 2016 Mar 15]. Available

from: <a href="http://www.saude.mg.gov.br/images/d">http://www.saude.mg.gov.br/images/d</a> ocumentos/portaria\_2048\_B.pdf

2. Oliveira AS, Rodrigues MP. Educação permanente sob a ótica de profissionais do serviço de atendimento móvel de urgência. J Nurs UFPE on line [Internet]. 2015 July [cited 2016 Mar 15];9 (Supl. 6):8751-4. Available from:

http://www.revista.ufpe.br/revistaenfermage m/index.php/revista/article/download/7744/ 12766

3. Merhy EE. Saúde a cartografia do trabalho vivo. 4th ed. São Paulo: Hucitec; 2014.

- 4. Presidência da República (BR), Casa Civil, Subchefia para Assuntos Jurídicos. Constituição da República Federativa do Brasil de 1988 [Internet]. Brasília: Presidência da República; 1988 [cited 2016 Mar 15]. Available from: <a href="http://www.planalto.gov.br/ccivil\_03/c">http://www.planalto.gov.br/ccivil\_03/c</a> onstituicao/ConstituicaoCompilado.htm
- 5. Peduzzi M. Equipe multiprofissional de saúde: conceitos e tipologia. Rev Saúde Públ [Internet]. 2001 [cited 2016 Mar 15];35(1):103-9. Available from: <a href="http://www.scielo.br/pdf/rsp/v35n1/4144.pdf">http://www.scielo.br/pdf/rsp/v35n1/4144.pdf</a>
- 6. Ministério da Saúde (BR). Portaria GM/MS n. 198, de 13 de fevereiro de 2004. Institui a Política Nacional de Educação Permanente em Saúde como estratégia do Sistema Único de Saúde para a formação e o desenvolvimento de trabalhadores para o setor e dá outras providências [Internet]. Brasília: Ministério da Saúde; 2004 [cited 2016 Mar 15]. Available from: <a href="https://www.nescon.medicina.ufmg.br/biblioteca/imagem/1832.pdf">https://www.nescon.medicina.ufmg.br/biblioteca/imagem/1832.pdf</a>
- 7. Ministério da Saúde (BR). Portaria GM/MS n.º 1.996, de 20 de agosto de 2007. Dispõe sobre as diretrizes para a implementação da Política Nacional de Educação Permanente em Saúde e dá outras providências. Brasília: Ministério da Saúde; 2007 [cited 2016 Mar 15]. Available

from: <a href="http://www.esp.ms.gov.br/wp-content/uploads/sites/66/2015/05/portaria\_1">http://www.esp.ms.gov.br/wp-content/uploads/sites/66/2015/05/portaria\_1</a>
996.pdf

- 8. Ministério da Saúde (BR). Portaria GM/MS 278, de 27 de fevereiro de 2014. Institui as diretrizes para implementação da Política de Educação Permanente em Saúde no âmbito do Ministério da Saúde (MS). Brasília: Ministério da Saúde; 2014 [cited 2016 Mar 15]. Available from: <a href="http://www.poderesaude.com.br/novosite/images/Publica%C3%A7%C3%B5es\_28.02.2">http://www.poderesaude.com.br/novosite/images/Publica%C3%A7%C3%B5es\_28.02.2</a> 014\_-\_IV.pdf
- 9. Merhy EE. Micropolítica, instituições e governos dos vivos: plataforma de interinventividade a partir da Linha de Pesquisa Micropolítica do Trabalho e Cuidado em Saúde [Internet]. 2013 [cited 2016 Mar 13]. Available from <a href="http://saudemicropolitica.blogspot.com.br/2">http://saudemicropolitica.blogspot.com.br/2</a>
- 10. Mehry EE. Colaboração de Emerson Merhy: sua trajetória acadêmica [Internet]. Mensagem para: Daniel Laprovita. 2016 Feb 29 [cited 2016 Mar 13]. [1 parágrafo].
- 11. Ministério da Saúde (BR). Lei 1863/03 de setembro de 2003. Institui a Política Nacional de Atenção às Urgências, a ser implantada em todas as unidades federadas, respeitadas as competências das três esferas de gestão

Permanent education in mobile pre-hospital care...

