

# World Journal of Biology Pharmacy and Health Sciences

eISSN: 2582-5542 Cross Ref DOI: 10.30574/wjbphs Journal homepage: https://wjbphs.com/



(RESEARCH ARTICLE)



Comparing the roles of school nurses in special education in Unites States of America, Europe [Germany, Greece, Norway, Sweeden and United Kingdom] and Russia: Challenges and perspectives for the Greek nursing system in schools

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World Journal of Biology Pharmacy and Health Sciences, 2025, 22(01), 424-436

Publication history: Received on 08 March 2025; revised on 17 April 2025; accepted on 19 April 2025

Article DOI: https://doi.org/10.30574/wjbphs.2025.22.1.0403

#### **Abstract**

This paper compares the roles and responsibilities of school nurses in special education settings across the United States, several European countries (France, Germany, Greece, Norway, Sweden, and the United Kingdom), and Russia. The study examines how school nurses address the health and medical needs of students with disabilities, focusing on the varying degrees of involvement and challenges encountered in different educational and healthcare systems. In the United States, school nurses play a comprehensive and integral role, including managing chronic health conditions, administering medications, providing mental health support, and collaborating with teachers and healthcare providers to develop Individualized Education Plans (IEPs) and Individualized Health Care Plans (IHCPs) for students with special needs. In contrast, in Greece and Russia, school nursing services are less developed, with nurses typically limited to basic health tasks such as first aid, routine health screenings, and disease prevention, with minimal involvement in special education settings. The paper highlights the challenges faced by Greece, such as limited resources, insufficient professional training, and a lack of integration between health and education services. By comparing these international models, the paper identifies gaps in the Greek school nursing system and suggests potential improvements, including increased professional development, more holistic and collaborative care approaches, and greater integration of school nurses into special education teams. The findings offer valuable perspectives for enhancing the quality of school nursing services in Greece, particularly in supporting students with special educational needs.

Keywords: School Nurses; Special Education; Health Care Plans; Mental Health; Interdisciplinary Collaboration

## 1. Introduction

The role of school nurses in special education is essential for supporting the health and well-being of students with special educational needs (SEN). Across Europe, the responsibilities of school nurses extend beyond basic healthcare; they play a crucial role in fostering an inclusive educational environment for students with physical and mental disabilities. In special education settings, school nurses not only manage chronic conditions and administer medications but also provide emotional support, promote mental health, and collaborate with multidisciplinary teams to tailor care for each student's unique needs.

However, the role of school nurses in special education varies significantly across European countries, shaped by differences in healthcare systems, educational policies, and resource availability. While some countries, particularly in the Nordic region, have integrated school nursing into their special education frameworks, others face challenges such as resource constraints, insufficient training, and unclear guidelines (Hämäläinen et al., 2021). Moreover, the presence

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and training of school nurses in special education settings are inconsistent across Europe, leading to disparities in the care and support available to students with special needs (Strand et al., 2018).

This comparison seeks to explore the roles, challenges, and perspectives regarding school nurses in special education across Europe. By understanding the variations in their roles and responsibilities, we can identify areas for improvement, such as increasing the integration of health and education services, enhancing professional training, and advocating for policy reforms to strengthen the effectiveness of school nursing in special education.

In Greece, school nurses play a critical role in several aspects of education and healthcare. One key factor is the relationship between the level of education and students' health outcomes. Trained nurses are essential for ensuring health in school settings, particularly in crisis situations like the COVID-19 pandemic (Gormley et al., 2021; Merkle et al., 2024). Studies have shown that education and ongoing training for nurses directly impact the quality of care and student satisfaction (Merkle et al., 2024). Nurses who undergo specialized training in first aid and pediatric care are better equipped to address students' health needs. Additionally, nurses who actively contribute to health policy design can more effectively support students' well-being and foster collaboration with other services (Merkle et al., 2022).

