Pediatric nursing in selected European countries



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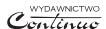
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Reviewer's Word

I have been a pediatric nurse for nearly 50 years, and I have met pediatric nurses from all over the world. This means I have witnessed many of the changes that have happened in the way pediatric nurses have been educated and the different philosophies and approaches that have influenced the way we provide care to children and their families. When I started training as a pediatric nurse, there was very little evidence to underpin our practice, and much of what we did was task-oriented. Current practice is now informed by research, often undertaken by nurses, and it is typically child-centred and trauma-informed. Education has moved to become degree-level with many more opportunities for post-registration education at Masters level and beyond.

What is very clear to me is that pediatric nurses are part of a very special community. A passionate community with the ambition and determination to improve the care of children, young people and their families. We share a vision for the future and by appreciating where we have come from, we move practice, leadership, management and research forward.

Despite differences between different countries in terms of pre- and post-registration education opportunities, differences in regulation and governance, as well as other factors such as resources, pediatric nurses are part of a global family. We recognise the challenges that members of that global family face and we appreciate the work they do.

Pediatric nurses play a vital role in providing care and essential services during the early stages of a person's life course. When we get things right for babies, children and young people, they have a better opportunity to flourish as they reach adulthood.

Pediatric nurses face the same external challenges as nurses who are part of the wider global nursing workforce; challenges such as economic uncertainty, politics, conflict, climate change, pandemics.

As can be seen in the most recent World Health Organisation (2025) 'State of the World's Nursing 2025' report there is a shortage of nurses globally and there is an expectation that this shortfall will grow. The projection is that 69% of this shortage will be "borne by the WHO African and the Eastern Mediterranean regions" (WHO, 2025, p. viii). This projection will be of particular interest to the readers of this book. The migration of pediatric nurses within Europe and other countries is understandable. It is driven by many factors including the drive for better pay, career prospects and working conditions. However, this means that some children have better access to highly qualified pediatric nurses than others do.

This book provides insights into the histories, structures, systems of regulation and shifts in thinking about pediatric nursing, as well as the current and future chal-

lenges facing pediatric nurses in seven European countries: Bulgaria, Cyprus, Lithuania, Poland, Portugal, Sweden, and the UK. It reveals the similarities and differences between these selected countries and helps create a better understanding of pediatric nursing in Europe. It provides pediatric nurses with a way of examining how challenges have been and are being met.

Across the chapters in this book, the authors explore and examine core issues that help the reader to position their understanding of pediatric nursing within their own country and often position it in relation to other professions and other countries. There is a wealth of information within this book and, within this review, I've only space to select and reflect on some aspects

Although in writing this review I'm adopting the term 'pediatric nursing' and, indeed the book's title is 'Pediatric nursing in selected European countries', I would not call myself a pediatric nurse. I describe myself as a children's nurse; this is one of several differences between the UK (where I trained) and the other countries in this book. When I first registered as a qualified nurse I was on the register as a Registered Sick Children's Nurse; following later changes to training and registration I am now registered as a Registered Nurse (Child). The terminology may not seem to be that important as, regardless of whether we describe ourselves as children's nurses or pediatric nurses, the focus of our care is on babies, children, young people and their families. However, for me as a UK trained nurse, the wording is important – we look after children, not 'pediatrics' – but for the purposes of this review I use the terminology of the majority and talk of pediatric nursing.

For pediatric nurses, politics matters, as does the positioning of children within society; this is obvious in different ways. Nursing, and particularly pediatric nursing, is typically female-dominated and historically as well as currently (see the chapter on Bulgaria) this can influence the regard in which being a pediatric nurse is held. The impact of politics and other significant factors on nurse education shapes practice. For example, it is clear in Cyprus how a history of conflict and invasion shaped nursing and educational opportunities; similarly, revolution in Portugal impacted changes to nursing education. Nursing is part of society and subject to the changes that occur within society. The shortage of pediatric nurses, increasing demand for specialised pediatric care, and financial and other constraints on healthcare systems creates challenges. Bulgaria, for example, faces challenges related to internal migration of nurses (from rural to urban) and out-of-country migration (to other countries). When Bulgaria loses skilled nurses, other countries that offer better wages, opportunities, careers and working conditions benefit.

The core of pediatric nursing education is broadly similar across these seven countries, with education spanning a wide range of subjects including developmental care assessment, supporting families, communication, and multidisciplinary teamwork, with the child's physical, emotional and social well-being as central. There are differences in the age range of children cared for by pediatric nurses, typically

covering infancy to adolescence, with some such as Poland and Portugal noting a cut off as under the age of 18 years.

However, perhaps one of the biggest differences in pediatric nursing education is that the UK, unlike all the other countries in the book, allows pre-registration training as a pediatric nurse (Registered Nurse, Child). For the other countries, pediatric nursing is a specialised training undertaken after having completed a general nursing programme. There are clearly arguments for and against pediatric nursing being a pre- or post-registration programme of study. I've long been an advocate for protecting and retaining the pre-registration route within the UK. Further, within the UK there are different pre-registration routes to qualifying as a pediatric nurse, ranging from apprenticeships through to Bachelor of Science and Master of Science. There are also some dual pre-registration programmes such as pediatric nursing and learning disability nursing.

Additionally, there are different requirements in terms of experience post-qualification in terms of the level of experience a nurse requires before commencing postgraduate pediatric nursing education. For example, in Sweden nurses must have worked for a period of at least one year as a registered nurse to undertake specialist education in pediatric care. In Poland nurses must have worked in the profession for at least 2 years within the last 5 years, before starting post-graduate pediatric nursing training. However, in countries such as Lithuania, pediatric nurses do not need additional specialisation, although mandatory training courses are required to work in some practice settings. In Cyprus, there is no distinct registry for pediatric nurses and few opportunities for dedicated post-registration education for nurses working with children, young people and their families, although the first Masters-level programme in child and adolescent nursing care is expected to commence in 2026.

It seems that, regardless of the route taken, in most – if not all – of the countries covered in this book, more educational opportunities post-qualifying as a pediatric nurse are needed. Not all children and young people who receive care will have that care given by a pediatric nurse. What is clear from the book is that there is a drive to change this.

One way in which change occurs is through networking and collective action and this is best embodied through the work of nursing associations. The range of nursing associations and organisations available for nurses to join varies between different countries and not all have specific associations for pediatric nurses, although pediatric nurses can be active participants in generic associations (e.g. Lithuanian Nurses' Organization). However, a pediatric nursing association such as the Swedish Pediatric Nursing Association) creates opportunities for members to network with colleagues who understand your field, shares values that are specific pediatric nursing and create opportunities to learn from those with different or greater expertise. Pediatric nursing associations have the potential to drive forward the nursing care of children and young people and their families, promote collaboration, more educational opportunities as well as advocate for the pediatric nurses.

Pediatric nurses are passionate about delivering the best care to babies, children, young people and their families. Reading this book provides a wealth of information about pediatric nursing in seven European countries. It shines a light on our similarities and differences and what we can learn from each other. I commend the authors and editors for bringing this book to fruition.

