The Role of Hygiene Education for Specialists in the Context of the Covid-19 Pandemic

Mihaela GAVRILA-ARDELEAN¹,
Liliana Renate BRAN²,
Liviu GAVRILA-ARDELEAN³

¹Professor dr., 'Aurel Vlaicu' University of Arad, Arad, Romania,
mihaela.gavrila@uav.ro

²Assoc. professor, 'Aurel Vlaicu' University of Arad, Arad, Romania,
lilysan_arad@yahoo.co.uk

³Lecturer dr., 'Vasile Goldiș' Western University, Arad, Romania,
liuigav@yahoo.com

Abstract: Aim of research: Starting from the scientifically proven fact that hygiene measures are prophylactic factors in transmitting covid-19 infection, we wanted to improve the level of theoretical and practical knowledge of future specialists in social and medical sciences, to prevent pandemics. In this regard, a workshop was organized at the beginning of March 2020, in the context of the International Day of Social Work.

The workshop's elements of novelty could be seed in the rapid thematic adoption of education for individual and community health, in the context of Covid-19, as well as in its particular organizational elements, specific to the epidemiological context in which it was carried out. It aimed to raise awareness of the importance of specialists' hygiene, in the process of stopping the pandemic.

The research method is empirical, based on a qualitative thematic analysis. Continuous professional education was achieved through research instruments: practical experimental case study, observation and participation in the workshop, under the supervision of a trainer.

The research sample consists of a group of over 30 health specialists and students from different social and medical specialties.

Research results: The opinion of the specialists from the study group, who participated in the demonstration workshop, shows that practical learning through exemplification and exercises, based on previously known theoretical notions, form and strengthen professional skills.

Conclusions: This report was written in the scientific perspective of professional education classes, which improve specialists' awareness of the role of proper personal hygiene in an epidemic context.

Keywords: *education; specialists; hygiene; Covid-19; pandemic.*

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1. Introduction

Hand hygiene measures are considered as prophylaxis for the transmission of infectious diseases. It has been historically demonstrated during major epidemics and it has been scientifically confirmed that proper hand hygiene of medical and social care staff, especially those working in the health field, is extremely important, as shown by *Global Research Collaboration for Infectious Disease Preparedness in Global Reserach Roadmap* on Covid-19 transmission, through the *Global research and innovation forum: towards a research roadmap for the 2019 novel Coronavirus* held on February 2020, at World Health Organization Headquarters (WHO), Geneva (WHO, 2020).

According to the epidemiological model of the transmission of infectious diseases, through direct and prolonged contact with both healthy people and patients with covid-19, specialists in the field of care become a real biological bomb (Rută & Cernescu, 2004; Vinck et al., 2019). The hygiene of the specialists who provide support and care directly to other people, is all the more important as some of the beneficiaries may be Covid-19 positive, but asymptomatic (Rothe et al., 2020). These *silent carriers* are the ones that spread the infection, unnoticed, acting as viral reservoirs (Hijawi et al., 2013; Rută, 2020).

2. Methodology

2.1. Aim of research

Starting from the scientifically proven fact that hygiene measures are prophylactic factors in transmitting covid-19 infection, we wanted to improve the level of theoretical and practical knowledge of future specialists in social and medical sciences, to prevent pandemics (de Wit et al., 2016; Rubin et al., 2020). It aimed to raise awareness of the importance of specialists' hygiene, in the process of stopping the Covid-19 pandemic.

2.2. Hypothesis of research

Practical learning through exemplification and exercises, based on previously known theoretical notions, under the supervision of a training specialist, form and strengthen professional skills. (Caras & Sandu, 2014).

2.3. Objective of research

The article aims to show that learning through a practical workshop can be a useful method of education for health and social professionals. The

purpose is to successfully apply this educational method in future sessions of training and continuous professional education.

2.4. Research methods

The article is a short communication of our research. It is a stage research. The research method is empirical, based on a qualitative thematic analysis. Continuous professional education was achieved through research instruments: practical experimental case study, observation and participation in the workshop, under the supervision of a trainer. An experimental study was conducted to confirm the hypothesis regarding the effectiveness of introducing practical workshop as a training method into the educational process of social and health specialists.

In this regard, at the beginning of March 2020, in the context of the International Day of Social Work, as part of the activities carried out by the specialists, we organized a workshop on *The Role of the Social Worker in Case of Pandemics* (figure 1). Figure 1 is an image of the poster. It is an original conception, created using Core and Power-Point Template Programme, in consensus with all the authors of this article. This poster was utilised in promoting the educational workshop.

2.5. Research sample

The event was held in the *Nursing School of Arad* and was addressed to students from the specialisations: Bachelor's Study Programme in Social Work and Master's Study Programme in Social Work, and from the *Nursing School of Arad*. As it brought together a group of over 30 people, the activity needed the approval of the local *Public Health Directorate*, in accordance with the community prophylaxis measures of transmission of the infection with Covid-19, which were less restrictive at the time. During the workshop, the epidemic had just broken out in our country, and Romania was at the stage of adopting specific European prevention measures, for the first scenario - stage 1 (Callaway & Cyranoski, 2020; Tang et al., 2020).

Fig.1. Poster of the event carried out on Social Work Day in Arad, 2020
Source: after Mihaela Gavrilă-Ardelean

Specialists with experience in the field of public health were invited to coordinate the educational activities, namely 2 epidemiologists from the *Compartment of Epidemiological Surveillance and Communicable Disease Control* and of the *Health Assessment and Promotion Department*, of the *Public Health Directorate of Arad County*, along with specialists in education from the University of Arad, and social work specialists.