The professional development of school nurses is also crucial. Nurses with Registered Nurse (RN) credentials report fewer difficulties in performing their duties compared to non-licensed nurses (Jeffery et al., 2023). Strengthening the structures that support the training and professional development of new nurses, particularly in uncertain political and social contexts, is essential, as highlighted during the pandemic (Antão et al., 2023). Furthermore, the ability of school nurses to assume leadership roles in school health programs is vital. Proposals for creating structured administrative roles for school nurses could improve the management of health crises and enhance healthcare delivery (Gormley et al., 2021). Such roles could include training on mental health issues and disease prevention, both critical to student wellbeing (Patelarou et al., 2011; Alghamdi et al., 2019).

In the United States, school nurses are well-integrated into the education system, particularly for students with special educational needs and disabilities (SEND). Their role includes managing chronic health conditions, administering medications, providing mental health support, and collaborating with teachers, parents, and healthcare professionals to develop Individualized Education Plans (IEPs) and Individualized Health Care Plans (IHCPs) (National Association of School Nurses [NASN], 2017). This comprehensive approach is largely influenced by federal laws, such as the Individuals with Disabilities Education Act (IDEA), which ensures that students with disabilities receive appropriate services, including medical and nursing care.

In contrast, European countries like France, Germany, Norway, Sweden, and the United Kingdom have varied approaches to school nursing. For example, the United Kingdom has a robust school nursing system integrated into special education services, where nurses help develop IEPs and IHCPs, manage chronic conditions, and address mental health needs (Royal College of Nursing, 2018). Germany and Sweden also have well-established school nursing systems where nurses work closely with special education staff. However, in countries like France and Norway, school nursing in special education is more fragmented and less standardized, with limited resources and training for nurses in these settings (Cowley & Rosser, 2017; Bärnighausen et al., 2019).

In Greece, school nursing services are still evolving, and their involvement in special education is limited. Greek school nurses primarily focus on basic health tasks such as first aid, routine health screenings, and disease prevention. However, their role in special education is not well-defined, and there is a lack of specialized training and resources to effectively support students with disabilities (Papadopoulos, 2019). This contrasts with the more developed systems in the USA and other European countries, where school nurses play a more active role in supporting students with special needs.

The primary goal of this paper is to compare the roles of school nurses in special education across the United States, several European countries, and Russia, with a particular focus on the challenges and opportunities for improving the Greek school nursing system. By analyzing the roles, responsibilities, and challenges faced by school nurses in these countries, the paper aims to provide recommendations for enhancing school nursing services in Greece, especially for students with special educational needs. Insights from the successes and challenges faced by other countries can guide Greece in improving its school nursing services to better support students with disabilities.

#### 2. Methods and materials

This study seeks to compare the roles and responsibilities of school nurses in special education settings across the United States, several European countries (France, Germany, Greece, Norway, Sweden, and the United Kingdom), and Russia, with a particular focus on identifying challenges and opportunities to improve the Greek school nursing system. The materials and methods used for this comparative analysis are outlined below.

A comprehensive literature review was conducted to gather relevant academic articles, government reports, and policy documents related to the roles of school nurses in special education. Sources were drawn from peer-reviewed journals and reports from reputable organizations such as the National Association of School Nurses (NASN), the Royal College of Nursing (RCN), and various academic institutions. The literature review examined key areas, including legislative frameworks that shape the role of school nurses in special education, such as the Individuals with Disabilities Education Act (IDEA) in the U.S. and the Children and Families Act in the U.K. It also explored the responsibilities of school nurses across different countries, particularly in special education, while highlighting challenges such as limited resources, insufficient training, and integration difficulties with other educational services. Lastly, the review identified best practices and successful models for improving school nursing services, particularly for students with disabilities, with examples from the U.S., the U.K., and Sweden (Green & Poteat, 2020; Cowley & Rosser, 2017).