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1. WHO (2025). State of the world's nursing 2025: investing in education, jobs, leadership and service delivery. World Health Organization. Https://www.who.int/publications/i/item/9789240110236. Accessed 20th June 2025.

Pediatric nursing, which focuses on child care, is one of the specialist nursing fields, but at the same time, in social terms, it is a professional form of support for parents in caring for healthy children, children at risk of illness, sick children and/or children with disabilities (...).

The consensus on the definition of a pediatric nurse, also according to the Pediatric Nursing Associations of Europe (PNAE), takes into account the assumptions of the International Council of Nurses (ICN 1998) and states that: A nurse who has successfully completed a recognised course of study and gained experience in nursing care for infants, children and adolescents/young people is a pediatric nurse.

The primary task of European pediatric nurses is to protect and promote the rights and health of children and to provide care within specific/dedicated healthcare services to meet the needs of children and their families in hospitals and communities across Europe (...).

The conceptual maturity of the study induces not only passive learning of information, but also an active process of interpretation. The comparative analysis of the essence and intricacies of the development of specialist pediatric nursing in individual countries, systematically presented in the study, allows us to identify specific characteristics, but also those that appear in many nursing environments.

This creates special circumstances for the reader, triggering processes of processing the information learned and using it to indicate directions for change in pediatric nursing that refer to proven solutions (...).

The scope of solutions presented in the monograph entitled *Pediatric nursing in selected European countries* fits in with the subject matter of undergraduate nursing studies as part of the course Pediatrics and Pediatric Nursing (D.W7. principles of specialist care organisation). An analysis of the learning outcomes contained in the standard of education preparing for the nursing profession at the second level of studies (Regulation of the Ministry of National Education of 10 October 2024) indicates the usefulness, or rather the dedication of this position as essential literature for the implementation of the subject Professional practice of nurses in an international perspective (...).

At this point, it is worth emphasising the wide availability of the study, which is available in full in Polish and English, which will undoubtedly enable its content to be used in courses also taught in English, as this is becoming a nationwide trend in medical universities, but also in non-public higher education institutions offering medical courses (...).

While reading the individual chapters of the study, my attention was drawn to solutions that are interesting and potentially useful in nursing in Poland. These include a 4-year cycle of education in first-cycle nursing studies, and economic barri-

ers, which are often considered insurmountable in Poland, but do not constitute an obstacle in countries with much lower national income, e.g. Bulgaria.

An interesting solution that is still being discussed in Poland is a centralised diploma examination for nurses, which would standardise the substantive conditions for obtaining a nursing diploma, or multidisciplinary education for students, which would have a positive impact on the culture of interprofessional cooperation (...).

The value of studying this monograph lies in drawing attention to the historical influences on the development of nursing in Cyprus, but also in other countries (Portugal, Sweden, Great Britain), as well as in domestic nursing, which currently seems to be marginalised.

Reading this study should reinforce the conviction that it is necessary to create and apply a system for monitoring the professional development of nurses as a prerequisite for maintaining the right to practise the profession and provide care at a high professional level (...).

The value of the content and views presented by the authors of the study lies in pointing out the usefulness of specific theoretical foundations in paediatric nursing, i.e. Anne Casey's Partner Model of Care, which is in line with the views of, unfortunately, only a few nursing communities in Poland.

This original international scientific study, which includes not only a review of the literature but also the experiences and observations of authors representing various academic centres in Europe, is unique in its reliability, which will certainly be appreciated by a wide readership.

Excerpts from a review by Danuta Zarzycka, PhD, Professor at the University

Foreword

Pediatric nursing is a specialised branch of the nursing profession dedicated to caring for children from birth through adolescence. Pediatric nurses, who are registered nurses (RNs) with specialised knowledge and skills, provide care in a variety of settings, including hospitals, clinics, and schools. This field holds particular importance, as children's health needs differ significantly from those of adults, largely due to the rapid growth and developmental changes that occur throughout childhood. Pediatric nurses work as members of multidisciplinary teams, collaborating with other healthcare professionals to deliver comprehensive, compassionate care for children. They have a vital role in monitoring young patients' health, supporting their treatment, and assisting families during challenging times.

The scope of pediatric nursing tasks and responsibilities can vary across regions, influenced by differences in education, professional experience, and career goals. The Editors' intention in preparing this book was to offer readers an overview of the organisational structures and practices of pediatric nursing in various countries. Authors from the United Kingdom, Sweden, Portugal, Lithuania, Cyprus, Bulgaria, and Poland contributed to this work, sharing their expertise and insights. The book was prepared by a distinguished group of nurses, scientists, and researchers deeply engaged in pediatric nursing.

Each chapter of this book covers topics such as:

- Education systems and licensing requirements for the nursing profession.
- Qualifications in pediatric nursing (courses, specialised training).
- Scope of practice and competencies of pediatric nurses.
- Professional organisations and associations dedicated to pediatric nursing.
- Systems of pediatric nursing supervision.

This book brings together current knowledge and international perspectives, offering a unique guide to developing and organising pediatric nursing across selected European countries. It is intended for nursing students, educators, and academic staff. We hope this manual will serve as a valuable resource, enriching the existing literature in pediatric nursing.

Prof. Ludmiła Marcinowicz, RN, PhD Full prof. Dragana Milutinovic, RN, PhD Beata Janina Olejnik, RN, PhD

Pediatric nursing in Bulgaria

Petya Trendafilova

1. Nursing profession in Bulgaria

1.1. Education system

The educational system for nursing in Bulgaria is designed to prepare nurses with the foundational knowledge and skills necessary to provide quality healthcare. The educational pathways are regulated by both the **Ministry of Education** and the **Ministry of Health**, which ensure that nurses are equipped with the knowledge, skills, and competencies to meet the demands of healthcare practice in Bulgaria.

1.2. Undergraduate education

To become a registered nurse in Bulgaria, individuals must complete a **Bachelor's degree in Nursing.** The Bachelor's degree typically lasts **four years** and is offered by universities and colleges accredited by the Ministry of Education and Science. During this time, students are provided with theoretical knowledge in **basic health sciences**, **nursing theory**, **medical ethics**, **anatomy and physiology**, **pharmacology**, **and public health.** Additionally, clinical practice is a crucial component of the nursing education program, with students gaining hands-on experience in hospitals, clinics, and other healthcare settings.

Depending on the institution, the nursing program includes 800 to 1,000 hours of clinical training. These practical hours allow students to engage directly with patients, work under the supervision of experienced nurses, and develop practical skills in patient care, such as wound dressing, medication administration, and monitoring vital signs.

1.3. Licensing and registration

Upon graduation, nursing students must pass the **national licensure exam** to practice as registered nurses (RNs) in Bulgaria. The **Bulgarian Ministry of Health** is the regulatory authority responsible for issuing licenses to healthcare professionals, including nurses. This ensures that those entering the profession meet the national standards for nursing practice [1].

After passing the exam, nurses are registered with the **Bulgarian Nurses Association (BNA)**, the professional body representing nurses nationwide. The BNA advocates for the interests of nurses, promotes the professional development of nurses, and ensures adherence to national healthcare standards [2].

1.4. Right to practice the profession

Nurses must adhere to national and international standards for care, and their professional development is continuously monitored.