3. Results

The workshop was organized for educational, instructive, and professional purposes. It granted professional credits to the participating social workers, in collaboration with Arad's Territorial Structure of the National College of Social Workers, and credits for continuous medical education, through the local branch of the Order of the Nurses, Midwives and Medical Assistants of Romania.

The workshop was organized for the University Days of Social Work, which were supposed to take place throughout the month of March 2020. The accelerated evolution of the national and international epidemiological situation outpaced the community events, leading to this workshop being the only conventional educational event that was completed. The other events that were included on the agenda of the International Day of Social Work in Arad, were canceled or rescheduled for after the crisis situation ends.

The workshop that we organized had the following elements of novelty:

- Rapid thematic adoption of education for individual and community health, in the context of Covid-19;

- The particular organizational elements of the workshop, specific to the epidemiological context in which it was carried out, with a limited number of less than 50 participants, to prevent community transmission of the virus, according to the first scenario of Covid-19 prophylaxis in Romania;

- The importance of the technical aspects that have been learned from the practical training process which took place in the clinical laboratory of the Nursing School, where a nurse demonstrated correct methods of personal hygiene in an epidemiological situation, including correct hand washing and hand hygiene techniques, for a double protection: of the specialized medical and social staff – the social assistant in care units –and of the beneficiaries of medical, medico-social and social services (Al-Tawfiq et al., 2013; Klompas et al., 2020);

- Raising awareness of the importance of all the specialists involved in stopping the pandemic with Covid-19, which leads to strengthening inter-human relations of socio-professional and inter-professional solidarity, in multidisciplinary teams. The aim of the International Social Work Day 2020 was: *Promoting the importance of Human Relationships*. The avalanche of the current international events has confirmed the importance of each member of the social body of professional solidarity in health and care, in the process of stopping the Covid-19 pandemic (Abramowitz et al., 2018; Bardosh et al., 2019);

- Professional solidarity leads to the increase of inter-professional empathy and international professional exchanges of mutual help. For example, Europe and Mexico supply red risk zones with specialized staff.

4. Conclusion

Practical perspectives and utilities of the scientific-educational approach

Through an educational and scientific approach we tried to answer a few questions in the context of the Covid-19 crisis. The paper brought new knowledge to this field of education for health specialists. The research improves practical knowledge and hygiene skills, for continuous professional education. The hypothesis and objective of research were achieved. The opinions of specialists from the study group, who participated in the

demonstration workshop, show that practical learning through exemplification and exercises, based on previously known theoretical notions, form and strengthen professional skills (Caras & Sandu, 2014). The objective of research was reinforced by the conclusions of health and social specialists. As our case study proves, learning through practical demonstration can be successfully applied in training sessions and continuous professional education.

This short communication highlights the following ways in which this paper brings improvement to the field:

- Is this epidemiological crisis also a crisis of greater needs in the hygiene education of health professionals and social professionals?
- What are the priorities in the hygiene of the health staff at this time of the pandemic?
- Are there only material needs, which can be satisfied through the purchase of equipment and disinfectants?
- Or are there any requirements regarding a minimum of current training regarding the access and use of equipment and substances for personal hygiene, as well as the introduction of a routine in the hygiene circuit to avoid contamination?

The European Commission allocates special research funds, in the Covid-19 context, to prevent future outbreaks. This is done by analyzing the current state of knowledge and level of preparedness of the population and the specialists from various vital fields, to identify the existing gaps, for possible areas where to fund projects (GloPID-R, 2020).

This article is a first report of a rapid contextual initiative, which the course of the events has proved necessary for a larger number of staff, including those with higher medical studies (resident doctors), see the case of the Public Health Directorate of Arad.

The perspective of our educational approach is to realize a broad scientific material with the intention of publishing a scientific article on the prevention of Covid-19 transmission (Paules et al., 2020). This will include the results of the analysis of student satisfaction regarding their training activity and the technical skills that they have learned through practical examples. Professional education raises specialists' awareness of the role of proper personal hygiene in an epidemic context. Our scientific approach is consisted of:

- an anticipatory step for the prevention of future pandemics, which may also be caused by other viruses (Department of Health, 2019; Hick et al., 2020; Ravi et al., 2019; Ross, 2017);

- a method of optimizing the hygiene of the care staff, through acquired knowledge and correct application of hygiene techniques, to effectively reduce the risk of transmission in health care and community settings;

- skills of strategic control in staff hygiene, to prevent secondary transmission in health care and community settings.

The international practical aspects of Covid-19 prophylaxis, scientifically substantiated by W.H.O., and approved as mandatory protocols in the Member States by the European Commission, have shown that the generalization of these basic measures of personal hygiene, as a current practice of specialized personnel, can be an active and low-cost measure to prevent the next pandemic, through education.

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'We declare that, there is no conflict of interest regarding the publication of this paper.'

Figure 1 is the image of the poster created by the first author of the article, Mihaela Gavrilă-Ardelean. We were given full permission to use it in this article. It is an original conception, made with Core and Power-Point Poster Programme, in consensus with all the authors of the article. The poster was utilised in the promotion of the educational workshop.

The article is a first stage of the research, which we hereby present as a short stage communication.

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