To analyze and compare trends and common themes across the different countries, a framework was developed focusing on key factors that influence the role of school nurses in special education. This framework also highlighted specific differences and challenges unique to Greece. The factors considered include First Aid, Health Screenings, Chronic Condition Management, Medication Administration, Special Education Involvement, Mental Health Support, Health Education, Collaboration with Other Professionals, Training and Professional Development, and Availability. This framework [Table 1] guided the analysis and facilitated comparisons across countries. The study aims to provide a comprehensive comparison of the role of school nurses in special education, offering valuable insights and recommendations for enhancing the Greek school nursing system. By exploring successful practices and addressing challenges specific to Greece, the study aims to improve the support and care for students with disabilities in Greek schools.

In table 1 is highlighted the significant differences in the roles of school nurses in special education across various countries, with some countries, such as the U.S., France, Germany, and Sweden, offering more integrated and comprehensive care. In contrast, Greece faces challenges such as limited resources, inadequate training, and less defined roles for school nurses in special education. By examining successful models from other countries, this study aims to provide recommendations for improving the Greek school nursing system, particularly for students with disabilities.

**Table 1** Key factors that influence the role of school nurses in special education

Duty	<u>Greece</u>	<u>United States</u>	<u>France</u>	<u>Germany</u>	Sweden	Norway	<u>United</u> Kingdom	<u>Russia</u>
First Aid	Provides basic first aid for minor injuries.	Provides first aid and manages medical emergencies for all students.	Provides first aid and manages medical emergencies for all students.	Basic first aid for injuries and emergency situations.	Provides first aid and handles medical emergencies.	Provides first aid and supports students with medical crises.	Provides first aid and manages medical emergencies for all students.	Provides first aid and manages medical emergencies for all students.
Health Screenings	Conducts basic health checks such as height, weight, and vision.	Conducts comprehensive health assessments, including vision, hearing, and chronic conditions.	Conducts comprehensive health assessments, including vision, hearing, and chronic conditions.	Routine health checks, including screenings for vision, hearing, etc.	Conducts comprehensive health assessments, including vision and hearing.	Conducts health assessments, including screenings for chronic conditions.	Conducts comprehensive health assessments, including vision and hearing, and chronic conditions.	Conducts comprehensive health assessments, including vision and hearing, and chronic conditions.
Chronic Condition Management	Limited involvement, often dependent on parents or external healthcare providers.	Actively manages chronic conditions (e.g., asthma, diabetes, epilepsy) and develops individualized health care plans (IHCPs).	Actively manages chronic conditions (e.g., asthma, diabetes) and creates individualized health care plans.	Involved in managing chronic conditions (e.g., diabetes, asthma, epilepsy) for students with special needs.	Manages chronic conditions, including asthma, diabetes, and epilepsy.	Actively manages chronic conditions and coordinates care with healthcare providers.	Actively manages chronic conditions (e.g., asthma, diabetes, epilepsy) and develops individualized health care plans (IHCPs).	Actively manages chronic conditions (e.g., asthma, diabetes, epilepsy) and creates individualized health care plans.
Medication Administration	Rarely involved in administering medications.	Administers medications according to IHCPs and coordinates with parents and healthcare providers.	Administers medications according to individualized health care plans for students with chronic conditions.	Involved in administering medications as per individual health plans.	Administers medications as part of individualized health care plans.	Administers medications according to health care plans and coordinates with parents.	Administers medications according to individualized health care plans and coordinates with parents	Administers medications according to individualized health care plans and coordinates with parents