According to the **Law on Healthcare** and the **Law on Medical Practice**, all healthcare professionals, including nurses, are required to maintain professional ethics, ensure patient confidentiality, and comply with national regulations regarding the quality of healthcare services.

It is also important to note that the Ministry of Health and the **Bulgarian Nurses Association (BNA)** play a central role in shaping the nursing profession in Bulgaria, defining the standards for education, training, and professional practice. The BNA also organizes regular seminars, workshops, and professional development programs to ensure nurses' ongoing competency.

1.5. Postgraduate education and specialization

After completing the undergraduate program, nurses interested in specialized fields, such as **pediatric nursing**, can pursue **post-graduate programs**. Moreover, nurses in Bulgaria may also pursue **continuing education** courses to stay updated with the latest practices and technologies in healthcare. Universities, hospitals, and specialized institutions like the Institute for Postgraduate Studies in Sofia offer these programs. This commitment to continuous professional development ensures that nurses are well-equipped to meet the challenges posed by advances in medical technologies and the evolving needs of patients [3].

1.6. Regulation and governance

The Ministry of Health primarily regulates nursing practice in Bulgaria. It establishes the rules for licensing and monitoring nurses, ensuring that healthcare services are delivered safely and effectively. Nurses must adhere to strict ethical guidelines and clinical standards. The **Bulgarian National Health Insurance Fund (NHIF)** is also responsible for overseeing the provision of nursing services within the national healthcare system and ensuring that nurses comply with the country's healthcare policies.

Nurses are also required to complete regular **professional development courses** and may face revalidation to maintain their license. This ensures that the nursing profession in Bulgaria is not only highly regulated but also constantly improving and adapting to new healthcare challenges.

1.7. Nursing workforce

In recent years, Bulgaria has faced challenges in terms of the nursing workforce, primarily due to **migration**, which has led to a shortage of healthcare professionals, particularly in rural areas. Many Bulgarian nurses seek employment in other European Union countries, which offer higher wages and better working conditions. According to a 2019 report by the **World Health Organization (WHO)**, Bulgaria has one of the lowest ratios of nurses to population in the European Union, with fewer than 5 nurses per 1,000 inhabitants [4].

Despite these challenges, the Ministry of Health has implemented strategies to increase the number of trained nurses and improve retention within the country. There was a quite recent decision.

1.8. Professional nursing organizations and associations

The **Bulgarian Nurses Association (BNA)** is the primary organization that represents the interests of nurses across Bulgaria. Founded in 1901, the BNA advocates for the professional rights of nurses and works to improve the status of the nursing profession. It is involved in various initiatives such as:

- **Policy advocacy:** The BNA plays a significant role in advocating for policies that benefit nurses and improve healthcare services in Bulgaria.
- Professional development: It organizes conferences, workshops, and seminars to foster professional growth among nurses.
- **Ethical guidance:** The association provides ethical guidelines and enforces a code of conduct for nursing practice in Bulgaria.
- **Networking and collaboration:** The BNA helps facilitate collaboration between nurses and other healthcare professionals, both nationally and internationally [2].

Other important associations include the **Bulgarian Association of Pediatric Nurses** and the **Bulgarian Pediatric Society**, which specifically support the professional development of nurses working in pediatric care.

Nurses in Bulgaria are highly educated and trained, and specialized fields such as pediatric nursing are supported by comprehensive educational programs, professional associations, and government policies.

2. Pediatric nursing in Bulgaria

Pediatric nursing in Bulgaria is a well-established but highly specialized field of healthcare focused on the care of children from infancy to adolescence. Nurses who work in pediatric settings play an essential role in the medical team, providing comprehensive care for children while ensuring the emotional and psychological well-being of both the child and the family.

2.1. Qualifications: courses and specialized training

Pediatric nursing in Bulgaria is a specialized field requiring both general nursing education and additional training in child health. After completing the general nursing program, nurses can undertake **specialized training** in pediatric care. This training often involves courses in:

- pediatric anatomy and physiology,
- pediatric pharmacology,
- pediatric emergency care,
- child nutrition and growth,
- child development and psychology,
- pediatric care in different healthcare settings (e.g., hospitals, outpatient care, home care).

Specialized **post-graduate programs** in pediatric nursing are available at certain Bulgarian universities. These programs generally last 1 to 2 years and include academic coursework and practical clinical placements in pediatric departments [5, 6].

There are also opportunities for **continuing education** for pediatric nurses to enhance their skills in specialized areas such as pediatric intensive care, neonatology, or pediatric oncology.

Additional coursework in pediatric care is often required to work as a pediatric nurse. This can be done through:

- Elective courses in pediatric nursing: Students may take elective courses related to pediatric care during their undergraduate program. These courses cover basic pediatric nursing practices, including infant and child nutrition, developmental milestones, vaccination schedules, and child health assessments.
- Postgraduate Pediatric Nursing Programs: Once nurses have completed their undergraduate education, they can pursue specialized postgraduate programs in pediatric nursing. Medical Universities, such as the Medical University of Sofia, typically offer these programs. These programs may last 1 to 2 years and focus on advanced pediatric care, including pediatric critical care, child oncology, and neonatology. Specialized training may also

- include certifications in areas like pediatric intensive care or pediatric palliative care [6].
- Clinical practice: Specialized pediatric nursing education includes a significant portion of clinical practice, where nurses work in pediatric hospitals, clinics, or outpatient settings. During these placements, nurses learn to manage common pediatric conditions, such as respiratory illnesses, infectious diseases, and congenital disorders. They also receive training in handling medical emergencies in children, including trauma care and resuscitation.

2.2. International certifications and collaboration

Nurses who pursue pediatric nursing may also have opportunities to attain international certifications such as those offered by the European Pediatric Nurses Association (EPNA) or the International Council of Nurses (ICN). These certifications not only enhance the nurse's professional credibility but also help to integrate Bulgaria's pediatric nursing community with broader European and global healthcare networks. Collaboration with other European countries through various exchange programs helps Bulgarian nurses keep abreast of the latest trends and best practices in pediatric care [7].

2.3. Scope of tasks and competences of a pediatric nurse

The role of a pediatric nurse in Bulgaria encompasses a broad range of tasks, and the scope of their responsibilities varies depending on the clinical setting. However, pediatric nurses in Bulgaria are expected to demonstrate a combination of clinical, technical, emotional, and communication skills when caring for children. Their scope of tasks and competences extends beyond basic nursing duties and includes the following:

Key responsibilities of pediatric nurses:

- 1. Assessment and monitoring: Pediatric nurses are responsible for assessing and continuously monitoring a child's health. This includes taking vital signs, such as temperature, pulse, blood pressure, and respiratory rate, as well as checking growth and developmental milestones. Pediatric nurses use ageappropriate tools for assessment to ensure accuracy.
- 2. Administering medications and treatments: Pediatric nurses are responsible for administering prescribed medications, monitoring their effects, and ensuring the correct dosage. They must understand the unique pharmacokinetics and pharmacodynamics in children, as well as the importance of appropriate dosages for children of different ages and sizes.
- **3. Developmental care:** Pediatric nurses also ensure that a child's physical, cognitive, and emotional development is supported during hospital stays.