[Internet]. Brasília: Ministério da Saúde; 2003 [cited 2016 Mar 15]. Available from: <a href="http://www.samu.fortaleza.ce.gov.br/legislacao/portaria\_ms\_gm\_1863\_03.pdf">http://www.samu.fortaleza.ce.gov.br/legislacao/portaria\_ms\_gm\_1863\_03.pdf</a>

- 12. Ministério da Saúde (BR). Portal da Saúde SUS. O que é SAMU 192? [Internet]. Brasília: Ministério da Saúde; 2014 [cited 2016 Mar 15]. Available from: http://portalsaude.saude.gov.br/index.php/o-ministerio/principal/secretarias/951-sas-raiz/dahu-raiz/forca-nacional-do-sus/l2-forca-nacional-do-sus/13407-servico-de-atendimento-movel-de-urgencia-samu-192
- 13. Martel J, Oteng R, Mould-Millman NK, Bell SA, Zakariah A, Oduro G, et al. The development of sustainable emergency care in Ghana: physician, nursing and prehospital care training initiatives. J Emerg Med [Internet]. 2014 Oct [cited 2016 June 01];47(4):462-8. Available from: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/">https://www.ncbi.nlm.nih.gov/pmc/articles/</a> PMC4179991/pdf/nihms616469.pdf
- 14. Siriwardena AN, Shaw D, Essam N, Togher FJ, Davy Z, Spaight A, et al. The effect of a national quality improvement collaborative on prehospital care for acute myocardial infarction and stroke in England. Implementation Science [Internet]. 2014 Jan [cited 2016 June 01];9:17. Available from:

https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-9-17

- 15. Leggio Jr. WJ. The state of leadership education in emergency medical services: a multi-national qualitative study. Prehosp Disaster Med [Internet]. 2014 Oct [cited 2016 June 01]; 29(5):478-83. Available from: <a href="https://www.researchgate.net/publication/2">https://www.researchgate.net/publication/2</a> 65057229\_The\_State\_of\_Leadership\_Education in\_Emergency\_Medical\_Services\_A\_Multi-national\_Qualitative\_Study.
- 16. Merhy EE. A perda da dimensão cuidadora na produção da saúde: uma discussão do modelo assistencial e da intervenção no seu modo de trabalhar a assistência [trabalho de conclusão de curso] [Internet]. Niterói: Universidade Federal Fluminense; 2008 [cited 2016 Mar 16]. Available from: http://www.uff.br/saudecoletiva/professores /merhy/capitulos-10.pdf
- 17. Merhy EE. Educação Permanente Movimento: uma política de reconhecimento e cooperação, ativando OS encontros cotidiano no mundo do trabalho em saúde, questões para os gestores, trabalhadores e quem mais quiser se ver nisso. Saúde em Redes [Internet]. 2015 [cited 2016 Mar 15];1(1):07-14. **Available** from:

http://revista.redeunida.org.br/ojs/index.php/redenida/article/download/309/15

18. Merhy EE. O ato de cuidar: a alma dos serviços de saúde [trabalho de conclusão de curso] [Internet]. Niterói: Universidade Federal Fluminense; 1999 [cited 2016 Mar 15]. Available from: <a href="http://www.uff.br/saudecoletiva/professores/merhy/artigos-05.pdf">http://www.uff.br/saudecoletiva/professores/merhy/artigos-05.pdf</a>

19. Divino EA, Pereira QLC, Siqueira HCH. A capacitação da equipe que atua atendimento pré-hospitalar móvel: necessidade e capacitação da equipe que atua no atendimento pré-hospitalar. REME rev min enferm [Internet]. 2009 July/Sept [cited 2016 Feb 12];13(3):358-64. Available from: http://www.reme.org.br/artigo/detalhes/201 20. El Hetti LB, Bernardes A, Gabriel CS, Fortuna CM, Maziero VG. Educação permanente/ continuada como estratégias de gestão no serviço de atendimento móvel de urgência. Rev eletronica enferm [Internet]. 2013 Dec [cited 2016 Feb 15];15(4):973-82. Available

from: https://www.fen.ufg.br/fen\_revista/v1 5/n4/pdf/v15n4a15.pdf

Submission: 2016/07/18 Accepted: 2016/11/09 Publishing: 2016/12/01 Corresponding Address

Daniel Laprovita Rua Dr. Celestino, 74 Bairro Centro

CEP 24020-091 – Niterói (RJ), Brazil

English/Portuguese

Permanent education in mobile pre-hospital care...