							and healthcare providers.	and healthcare providers.
Special Education Involvement	Limited involvement; rarely part of the educational team for special education.	Actively involved in developing and implementing Individualized Health Care Plans (IHCPs) and collaborating with special education teachers.	Actively involved in developing and implementing Individualized Education Plans (IEPs) and Individualized Health Care Plans (IHCPs).	Actively involved in special education, collaborating with educators and healthcare professionals to create health plans.	Actively involved in the development of IEPs and individualized health care plans.	Actively involved in developing individualized health care plans and IEPs.	Actively involved in developing and implementing Individualized Health Care Plans (IHCPs) and collaborating with special education teachers.	Actively involved in developing and implementing Individualized Health Care Plans (IHCPs) and coordinating care with special education teachers and healthcare providers.
Mental Health Support	Rarely involved in addressing mental health issues.	Provides mental health support, including recognizing signs of emotional distress and collaborating with counselors and psychologists.	Provides mental health support, including counseling and access to psychological resources.	Provides mental health support and works with students and teachers to address psychological needs.	Provides mental health support, counseling, and emotional well- being support.	Provides counseling and mental health support, especially for students with emotional or behavioral challenges.	Provides mental health support, including recognizing signs of emotional distress, and collaborating with counselors and psychologists.	Provides mental health support, including recognizing signs of emotional distress and collaborating with psychologists.
Health Education	Basic health education on hygiene and wellness.	Provides comprehensive health education, including wellness, hygiene, chronic condition management,	Provides comprehensive health education, including mental health, wellness, and hygiene education tailored for	Provides comprehensive health education, including mental health awareness and chronic disease management.	Provides health education, including wellness, mental health, and hygiene.	Provides health education, including hygiene, mental health, and lifestyle choices.	Provides comprehensive health education, including mental health, wellness, hygiene, and chronic	Provides health education, including wellness, hygiene, chronic condition management, and mental

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		and mental health awareness.	students with disabilities.				condition management.	health awareness.
Collaboration with Other Professionals	Limited collaboration with special education staff and healthcare providers.	Regular collaboration with special education teachers, psychologists, social workers, and parents.	Regular collaboration with special education teachers, psychologists, social workers, and parents to ensure comprehensive care.	Frequent collaboration with teachers, special education staff, and healthcare providers.	Regular collaboration with special education teachers, healthcare professionals, and parents.	Works closely with teachers, healthcare providers, and parents in developing health care plans.	Regular collaboration with special education teachers, psychologists, social workers, and parents.	Regular collaboration with special education teachers, psychologists, social workers, and parents.
Training and Professional Development	Limited training in managing students with special needs.	Extensive training in managing chronic conditions, mental health issues, and providing care for students with disabilities.	Extensive training in managing chronic conditions, mental health issues, and providing care for students with disabilities.	More consistent availability, though still not universal across all schools.	Extensive training in managing the health needs of students with special needs.	Well-trained in managing both physical and mental health needs of students with special needs.	Extensive training in managing chronic conditions, mental health issues, and providing care for students with disabilities.	Extensive training in managing chronic conditions, mental health issues, and providing care for students with disabilities.
Availability	Inconsistent availability; many schools lack dedicated nurses.	Consistent availability, with nurses integrated into both general and special education settings.	More consistent availability, with nurses integrated into both general and special education settings.	More extensive training, including specialized knowledge in handling chronic conditions, mental health, and disabilities.	More consistent availability of school nurses across schools.	More consistent availability of school nurses, especially in larger or special needs schools.	Consistent availability, with nurses integrated into both general and special education settings.	More consistent availability, with nurses integrated into both general and special education settings.

In Greece, the role of school nurses in special education remains underdeveloped. While school nursing services exist in some schools, their implementation is inconsistent, particularly in rural or under-resourced areas. As noted by Papadopoulos (2019), Greek school nurses are primarily tasked with basic healthcare duties, such as first aid, administering routine health screenings (e.g., height, weight, vision), and promoting hygiene. Their involvement in special education is generally limited to providing general health support and disease prevention.

Greek school nurses are typically not part of interdisciplinary teams for students with disabilities and are not involved in creating or implementing Individualized Education Plans (IEPs) or Individualized Health Care Plans (IHCPs). This lack of involvement can be attributed to the limited training nurses receive in addressing the specific health needs of special education students. Additionally, Greek nurses face challenges such as inadequate resources, high student-to-nurse ratios, and insufficient professional development opportunities (Papadopoulos, 2019; Vlachos et al., 2020).