This includes engaging children in play therapy, using distraction techniques during medical procedures, and providing age-appropriate explanations to reduce anxiety.

- **4. Health education and prevention:** Pediatric nurses are key educators for parents and caregivers. They provide information on child nutrition, preventive healthcare practices (such as vaccinations), and the management of chronic conditions like asthma or diabetes. Nurses help families understand the significance of regular check-ups and the importance of early intervention in case of illness.
- 5. Supporting families: Pediatric nurses work closely with families, offering emotional support and guidance. This includes preparing families for potential procedures, explaining the treatment plan, and providing reassurance. Nurses also advocate for children's health needs within multidisciplinary teams.
- **6. Emergency care:** Pediatric nurses are trained to respond quickly to emergencies, including pediatric resuscitation, trauma, and sudden illness. They are equipped with the skills to act in emergency situations and ensure that children receive the necessary life-saving interventions.
- 7. Assisting in pediatric procedures and surgeries: Pediatric nurses assist doctors during medical procedures and surgeries, providing care before, during, and after these interventions.
- 8. Pediatric nursing in specialized areas: Pediatric nurses may also specialize further in areas such as neonatology, pediatric oncology, pediatric cardiology, and pediatric palliative care. In such settings, their duties may include monitoring critically ill neonates, caring for children undergoing cancer treatment, or providing end-of-life care for children with terminal conditions.
- **9. Emotional support and advocacy:** Given that children may be anxious or frightened during medical treatments, pediatric nurses offer emotional support to both the child and family, ensuring that their emotional needs are met.
- **10.** Collaboration with multidisciplinary teams: Pediatric nurses work closely with pediatricians, child psychologists, nutritionists, and other healthcare professionals to develop comprehensive care plans for children.

Pediatric nurses in Bulgaria are expected to have a high degree of professionalism and competence, as they play a pivotal role in ensuring the health and well-being of children in various healthcare settings.

2.4. Organizations and associations of pediatric nurses

Pediatric nurses in Bulgaria are supported by several key organizations that focus on advocacy, education, and professional development.

Bulgarian Nurses Association (BNA)

The most prominent professional body for nurses in Bulgaria is the **Bulgarian Nurses Association (BNA)**, which provides a platform for nursing professionals, including pediatric nurses, to network, access educational resources, and participate in advocacy efforts related to healthcare policy, but several other specialized groups focus specifically on pediatric nursing. The BNA works to elevate the standards of nursing practice, and it plays a critical role in supporting pediatric nurses. It organizes **professional development workshops, annual conferences,** and **seminars** that allow pediatric nurses to enhance their skills and share knowledge. It also provides **advocacy** for recognizing nursing as a critical component of the healthcare system [2].

Bulgarian Pediatric Society (BPS)

The **Bulgarian Pediatric Society (BPS)** is another key organization that works closely with Bulgarian pediatric nurses. The BPS aims to improve child health care and serves as a professional platform for pediatricians and pediatric nurses. The society organizes **national** and **international conferences** where pediatric nurses can learn about the latest developments in pediatric healthcare. Additionally, the BPS often collaborates with the BNA to organize specialized conferences, workshops, and seminars for pediatric nurses. These events aim to foster professional development, exchange knowledge, and promote best practices in pediatric nursing.

Bulgarian Association of Pediatric Nurses (BAPN)

The **Bulgarian Association of Pediatric Nurses (BAPN)** is a specialized organization that focuses on the professional development of pediatric nurses. BAPN organizes workshops, continuing education programs, and networking events for pediatric nurses in Bulgaria. The association is crucial in advocating for pediatric nursing as a distinct and essential field within the broader nursing profession.

2.5. Pediatric nursing supervision

In Bulgaria, pediatric nurses are closely supervised to maintain high standards of care. Supervision is provided in multiple forms, from **clinical supervision** to **peer review.**

- 1. Clinical supervisors: Senior nurses and pediatricians oversee the work of junior nurses in pediatric units. This supervisory role includes mentoring, providing feedback on performance, and ensuring adherence to medical protocols.
- 2. Government regulations: The Bulgarian Ministry of Health sets the legal framework for nursing practice, including pediatric nursing. The ministry ensures pediatric nurses adhere to national child health and care standards.
- **3.** Accredited training institutions: Universities and specialized training institutions play a key role in supervision, offering academic and clinical

- training for pediatric nurses. During clinical placements, students are closely supervised by experienced pediatric nurses and faculty members to ensure that they meet the necessary competencies [7].
- **4. Peer supervision:** Pediatric nurses in Bulgaria often engage in peer supervision, where colleagues support each other by sharing experiences, discussing complex cases, and providing constructive feedback. This peer-driven supervision helps create a collaborative learning environment within pediatric care settings.

Clinical supervision

In hospitals and healthcare settings, pediatric nurses work under the supervision of senior nurses or pediatricians. These supervisors provide mentorship and guidance, ensuring nurses adhere to clinical standards and procedures. Senior nurses also monitor and evaluate the performance of pediatric nurses, providing feedback and supporting continuous professional development.

Government and institutional oversight

The **Bulgarian Ministry of Health** plays a regulatory role in overseeing the nursing profession, including pediatric nursing. The ministry ensures that nursing practice aligns with **national healthcare standards** and that pediatric nurses follow ethical and professional guidelines. The ministry also conducts **audits** of healthcare institutions to ensure compliance with established care protocols [1].

Peer supervision and support

Pediatric nurses in Bulgaria often engage in **peer supervision** – working alongside colleagues in a collaborative and supportive environment. This peer-driven model allows pediatric nurses to share knowledge, discuss complex cases, and develop innovative approaches to care. In addition, this model helps nurses stay current with evolving pediatric care practices.

Pediatric nursing in Bulgaria is a highly specialized and essential field within the broader healthcare system. With a strong foundation in nursing education and a variety of opportunities for specialized training, pediatric nurses are well-prepared to meet the healthcare needs of children. These nurses play a critical role in the healthcare system, providing care that goes beyond physical health to include emotional support and family-centered care. Through professional organizations like the Bulgarian Nurses Association, the Bulgarian Pediatric Society, and the Bulgarian Association of Pediatric Nurses, pediatric nurses in Bulgaria are continuously supported in their professional development. The future of pediatric nursing in Bulgaria looks promising, with continued efforts to improve the quality of care, expand education, and address workforce challenges.

2.6. Bulgarian perceptions of pediatric nursing

The field of **pediatric nursing** in Bulgaria, like in many other countries, is shaped not only by the medical and educational frameworks but also by **cultural**, **societal**, and **professional perceptions** that influence the practice and status of pediatric nurses. The role of pediatric nurses in Bulgaria is highly respected, though it is often overshadowed by the more traditionally recognized roles of doctors, especially pediatricians. However, as public awareness of the importance of comprehensive child care increases, the societal recognition and understanding of pediatric nursing have evolved.

