



## The Teachers' Action for Health – Teachers' First Aid Intervention in Emergency Cases at School

## Irina Gheorghiu<sup>1</sup>, Loredana Danaila<sup>2</sup>, Alexandra Hanu<sup>3</sup>, Claudia Dinu<sup>4</sup>, Ovidiu Ursa<sup>5</sup>, Stefan Colibaba<sup>6</sup>

Albert Ludwigs Freiburg University, Germany<sup>1</sup> EuroEd School Iasi, Romania<sup>2,3</sup> University of Medicine and Pharmacy, Iasi, Romania<sup>4</sup> University of Medicine and Pharmacy Cluj-Napoca, Romania<sup>5</sup> Al. I. Cuza University Iasi, Romania<sup>6</sup>

## Abstract

The article is based on the TA4H project - funded by the European Commission under the Erasmus+ KA220-SCH - Cooperation partnerships in school Education. The project is being implemented by the EuroED kindergarten and primary school, lasi, Romania, within a partnership of schools, NGOs, universities, and health institutions from Turkey (coordinator), Bulgaria, Greece, Latvia, Lithuania and Romania. The main goal of the project is to support teachers in primary and preschool education to improve their knowledge and increase awareness of situations in which students may need first aid intervention or emergency response in case of chronic diseases, through the use of digital educational materials. Furthermore, the project aims to ensure the continuity of this knowledge and skills. Understanding the importance of first aid and chronic disease management in schools is crucial to ensure the safety, well-being, and academic success of children. The project stems from a rigorous needs analysis carried out in all partner countries to identify the top priority issues in the field of first aid that teachers face and the current state of preparedness, the availability of resources, and the effectiveness of training programs. The project's goal is to develop training programmes for preprimary and primary teachers that address the specific needs and challenges identified. The article looks into the findings of the needs analysis in Romania and provides some insights into the project's objectives, target users, and main deliverables.

Keywords: kindergarten and primary school, first aid intervention, emergency, teachers

## 1. Introduction

Ensuring a safe learning environment is paramount for both educators and students. One crucial aspect often overlooked is teachers' awareness of emergency situations and proficiency in first aid. The unpredictable nature of emergencies, ranging from medical incidents to unforeseen accidents, necessitates a proactive approach. When teachers are well-informed and trained in handling emergencies, they become vital first responders, capable of swiftly and effectively addressing critical situations. This not only safeguards the well-being of students but also contributes to a sense of security and preparedness within the educational setting.

Raising teachers' awareness of emergency situations and first aid in schools as well as equipping them with knowledge and competences to handle such incidents has been a growing and important topic recently [1, 2,3]. The TA4H project is in line with this tendency, which recognizes the critical role that teachers may play in ensuring the well-being of students in various situations [4]. To this end, it aims at equipping teachers with the knowledge and skills to respond effectively to emergencies.

## 2. TA4H Project

### 2.1 Project objectives and target groups

Through the use of digital educational resources, the Teachers' Action for Health (TA4H - 2022-1-TR01-KA220-SCH-000089892) project aims to support preschool and primary school teachers in enhancing their knowledge, awareness, and experience of students who may require first aid intervention or emergency response in chronic diseases in school contexts [4].



# International Conference EW PERSPECTIVES CIENCE EDUCATION

## 2.2 Project Partnership

 $\left[ 1 \right]$ 

The TA4H project's challenges need a multinational approach to be solved. The partnership is coordinated by Cigli Ilce Milli Eqitim Mudurlugu (Türkiye) and made up of schools and universities (Yildiz Technical University, Türkiye, University of Latvia, Latvia, Vilniaus Kunigaikscio Gedimino progimnazia, Lithuania) as wel as education, research and training organizations (Ekoloqijakm Ood, Bulgaria, Fundatia EuroEd, Romania, Educom+ The community for the "plus" in education, Greece). These institutions care for the overall safety and health of the school community, positively impacting academic performance and fostering a supportive learning environment.

### 2.3 Project Results

The key subjects and their subtopics to be included when devising the main structure of the deliverables were determined by a mixed team of teachers, trainers, and technicians working within the project consortium in order to produce the project's results [4].

The main project deliverables are:

• an online course with modules on school-based first aid and intervention in physical injury and chronic diseases

• a network aiming at increasing institutional capacity and professionalism to work at EU/international level.

The project enables early and primary school teachers to acquire digital skills and intervention methods in first aid and chronic illnesses through an online course, which comes with an e-book illustrated by videos [4].