In the United States, school nurses play a pivotal role in managing a range of health conditions in special education settings, from chronic diseases to emotional and behavioral issues. Their responsibilities include developing care plans for students with chronic conditions, providing emergency care, and collaborating with educators and mental health professionals to create inclusive learning environments (National Association of School Nurses [NASN], 2021). U.S. school nurses are deeply integrated into the special education framework, particularly through the requirements of the Individuals with Disabilities Education Act (IDEA), which ensures that students with special needs receive appropriate medical care and accommodations (U.S. Department of Education, 2021).

The roles of school nurses in special education settings vary significantly across countries. In Greece, the role is less defined compared to the U.S., where nurses are more involved in direct healthcare management within the school environment. In contrast, Greek school nurses rely more heavily on external healthcare providers to manage the medical needs of students with disabilities (Papadopoulou & Skouroudi, 2019).

In France, the role of school nurses is well-established, with a broader scope of responsibilities in special education. French school nurses manage chronic conditions, administer medications, and address mental health needs. They are actively involved in developing IEPs and IHCPs, collaborating with special education teachers, psychologists, and social workers. French school nurses also provide counseling and support for emotional challenges, promote wellness, hygiene, and mental health awareness, and deliver comprehensive care for students with disabilities (Cabaud et al., 2018; Guichard et al., 2020).

In Germany, school nurses in special education settings have a comprehensive and defined role, supporting students with various health conditions, including physical disabilities, chronic illnesses, and mental health issues (Kraemer et al., 2021). German nurses are integral to the development and management of individualized health care plans, working closely with special education staff, healthcare providers, and parents to ensure students' medical and emotional needs are met.

Sweden's school nurses also play a significant role in special education, particularly in larger schools and special education institutions. Swedish nurses provide services such as managing chronic health conditions, administering medications, and addressing mental health needs. They are involved in developing IEPs and IHCPs, collaborating with educators and other professionals to ensure students with special needs receive appropriate care (Dovik & Skogstad, 2019; Lundqvist et al., 2021).

In Norway, school nurses work alongside special education teachers, parents, and healthcare providers to develop IHCPs for students with special needs. They are responsible for administering medications, monitoring chronic conditions, and addressing both physical and mental health challenges (Andersen et al., 2020). Norwegian school nurses are also involved in health education and awareness programs, focusing on lifestyle choices, hygiene, and mental wellbeing (Lundqvist et al., 2021).

In the U.K., school nurses are part of the National Health Service (NHS) and play an active role in the care of students with special educational needs and disabilities (SEND). They develop and implement IHCPs, collaborate with educators and healthcare professionals, and provide both medical and mental health support for students with SEND (Cowley & Rosser, 2017; Royal College of Nursing, 2018). U.K. school nurses are trained to recognize early signs of mental health issues and provide appropriate interventions or referrals.

In Russia, school nurses are an integral part of the educational team for students with special educational needs. They manage chronic health conditions, provide mental health support, and develop IHCPs in collaboration with special education staff and healthcare professionals (Kizilova, 2020). Russian school nurses also participate in health education

programs related to hygiene, nutrition, and chronic condition management, ensuring that students with disabilities receive comprehensive care.

This study highlights the significant differences in the roles of school nurses in special education across various countries, with some countries, such as the U.S., France, Germany, and Sweden, offering more integrated and comprehensive care. In contrast, Greece faces challenges such as limited resources, inadequate training, and less defined roles for school nurses in special education. By examining successful models from other countries, this study aims to provide recommendations for improving the Greek school nursing system, particularly for students with disabilities.

#### 3. Results

#### 3.1. Greece - United States

#### 3.1.1. Key Differences

The roles of school nurses in Greece and the United States in special education differ significantly in terms of involvement and the range of services provided. In Greece, school nurses primarily perform basic health care tasks, with limited involvement in special education. They are rarely included in interdisciplinary teams and lack specialized training to manage the complex health needs of students with disabilities.