2.6.1. Cultural and societal perceptions

In Bulgaria, as in many Eastern European countries, the **family** is often seen as the primary care unit for children. This cultural understanding emphasizes the role of parents and close family members in child-rearing and health decisions, including the healthcare of sick or hospitalized children. Within this context, **pediatric nurses** are perceived not only as caregivers but also as **advocates for the child's well-being**, often helping bridge the gap between medical professionals and the family.

Pediatric nurses are viewed as caregivers who not only provide physical care to children but also offer emotional support to both the child and their family. The emotional aspect of pediatric nursing – comforting children during painful procedures or reassuring anxious parents – is highly valued in Bulgarian society, where family ties and close-knit relationships are central.

However, traditional **gender roles** in Bulgaria can sometimes influence perceptions of nursing in general. Nursing, including pediatric nursing, has historically been seen as a **female-dominated profession**, and this can sometimes limit the recognition of the expertise and skill required to provide pediatric care. Although gender perceptions are shifting, with increasing numbers of men entering the nursing profession in Bulgaria, nursing is still often seen as a less prestigious or lower-status career compared to medicine or engineering, for example.

At the same time, there is a growing recognition of the importance of **specialized nursing care**, including pediatric nursing, within the broader healthcare system. As pediatric nursing becomes more specialized and associated with advanced skills, it is gaining more professional respect. Media, healthcare campaigns, and the work of different organizations contribute to changing these perceptions by highlighting the critical role that nurses, especially pediatric nurses, play in children's health.

2.6.2. Professional perceptions and the role of pediatric nurses

Pediatric nursing in Bulgaria is gradually gaining more professional recognition within the healthcare community. Traditionally, physicians, particularly pedia-

tricians, were considered the primary caregivers for children, and nurses were often seen as support staff. However, over the last two decades, there has been a notable shift toward recognizing pediatric nurses as **vital healthcare team members** capable of delivering high-quality care and contributing significantly to patient outcomes. Despite this, challenges are still related to recognizing **pediatric nurses' contributions**. However, this perception is evolving. In recent years, **nursing advocacy groups** and **pediatric organizations** have worked to elevate the role of pediatric nurses, emphasizing their critical contributions not only in direct care but also in **advocacy, research**, and **policy development** related to child health.

2.7. Public awareness and the changing landscape of pediatric nursing

The increasing number of **healthcare campaigns** and **public health initiatives** aimed at improving child health have emphasized the role of pediatric nurses in **preventive care.** As Bulgaria faces growing challenges in managing chronic childhood diseases such as **asthma**, **diabetes**, and **obesity**, pediatric nurses are seen as essential in **health education** and in providing **ongoing care** for children with long-term conditions. Pediatric nurses are also crucial in educating families about **vaccination schedules**, **nutrition**, and **early childhood development**, which enhances their standing in the public eye.

There is also a notable shift towards **family-centered care** in pediatric nursing, wherein nurses work closely with parents to ensure the child's holistic well-being. This shift reflects broader societal changes in how healthcare is viewed, moving from a **paternalistic model** toward a more **collaborative approach** where families are involved in decision-making processes about their child's care.

2.7.1. Challenges and opportunities for changing perceptions

While progress has been made, the perceptions of pediatric nursing in Bulgaria continue to face significant challenges. One of the most pressing issues is the migration of nurses to other EU countries, where they are offered higher salaries, better working conditions, and more professional recognition. As a result, Bulgaria is left with a shortage of qualified pediatric nurses, which directly affects the quality and accessibility of child healthcare services. This trend highlights the persistent undervaluation of the nursing profession in Bulgaria, where compensation, career opportunities, and social status remain considerably lower compared to other healthcare professions, such as medicine.

However, this situation also presents an opportunity for **advocacy** and **reform.** As pediatric nursing becomes increasingly important to child healthcare, there is

potential for change. Educational reforms, better working conditions, and higher wages could help retain highly qualified pediatric nurses within Bulgaria. Additionally, as Bulgaria continues to engage more with the European Union's healthcare initiatives and global pediatric nursing standards, these interactions could foster greater recognition of pediatric nurses and their vital role in the healthcare system.

Pediatric nursing in Bulgaria represents a specialized field that plays a vital role in the overall healthcare system, addressing children's unique medical, psychological, and emotional needs from infancy through adolescence. While the profession is well-established, several challenges and opportunities shape the future of pediatric nursing in the country.

One of the primary strengths of pediatric nursing in Bulgaria lies in the country's structured and rigorous education system. With a well-established **Bachelor's degree** in nursing and postgraduate programs specializing in pediatric care, nurses have the foundational and advanced knowledge necessary to provide high-quality care. The emphasis on clinical training ensures that nurses are well-versed in theory and prepared to deal with the practical demands of pediatric healthcare settings.

The presence of **professional organizations** plays an important role in fostering a sense of community, providing continuous education, and advocating for the rights of pediatric nurses. These organizations create platforms for networking, professional development, and advocating for policy changes to improve nurses' status and working conditions in the country. The collaboration between these professional bodies also ensures that pediatric nurses remain closely integrated with the wider healthcare team, promoting interdisciplinary care.

Moreover, the healthcare system in Bulgaria, despite its robust educational framework, still faces **resource limitations** in some areas. Pediatric nursing care in hospitals, especially in rural areas, is sometimes constrained by insufficient staff, lack of advanced medical technologies, and challenges in healthcare infrastructure. These factors can affect the overall quality of pediatric care and the working conditions of pediatric nurses.

On the other hand, these challenges present an opportunity for significant improvement and innovation. As Bulgaria continues to modernize its healthcare system, greater investments in **nursing education**, particularly in **specialized pediatric care**, would ensure that the country produces more highly skilled pediatric nurses to meet the growing demand. Collaborative initiatives with European institutions, including training and exchange programs, could also help address the gaps in expertise and staffing.

Another opportunity lies in developing **pediatric nursing leadership** and **research** in Bulgaria. Encouraging pediatric nurses to engage in research activities and creating dedicated roles for clinical nurse specialists and nurse practitioners in pediatrics could significantly enhance the quality of care. This could also contribute to the **globalization of pediatric nursing practice**, making Bulgaria a more prominent participant in international pediatric healthcare discussions.

2.7.2. Future challenges for pediatric nursing in Bulgaria

As pediatric nursing continues to evolve in Bulgaria, several challenges may impact the future of the profession. These challenges span education, workforce, healthcare infrastructure, and societal perceptions. Addressing these challenges will be crucial to ensuring the continued development and improvement of pediatric nursing in the country, allowing it to meet the growing demands of child healthcare in the coming years.

2.7.3. Shortage of pediatric nurses

One of the most pressing future challenges for pediatric nursing in Bulgaria is the ongoing shortage of qualified nurses, particularly in specialized areas such as pediatric intensive care, neonatology, and pediatric oncology. Although there is a growing demand for specialized pediatric care, the limited number of trained pediatric nurses, combined with the need for continuous professional development and training, presents a significant gap in the country's ability to meet the increasing demand for pediatric services. This shortage is compounded by the migration of nurses from Bulgaria to other European Union countries, where the demand for healthcare professionals is high, and wages and working conditions are often more favorable. The outflow of highly trained professionals to countries with better compensation packages results in a brain drain that exacerbates the lack of skilled pediatric nurses. One of the most pressing issues is the shortage of healthcare professionals, as many nurses seek better opportunities abroad within the European Union. This has led to an increasing reliance on foreign-trained nurses, which, while helping to fill gaps, also presents a challenge in maintaining a consistent standard of care. The **migration of nurses** from Bulgaria to higher-paying countries within the EU is a common phenomenon and one that has significantly impacted pediatric nursing in rural areas. If not addressed, this issue could affect the quality of pediatric care, as hospitals and clinics may struggle to maintain an adequate workforce. As the demand for healthcare services increases due to an aging population, along with the growing need for specialized pediatric care, the shortage of nurses in pediatrics will become even more critical.