## 3. The Findings of the Research

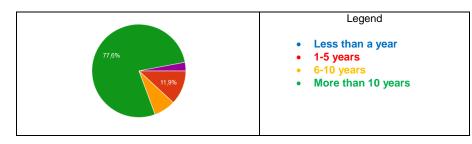
The main project deliverable (the online course) was created based on the findings of the needs analysis relative to first aid and chronic diseases in schools carried out in the six project countries (Latvia, Lithuania, Greece, Turkey, Romania, and Bulgaria). The research was based on surveys administered to teachers and students. The findings reflect a genuine panorama of the current state of preparedness, availability of resources, and effectiveness of training programs and offer essential information to develop the project materials.

This paper focuses on the findings reflecting the opinions of Romanian teachers about the role of first aid, management of chronic diseases, and the availability of resources and training in schools.

The surveys identified the participants' demographical features and explored their training and experience in first aid and chronic disease management. It also inquired into the availability of first aid kits in schools, common emergency incidents teachers faced in the school context as well as recommendations for improvement in relation to first aid instruction. There were 67 teachers who participated in the survey in Romania. They had to complete a Google Form questionnaire, which ensured a standardized approach to data collection.

The results of the research show that the participants' levels of teaching experience vary widely. (Figure 1). The vast majority of participants (55/ 77.6%) have more than 10 years of teaching experience, followed by teachers with 1-6 years of teaching experience (7/11.9%) and teachers with 6-10 years of teaching experience (5); the smallest group was teachers with less than 1 year of experience (2 participants) Thus the most significant group was made up of teachers with experience (similar to the general report), who can contribute to guiding the development of training materials.

#### Figure 1 The participants' levels of teaching experience



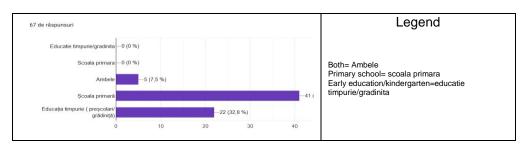
As for the *teaching levels* (Figure 2) there were 41 primary school teachers (61.2%), 22 kindergarten teachers (32.8%), and five teachers for both early childhood and primary school (7.5%). The



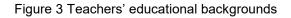
## International Conference NEW PERSPECTIVES in SCIENCE EDUCATION

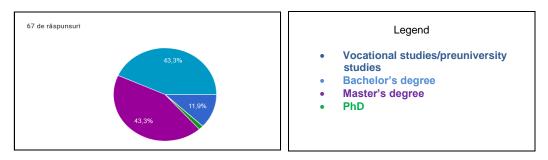
distribution of participants across different teaching levels helps us understand the unique requirements and difficulties at each level and pinpoints particular areas that might need more resources or training.



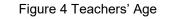


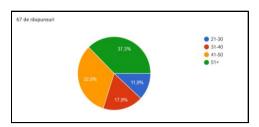
The participants had diverse educational backgrounds (Figure 3), with the majority holding bachelor's (30/43.3%) or master's degrees (30/43.3%). Nine participants 11.9%) had vocational or non-university degrees and one had a PhD. With the use of this data, educational materials and interventions may be created that are appropriate for teachers from a variety of educational backgrounds, promoting inclusive and thorough teacher preparation.





The participants could be classified into four age categories: 21–30, 31–40, 41–50, and 51+. The age group with the highest percentage of respondents (25) is 51+, followed by 41-50 (Figure 4). The smallest age group was 21-30, suggesting fewer participants in the early stages of their careers.



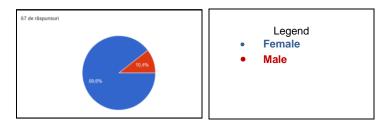


Regarding the participants' gender distribution, the majority of the respondents (62) are women (Figure 5), which is consistent with global patterns that have historically seen a higher percentage of female educators in the teaching profession. This gender gap may be caused by elements including cultural standards, job preferences, and societal expectations.



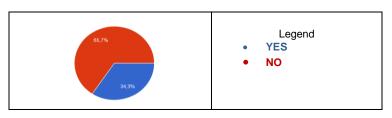
## International Conference NEW PERSPECTIVES In SCIENCE EDUCATION

#### Figure 5 Gender distribution



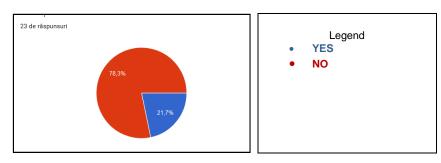
In terms of First aid training, only a small number of teachers (23/65.7%) received formal first aid training (Figure 6), mostly completed years ago. The duration varied from eight to one hour and the training was done by either public (12) or private (11) institutions. Basic First Aid training is the only reported category when it comes to the type of first aid training received by participants. The aforementioned findings emphasize the need for standardized guidelines and suggestions to ensure teachers receive comprehensive training in handling various first aid situations.