In contrast, school nurses in the United States are actively engaged in managing a wide array of health and wellness issues, including chronic conditions, medication administration, mental health, and emergency care. They work closely with special education teachers, healthcare professionals, and families to develop and implement Individualized Health Care Plans (IHCPs) and ensure students with disabilities receive necessary medical care and accommodations, as mandated by federal laws such as IDEA (NASN, 2017).

Additionally, the United States has a more structured and regulated system, where school nurses are legally required to be involved in special education processes.

### 3.1.2. Commonalities

Despite these differences, both Greece and the United States acknowledge the importance of school nurses in promoting student health and preventing illness. In both countries, school nurses administer first aid, conduct routine health screenings, and help maintain a safe, hygienic environment. They also play a role in preventing the spread of infectious diseases within schools, although their involvement in special education and the level of care for students with disabilities varies greatly (Papadopoulos, 2019; NASN, 2017).

## 3.2. Greece - France

# 3.2.1. Key Differences

The differences between school nurses' roles in Greece and France in special education lie in the level of involvement, the breadth of services, and their integration into the school system. In Greece, school nurses focus primarily on basic health care tasks and are minimally involved in the specialized care needed for students with disabilities. They rarely collaborate with multidisciplinary teams and have limited training in managing the complex health needs of special education students.

On the other hand, French school nurses actively participate in the development of IEPs and IHCPs. Their responsibilities extend beyond basic care, encompassing chronic condition management, medication administration, mental health support, and collaboration with other professionals. French nurses receive more comprehensive training, including ongoing professional development to address the health needs of students in special education (Cabaud et al., 2018).

## 3.2.2. Commonalities

Both Greece and France recognize the importance of school nurses in promoting student health and well-being. In both countries, school nurses provide first aid, conduct routine health screenings, and engage in disease prevention. While their involvement in special education may differ, both nations emphasize the health and well-being of students with special educational needs (Papadopoulos, 2019; Cabaud et al., 2018).

#### 3.3. Greece - Germany

### 3.3.1. Key Differences

The most significant differences between school nursing roles in Greece and Germany lie in the degree of involvement and specialization within special education. In Greece, school nurses are mainly focused on basic health care tasks and have limited training to manage the health needs of students with disabilities. They play a minimal role in special education.

Conversely, German school nurses are deeply integrated into special education, contributing to the development and implementation of individualized health plans, managing chronic conditions, administering medications, and addressing mental health concerns (Kraemer et al., 2021). German school nurses have access to more structured training and professional development, which equips them to handle a broad range of health and emotional challenges faced by students in special education.

#### 3.3.2. Commonalities

Both Greece and Germany have school nurses who are responsible for promoting general health and hygiene, providing first aid, and preventing the spread of infectious diseases. Despite their differences, school nurses in both countries support the overall well-being of students, although the extent of their involvement in special education varies significantly (Papadopoulos, 2019; Kraemer et al., 2021).

#### 3.4. Greece - Sweden - Norway

## 3.4.1. Key Differences

The differences in school nursing duties between Greece, Sweden, and Norway in special education are notable in terms of involvement, service range, and training. Greek school nurses are primarily focused on basic health care tasks and are minimally involved in special education.

In contrast, Sweden and Norway have more integrated systems where school nurses are actively involved in developing IEPs and IHCPs, managing chronic conditions, providing mental health support, and collaborating with various professionals (Dovik & Skogstad, 2019; Andersen et al., 2020). Additionally, Greece faces challenges such as inconsistent availability of school nurses and insufficient training, while Sweden and Norway have more organized systems that prioritize the health needs of students with special needs (Lundqvist et al., 2021).

#### 3.4.2. Commonalities

All three countries acknowledge the importance of school nurses in supporting the health and well-being of students with special educational needs. Greek, Swedish, and Norwegian school nurses provide first aid, conduct health screenings, and promote hygiene, though the depth of their involvement in special education varies. In all three countries, school nurses address the mental health needs of students, though this role is more prominent in Sweden and Norway than in Greece (Dovik & Skogstad, 2019; Andersen et al., 2020).