Potential solutions:

- Incentive programs such as improved wages, better working conditions, and career advancement opportunities could help retain pediatric nurses in Bulgaria.
- **Recruitment initiatives** targeting the younger generation of nurses, including scholarships, training programs, and mentorship, could help address the workforce gap.

 Retention strategies, including professional development and fostering a supportive working environment, are essential for preventing further attrition of pediatric nurses.

2.7.4. Increasing demand for specialized pediatric care

As healthcare evolves and child health needs become more complex, a growing demand for specialized pediatric nursing care is growing. Bulgaria is experiencing a rising incidence of chronic conditions in children, such as **asthma**, **diabetes**, **child-hood obesity**, and **pediatric cancers**. As a result, specialized nursing expertise will be increasingly needed to manage these long-term health conditions and provide **personalized care**.

Additionally, advances in medical technology and treatment protocols, especially in areas like **neonatology** and **pediatric critical care**, require highly skilled pediatric nurses who are trained to handle complex medical equipment and interventions. However, the shortage of specialized nurses poses a significant challenge, as the increasing need for these specialized services could outpace the supply of qualified nurses.

Potential solutions:

- Expansion of specialized training programs in pediatric nursing to ensure that nurses are equipped to care for children with complex health needs.
- Enhanced collaboration between nursing schools, hospitals, and pediatric healthcare institutions to create a pipeline of highly skilled pediatric nurses.
- Increased investment in continuing education and professional development to keep pediatric nurses up-to-date with advances in pediatric care and technology.

2.7.5. Impact of healthcare system strain

Bulgaria's healthcare system is currently under significant strain due to **financial constraints**, **resource limitations**, and **staff shortages**. Hospitals and clinics often face challenges in maintaining sufficient staffing levels, particularly in rural or under-resourced areas. Pediatric units, in particular, can suffer from insufficient equipment, outdated medical technologies, and a lack of specialized care units, all of which hinder the delivery of optimal pediatric care.

These systemic issues can lead to **burnout** among pediatric nurses, increased stress, and lower morale, which may exacerbate the existing shortage of qualified staff. Furthermore, these constraints can negatively impact the **quality of care** that pediatric nurses are able to provide, particularly in high-demand settings such as emergency departments and intensive care units, where rapid interventions are crucial.

Potential solutions:

- Government investment in pediatric healthcare infrastructure, including modernization of facilities and upgrading medical equipment, could improve the working conditions for pediatric nurses and ensure that children receive high-quality care.
- **Increasing funding for pediatric healthcare** to ensure that specialized units have the necessary resources to care for children with complex needs.
- **Developing comprehensive support programs** for pediatric nurses to mitigate burnout, such as mental health support, adequate staffing, and access to professional development.

2.7.6. Changing public health needs

The evolving public health landscape will also present challenges for pediatric nursing in Bulgaria. For example, the **COVID-19 pandemic** has highlighted the vulnerability of children, especially those with underlying health conditions. The long-term impact of the pandemic on child health, including delayed immunizations, mental health issues, and disruptions to normal development, will place additional demands on pediatric nurses in the future.

Additionally, **global health trends**, such as the increase in **mental health issues** among children and adolescents, including anxiety and depression, will require pediatric nurses to adapt and develop new competencies in addressing these concerns. Pediatric nurses will increasingly need to be trained not only to handle children's physical health but also their **mental** and **emotional well-being**.

Potential solutions:

- Strengthening public health initiatives aimed at improving child health outcomes, including vaccination programs and mental health services, would help reduce the burden on pediatric nurses.
- Training pediatric nurses in pediatric mental health so they can adequately support children and adolescents with psychological issues.
- Expanding the role of pediatric nurses in preventive care, including health education on topics such as nutrition, physical activity, and emotional well-being.

2.8. Enhancing public and professional recognition

Despite the growing recognition of the importance of pediatric nurses in Bulgaria, their role is still not always fully understood or appreciated by the public or within the healthcare system. Pediatric nurses often work behind the scenes, and their contributions may not be as visible or celebrated as those of pediatricians and other medical professionals. This lack of recognition can affect both **public perceptions** of pediatric nursing and the **professional status** of nurses within healthcare teams.

Furthermore, there is still room for growth in terms of **nursing leadership** in pediatric settings. Pediatric nurses need more opportunities to take on leadership roles, advocate for their profession, and contribute to **policy development** related to child health.

Potential solutions:

- **Public awareness campaigns** aimed at educating the general public about the essential role of pediatric nurses in child healthcare.
- **Promoting nursing leadership** through the development of specialized roles, such as **pediatric nurse practitioners** or **clinical nurse specialists.**
- Encouraging active participation of pediatric nurses in healthcare policy and decision-making, ensuring their voices are heard in the development of child health programs and initiatives.

2.9. Integration with multidisciplinary teams

As healthcare becomes increasingly **interdisciplinary**, pediatric nurses will need to collaborate even more closely with pediatricians, psychologists, social workers, and other healthcare professionals to provide **holistic care** to children and their families. Effective teamwork will be crucial in managing complex cases that require contributions from multiple specialists.

However, multidisciplinary collaboration can sometimes be challenging due to differences in roles, communication barriers, or organizational structures within hospitals. Ensuring smooth collaboration between nurses and other professionals will require ongoing effort, communication, and training.

Potential solutions:

- Developing multidisciplinary training programs that include pediatric nurses and other healthcare professionals, emphasizing the importance of teamwork in pediatric care.
- **Improving communication protocols** between pediatric nurses, doctors, and other healthcare professionals to ensure seamless care coordination.
- **Establishing a culture of collaboration** where all healthcare team members recognize and respect pediatric nurses' valuable contributions.

In conclusion, pediatric nursing in Bulgaria is a well-established and essential part of the healthcare system, but multiple challenges and opportunities will shape its future. The education system in Bulgaria provides a strong foundation for nurses, and postgraduate specialization offers avenues for advanced skills development in pediatric nursing. The work of professional organizations and collaboration with international bodies strengthens pediatric nurses' overall practice and professional development.

However, Bulgaria faces significant challenges related to workforce shortages, especially in specialized pediatric nursing areas. The migration of nurses to other European Union countries exacerbates this issue and calls for reforms in the health-care system to retain skilled professionals. Additionally, resource limitations, particularly in rural areas, can hinder the quality of pediatric care provided by nurses.