#### Figure 6 Teachers' previous first aid training



According to the research findings, chronic diseases were not generally covered by teachers' training (Figure 7). Only 13 (21.3%) participants indicated that their training gave them valuable tips on diabetes (the most commonly reported), asthma, epilepsy and allergies. This shows that there is a need to close the current gap in teachers' medical emergency preparation related to various chronic conditions.

Figure 7 Coverage of chronic diseases in teachers' previous first aid training



Regarding circumstances necessitating first aid, the majority of participants stated they have had to cope with various instances: injuries (most common), asthma attacks, fainting, cuts and wounds, allergic reactions, nosebleeds, seizures, choking incidents, panic attacks, diabetes or epilepsy. These findings emphasize how crucial it is for teachers to be trained in providing rapid assistance in a range of critical situations. They draw attention to how important teachers are to guaranteeing students' safety and wellbeing while they are in class. When faced with an emergency, teachers who possess first aid knowledge and abilities may react quickly and efficiently, giving students the care and support they need until more medical assistance can be provided. If they have the required training and resources, teachers can also efficiently address a variety of medical emergencies and give students the prompt care they need .

When asked about the factors that prevented their intervention in a first aid incident, the teachers who completed this column (25) mentioned: lack of practical knowledge (12), lack of theoretical knowledge (8), legal restrictions (3) or risk of exposure to communicable diseases (2).



Considering the crucial role teachers play in ensuring students' safety and well-being in various emergency situations, all participants agreed on the need to improve their knowledge and abilities in handling emergencies. They highlighted the necessity of participating in standardised comprehensive first aid training courses promoting scenario-based learning, technology and multimedia tool utilization, hands-on practices, and interactive techniques.

International Conference

## 4. New developments

Based on the suggestions provided by both teachers and students regarding first aid training, several key insights have been adopted to enhance the effectiveness and relevance of the online training course created within the project. A number of significant insights revealed by the research have also been considered to improve the efficacy and applicability of the online training course developed as part of the project.

The project's results (the online course with its interactive videos, scenarios, storyboards, e-book, and LMS content) are designed to specifically address the gaps and challenges that have been identified. These resources will help teachers and students become more knowledgeable, proficient, and self-assured in responding to emergencies and helping students with chronic illnesses.

## 5. Conclusions

First aid and chronic disease management in schools are essential components of a comprehensive approach to student well-being. They contribute to the overall safety and health of the school community, positively impacting academic performance and fostering a supportive learning environment.

The findings revealed by the surveys carried out in Romania were similar to those of the partnership and highlighted the following, which we used to create the online training course:

- the importance of incorporating comprehensive first aid and chronic disease education into school curricula and its potential impact on student well-being, safety, and overall educational experience.

- the need for improved first aid training among teachers with practical, hands-on training, scenariobased learning, use of technology and multimedia tools and interactive methods.

- a growing awareness of the importance of accommodating diverse student needs and creating equal learning opportunities for all.

- the need to include topics such as chronic diseases (asthma and diabetes) in teachers' training.

- the essential role of teachers and school staff in providing first aid assistance and managing chronic diseases.

- areas where teachers and students may have limited knowledge or misconceptions. The project's materials thus focus on these specific areas to provide accurate and comprehensive information.

- the need for collaboration between schools and healthcare professionals (nurses or medical experts) to enhance the effectiveness of first aid and chronic disease education.

### Acknowledgements

This article is based on a study of The TA4H the Teachers' Action for Health (TA4H - 2022-1-TR01-KA220-SCH-000089892), which is developed in the framework of the Erasmus+ Programme, KA2 - Strategic Partnerships for School Education.

## References

[1] Ilha, A. G., Cogo, S. B., Ramos, T. K., Andolhe, R., Badke, M. R., & Colussi, G "Educational actions on first aid for early childhood education teachers: a quasi-experimental study". Revista da Escola de Enfermagem da USP, 2021, pp 55.



## International Conference NEW PERSPECTIVES In SCIENCE EDUCATIO

[2] De Buck, E., et al., "Evidence-based educational pathway for the integration of first aid training in school curricula", Simulation and education/Vol94/P8-22, DOI: https://doi.org/10.1016/j.resuscitation.2015.06.008,2015,

https://www.resuscitationjournal.com/article/S0300-9572(15)00253-1/fulltext

[3] Mamatha, H. & Bhat, N. & Prakash, J. & Sumalatha, S. & Ankolekar, V., "Knowledge and Training of Primary School Teachers in First Aid - A Questionnaire Based Study", The Kurume Medical Journal. 66. 10.27, 2020. 39/kurumemedj.MS662001.

[4] The TA4H project, https://ta4h.sosschool.eu/about/