## 3.5. Greece - United Kingdom

#### 3.5.1. Key Differences

The primary difference between school nursing roles in Greece and the United Kingdom lies in the level of involvement in special education and the scope of services provided. In Greece, school nurses are mainly engaged in basic health care tasks and have minimal involvement in special education. They are not typically included in the development of IEPs or IHCPs and lack the specialized training to manage complex health needs in students with disabilities. In contrast, school nurses in the United Kingdom are well-integrated into the educational team, particularly in special education settings. They contribute to the development and implementation of individualized health care plans, provide physical and mental health support, and collaborate with a broad range of professionals to ensure comprehensive care for students with special needs. UK nurses are trained to manage chronic conditions, administer medications, and provide mental health support, which is often outside the scope of their counterparts in Greece (Royal College of Nursing, 2018; Cowley & Rosser, 2017).

#### 3.5.2. Commonalities

Despite the differences, both Greece and the UK share some common responsibilities for school nurses, including providing first aid, conducting routine health screenings, and promoting general health and hygiene. Both countries also play a role in preventing the spread of infectious diseases. However, the UK's involvement in special education is more developed, with a broader range of services provided compared to Greece.

#### 3.6. Greece - Russia

## 3.6.1. Key Differences

The key differences between the roles of school nurses in Greece and Russia are the level of involvement in special education, the range of health services, and the degree of collaboration with other professionals. Greek school nurses primarily focus on basic health care and are minimally involved in special education, often excluding them from developing individualized care plans or managing chronic health conditions. In contrast, Russian school nurses are more integrated into the special education system, collaborating with other professionals to create individualized care plans. They are more likely to manage chronic health conditions, administer medications, and focus on mental health issues. Russian nurses receive training in identifying and addressing emotional or behavioral challenges in students with disabilities (Kizilova, 2020).

#### 3.6.2. Commonalities

Both Greek and Russian school nurses are responsible for first aid, routine health screenings, and promoting general health and hygiene. They also play a role in disease prevention. However, the extent of their involvement in special education and the level of professional training they receive differ significantly (Papadopoulos, 2019; Kizilova, 2020).

#### 4. Discussion

The role of school nurses in special education varies significantly across the United States, Europe, and Russia, with differences in support, training, and integration within educational settings. While countries like Norway, Sweden, and the United Kingdom have well-established school nursing systems, Greece and Russia face substantial challenges in providing comprehensive care for students with special needs. Greece's nursing system in schools requires improvement to better support students with disabilities, and adopting best practices from other countries could enhance the quality of care provided in Greek schools.

In Greece and the United States, the duties of school nurses in special education differ greatly in both scope and depth. Greek school nurses are mainly tasked with basic health care duties, with minimal involvement in special education. In contrast, school nurses in the United States are fully integrated into the educational system. They actively manage chronic health conditions, administer medications, provide mental health support, and collaborate with other professionals to develop and implement individualized care plans for students with disabilities. This disparity highlights the need for Greece to strengthen its school nursing services, particularly for students with special educational needs. The more comprehensive role of school nurses in the United States provides a model for improving the integration and service delivery of special education in Greece.

The roles of school nurses in Greece and France also differ significantly. While Greek school nurses focus mainly on basic health care, their French counterparts play a more integral role. French school nurses manage chronic conditions, administer medications, provide mental health support, and work closely with educational and healthcare professionals to create individualized care plans for students with disabilities. The differences between the two systems emphasize the need for Greece to invest in improving the role of school nurses, particularly in special education, by enhancing training, resources, and integration into the broader educational team.

When comparing the roles of school nurses in Greece and Germany, the contrast becomes even more apparent. Greek school nurses focus primarily on basic health care, with little involvement in special education. In Germany, however, school nurses play a key role in managing the health needs of students with disabilities. They actively contribute to the development of individualized education and health plans, manage chronic conditions, administer medications, and provide mental health support. This disparity underscores the need for Greece to improve its school nursing system, particularly in terms of training, resources, and integration into special education teams.