To address these challenges, there is a clear need for **greater investment in pediatric nursing education and training**, especially in specialized areas of pediatric care. Enhancing pediatric nursing leadership and supporting research in pediatric nursing will further help advance the profession. Finally, as the global healthcare landscape continues to evolve, **increased international collaboration** and exchange programs will allow Bulgarian pediatric nurses to learn from global best practices and help raise the standard of pediatric care in the country.

Ultimately, despite the challenges, the future of pediatric nursing in Bulgaria looks promising. With continuous professional development, support from nursing organizations, and the government's commitment to improving healthcare infrastructure, Bulgaria has the potential to enhance the quality of pediatric nursing care, ensuring better health outcomes for children nationwide.

Pediatric nursing in Bulgaria is an evolving and dynamic field, supported by a strong educational system, specialized training programs, and professional organizations that advocate for the development of pediatric healthcare. Nurses in this field play a crucial role in ensuring children's health, safety, and emotional well-being, working in close collaboration with families and multidisciplinary healthcare teams. The ongoing professional development of pediatric nurses is essential to meeting the changing needs of children and families in Bulgaria, ensuring that pediatric nursing continues to thrive as a critical part of the healthcare system.

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Pediatric nursing in Cyprus

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1. Historical advancements of nursing in Cyprus

Due to its strategic position, Cyprus has always been the center of attention in the Mediterranean Sea. Being the crossroad for three continents, Asia, Europe, and the East, it was always conquered, with the conquerors always bringing their knowledge and expertise regarding the care of the ill on the island. As evidenced by the tools discovered, archaeological excavations across the island attest to the worship of medical deities like Asclepius and Isis, as well as surgical procedures [1, 2].

The nursing profession in Cyprus has changed identities throughout the centuries. During the first years of Christianity, nuns were responsible for the care of the ill and wounded. During the Frankish period, there were hostels that functioned as extensions of monasteries and as hospitals, whereas the Crusades brought about the need to create military battalions to care for the wounded and develop specialties.

The Ottomans conquered the island in 1571. Public health services, including hospitals, were nonexistent during the Ottoman era. The only existing hospitals on the island were one military hospital, at the Paphos Gate at Nicosia, and a Nuns Hospital in the city of Larnaca, which was established with the order of Franciscan Nuns that served as nurses and funded by the French government. The lack of sanitary conditions led to exposure to diseases such as malaria and leprosy, decimating the population, including women and young children. On the other hand, the lack of health professionals led to the outbursts of folk medicine and midwifery [3].

It was not until the island's administration was passed to the British in 1878 that the healthcare sector started to thrive on the island. The British had to deal with the situation they had obtained from their predecessors. Thus, the first measures aimed at protecting the populations' health were established, with pharmacies and dispensaries for patient examination and medication administration and the construction of hospitals in every city, initially staffed by English army physicians and then by civil physicians. Hospital wards were under the supervision of nurses brought from Britain at the time, whereas, as of 1891, Cypriots would serve as caregivers after training [2, 4].

From 1935 to 1945, Cypriot girls were sent to nursing schools in England and Beirut University, with scholarships to staff hospitals and replace the British nurses. During that time, two classes of nurses were created, i.e., graduate nurses (level 1

nurses) and nurse assistants (level 2 nurses). A two-year diploma for assistant nurses was awarded by the Nursing School of Cyprus, which was established in 1945 [2, 4]. The Cyprus Declaration of Democracy was signed in 1959, and Cypriot nurses agreed to take on the responsibilities of supervisors. Additionally, graduates who had completed their studies at universities located in other countries returned to work in the hospitals [1].

The two nurses' classes remained until the Cyprus University of Technology was established in 2004.

2. Nursing education in Cyprus

As mentioned above, the Nursing School of Cyprus was established in 1945 as a two-year school for nursing assistants. In 1954, a three-year program was established for high-school graduates, allowing graduates to have an extra year in nursing schools in the UK to be registered at the Nurses and Midwives Council. The two schools operated simultaneously until the two-year school was closed in 1990 [1].

The Nursing School of Cyprus University of Technology (CUT) was established in 2004, offering a four-year program and a state university degree. The old three-year nursing school ceased operations in 2009. However, from 2009 to 2014, more than 3,000 nurses completed the degree equation program at CUT and obtained a Bachelor's degree.

Private Universities followed the number of Nursing Schools in Cyprus, reaching four private universities and one state university. The EU Directive (2013/55/EU) states that the educational programs for nurses assigned to general care must include at least 4600 hours of theoretical and clinical training, with clinical training comprising at least one-half of the educational program (i.e., at least 2300 h), is followed by all Nursing programs, whereas the Cyprus Nursing and Midwifery Council is harmonized with the EU directives for the registration of Nurses.

3. The Cyprus Nurses and Midwives Council

The Cyprus Nurses and Midwives Council (NMC) was founded in 1988 under the Nursing and Midwifery Law of 1988 (214/1988). The law was periodically amended, primarily for Cyprus's accession to the European Union in 2003 and again in 2012, when continuing vocational education was mandated by law [5].

The role of NMC is to oversee the registration of nurses and midwives in the Register of Nurses and Midwives and the renewal of the Professional Practice License, as the practice of nursing and midwifery necessitates registration in the appropriate register and possession of a valid Professional Practice. The License to Practice is renewed every four years by submission of the relevant form with the

corresponding certification documents to the Council [6]. The NMC also wields any additional powers and responsibilities conferred upon it by the provisions of the Nursing and Midwifery Law (1988 to 2012) and the Regulations enacted accordingly [5]. There are two registries for which the NMC is responsible: the nursing registry, which consists of two parts, namely general nursing and mental health nursing, and the midwifery registry.

4. Pediatric nursing

Children and adolescents in Cyprus were hospitalized at the Pediatric Department of Nicosia General Hospital under general nurses' supervision. According to testimonials by Mrs Nitsa Apsiotou, a senior nursing officer at the reference pediatric hospital, the above-mentioned department included the neonatal unit, the neurosurgery unit, the pedo-surgery and the transfusions unit that accommodated children with Beta Thalassemia. The units were divided by glass partitions, while all the nurses involved were employed in the pediatric department.

The first pediatric hospital in Cyprus, Archbishop Makarios III Hospital (NAM III), was built in 1984. Pediatric Nurses were moved from Nicosia General Hospital's Pediatric Clinic to NAM III in 1984, which still remains the reference hospital for pediatric and maternal care. The hospital operated with one pediatric clinic and one Neonatal Intensive Care Unit (NICU). The pediatric clinic operated with the same specialties as the pediatric clinic of Nicosia General Hospital and accommodated intubated children. The hospital gradually expanded with a pedo-surgical department in 1988, a pedo-oncology department in 1994, a pediatric neuropsychiatric clinic, and a Pediatric Intensive Care Unit in 2003. A second pediatric clinic followed, whereas since the establishment of the NAM III, all external pediatric specialties were moved from the general hospital.

Registered nurses of the general nursing registry were and still are employed at the hospital and other pediatric clinics in public and private hospitals. The expertise of these nurses was determined by their experience rather than by their completion of educational courses.