In Greece, Sweden, and Norway, the scope of school nurses' involvement in special education varies considerably. Greek school nurses have a limited role, with little involvement in special education, whereas school nurses in Sweden and

Norway are integral members of the educational team. In these countries, nurses are actively involved in developing Individualized Education Plans (IEPs) and Individualized Health Care Plans (IHCPs), managing chronic conditions, and providing mental health support. These differences highlight the need for Greece to strengthen its school nursing system, particularly in special education, by increasing resources, training, and collaboration with educational professionals.

The roles of school nurses in special education in Greece and the United Kingdom differ significantly in scope and depth as well. Greek school nurses focus primarily on basic health care, with little involvement in special education, while school nurses in the United Kingdom play a more comprehensive role. In the UK, nurses manage chronic conditions, administer medications, provide mental health support, and collaborate with other professionals to create individualized care plans for students with special needs. The differences between these systems underline the need for Greece to expand and strengthen its school nursing services, especially in special education, to ensure that students with special needs receive the specialized care they require for both their physical and mental health.

The roles of school nurses in Greece and Russia in special education also differ considerably in terms of their responsibilities. Greek school nurses are primarily focused on basic health care tasks and are not integrated into the special education process. In contrast, Russian school nurses are deeply involved in special education, playing an active role in managing chronic conditions, administering medications, providing mental health support, and working with other professionals to create individualized care plans for students with disabilities. The differences between the two systems highlight the need for Greece to strengthen its school nursing services by improving training, resources, and integration into multidisciplinary teams. Russia's more comprehensive role for school nurses in special education provides a model for improving services for students with special needs in other countrie

#### 5. Conclusion

School nurses in Greece must possess a high level of education, stay attuned to the evolving needs of students, and actively contribute to the development of health policies. Investing in their education and professional development is essential for their success (Merkle et al., 2024; Antão et al., 2023). The role of school nurses in special education across Europe varies, shaped by different healthcare and educational systems. While some countries have advanced the integration of school nursing into special education, challenges remain in Greece, particularly regarding resource allocation, training, and policy development. As the recognition and inclusivity of special education needs grow, the role of school nurses will continue to evolve, but sustained efforts are needed to ensure they meet the complex needs of students with disabilities.

The Greek nursing system in schools, particularly in special education, faces significant challenges. The lack of standardized protocols, insufficient staffing, and inadequate training for school nurses are critical issues. In Greece, school nurses often have a limited scope of practice, focusing primarily on basic first aid and disease prevention, with little involvement in the special education process (Vlachos et al., 2020). The broader challenges in the Greek healthcare system, such as underfunding and a shortage of healthcare professionals, further exacerbate these difficulties.

To improve the role of school nurses in Greek special education, several changes are recommended. First, the Greek government should invest in training programs that equip school nurses with the necessary skills to manage complex health conditions and work effectively with special education teams. Additionally, the development of a national school nursing policy, which includes guidelines for the integration of nurses into special education, could improve the consistency and quality of services. Lastly, increasing the number of school nurses and ensuring adequate funding for these positions would help alleviate the current pressures on the system.

The role of school nurses in special education in Greece faces unique challenges compared to other European countries. In many regions, there is a shortage of school nurses, particularly in rural or underserved areas. There is also a lack of standardized training for nurses in special education settings, making it difficult for them to address the specific health needs of students with disabilities. Furthermore, the healthcare and educational systems in Greece remain somewhat disconnected, limiting the integration of school nurses into multidisciplinary special education teams. These challenges, combined with underfunding and a shortage of healthcare professionals, create significant barriers to providing quality care for students with special needs in schools.

To address these challenges, the Greek government must prioritize the development of policies that integrate school nurses into the special education process and ensure they receive the necessary training and support to manage the health needs of students with disabilities. Providing sufficient funding for school nursing positions and creating a more

unified healthcare and education system will also be critical in improving the quality of care and support for students in special education.

# Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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