The competencies of pediatric nurses in Cyprus do not differ from those of general nurses, as there is no distinct registry for pediatric nurses. This is partly attributed to the lack of education in the pediatric nursing specialty. The competencies and obligations of general nurses are referred to nursing and midwifery law of 1988 –2012. According to the law, a four-year nursing degree program at a university level, which includes, among others, nursing theory, basic sciences, humanities sciences, and preparation in behavioral sciences, which are necessary to practice the full range of activities of the professional nursing role, are considered adequate [7]. However, these competencies do not meet the needs of the pediatric population. Pediatric nursing during the 4-year curriculum is taught for only one semester. As

a result, nursing students and later graduates do not have comprehensive training in caring for children, adolescents, and their families.

Cyprus currently has 11 state pediatric clinics, including 2 NICUs and 11 outpatient Pediatric Specialty Clinics, staffed by a total of 282 nurses. These figures are increased compared to a previous recording carried out in 2015 and represent 193 nurses per 100,000 children [8]. Simultaneously, there is an absence of formal specialized education in pediatric nursing, which has led to the need for such courses to provide quality care for children and their families.

Recognizing these requirements, the Department of Nursing at the Cyprus University of Technology has established the first Master's program in Children's and Adolescent Nursing Care in Cyprus. This program was evaluated in November 2024 and is anticipated to commence in 2026, with the vision of the four-member committee (Dr. Christiana Nicolaou, Dr. Ourania Kolokotroni, Dr. Nicos Middleton, and Dr. Koralia Michail). In order to complete the durability study of the upcoming Master's program, a questionnaire was distributed by the Cyprus Nurses and Midwives Association to nurses all over Cyprus. The results of the questionnaire revealed the lack of specialized pediatric education among responders, as well as the increased interest in the program, as two-thirds responded that they would be interested in participating in a Master's Program on Children's and Adolescents' nursing care.

Additionally, in January 2025, a pediatric nursing initiative team was created to establish the Pediatric Nursing Sector of the Cyprus Nurses and Midwives Association. The team was created by seventeen nurses working at the pediatric reference hospital, pediatric clinics from other provincial state and private hospitals, and academics, all sharing the same vision of providing high-quality pediatric nursing care in Cyprus. The Cyprus Nurses and Midwives Association board endorsed this initiative and resolved to establish the Pediatric Nursing Sector in the forthcoming 2027 elections. The initiative team commenced actively by organizing workshops to educate and inform nurses in pediatric departments, in addition to planning further educational events.

5. The future of pediatric nursing in Cyprus

The concurrent establishment of the Master's program in Children's and Adolescent's Nursing Care and the Pediatric Nursing Sector aims to institutionalize specialization and pediatric nursing education in Cyprus, ultimately leading to the creation of a distinct sub-register from the Cyprus Nurses and Midwives Council that will acknowledge the specialized needs of children and their families.

Nursing in Cyprus has undergone numerous transformations in recent years. However, the advancement of pediatric nursing specialization has been largely overlooked. Establishing the pediatric nursing sector and the postgraduate program in child and adolescent nursing care will enhance nurses' professional development and specialization in paediatric departments and other areas involving pediatric patients. An effective measure of these initiatives will be the observable enhancement in the quality of provided care for children, adolescents, and their families.

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Pediatric nursing in Lithuania

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1. Nursing profession in Lithuania. The education system, and the right to practice the profession

In Lithuania, nurses are trained at three universities: Lithuanian University of Health Sciences (LSMU) in Kaunas, Vilnius University, and Klaipėda University, as well as at Klaipėda State University of Applied Sciences, Vilnius College, Kaunas College, Panevėžys College, Utena College, and Šiauliai State College. Nursing programs are also offered in private higher education institutions, such as the College of Social Sciences [1, 2].

These higher education institutions train and develop highly qualified nursing professionals, providing theoretical knowledge and practical skills. Students actively participate in scientific research, contributing to health policy and strategy development.

Nursing studies integrate various clinical disciplines, and practical training takes place in simulation classrooms using role-playing scenarios, mannequins, video materials, group work, discussions, and seminars.

Clinical nursing studies are conducted in primary care practice centers, secondary- and tertiary-level hospital departments.

Nursing studies prepare general practice nurses capable of independently caring for patients, including terminally ill individuals, performing nursing and medical procedures, collecting samples for medical tests, providing emergency medical assistance, and educating patients on healthy lifestyle principles.

Graduates of non-university higher education programs receive a Professional Bachelor's degree in Health Sciences and a General Practice Nurse qualification [1].

Graduates of university nursing programs receive a Bachelor's degree in Health Sciences and a General Practice Nurse qualification.

1.1. Master's degree (second cycle) nursing programs

Universities offering Master's degree programs in nursing:

 Lithuanian University of Health Sciences (LSMU) offers two Master's programs: Nursing Leadership and Advanced Nursing Practice (available in Lithuanian and English) [3].

- Vilnius University offers a Master's program in Advanced Nursing Practice
 [4].
- Klaipėda University offers a Master's program in Nursing [5].

The LSMU Faculty of Nursing is the only WHO Collaborating Center for Nursing Education and Practice in the Baltic States [6]. The faculty strongly promotes international cooperation and student and faculty exchange programs. LSMU graduates in Nursing and Rehabilitation have internationally recognized diplomas.

LSMU is the only university in Lithuania authorized to offer PhD studies in nursing [7].

In Lithuania, universities and colleges conduct scientific research in nursing involving faculty members, researchers, and doctoral students. Participation in international projects, faculty and student exchange programs, and professional networks such as NORD Plus and ROSA Linea is actively encouraged.

1.2. Nursing practice

Nursing practice is conducted in accordance with the Law on Nursing and Midwifery Practice [8], Nursing Practice Licensing Rules [9], and other legal acts regulating nursing practice.

Law on Nursing and Midwifery Practice of the Republic of Lithuania regulates the acquisition of professional qualifications, practice conditions, rights, duties, and responsibilities of general practice nurses, advanced practice nurses, and midwives, as well as the management of nursing and midwifery practice [8].

Practicing general nursing in the Republic of Lithuania is only permitted with a valid general nursing practice license [9].

1.3. Licensing

The State Health Care Accreditation Agency under the Ministry of Health issues General Practice Nurse Licenses [9] in accordance with the Law on Nursing and Midwifery Practice [8] upon submission of the required documents: a document confirming the acquisition of general practice nurse professional qualifications, a document proving that the applicant has completed professional qualification development in accordance with the requirements approved by the Minister of Health and other legal regulations; a medical certificate confirming that the applicant is medically fit to practice nursing; a document proving that the applicant's state language proficiency meets the requirements set by the Government of the Republic of Lithuania; a document confirming at least three years of legal nursing practice within the last five years before the date of application registration with the Agency.

Obligations of the License Holder: The license holder must comply with the conditions of licensed practice. Every five years from the date of license issuance, they must notify the State Health Care Accreditation Agency and provide supporting documents regarding mandatory professional qualification development as required by law. The total duration of mandatory professional development for a General Practice Nurse must be at least 60 hours over five years, including training in relevant programs.

If a license holder has not legally practiced nursing for more than two consecutive years within the last five years, they must submit additional documentation confirming supplementary professional qualification training in accordance with legal regulations. The duration of supplementary training for a General Practice Nurse is 100 hours.

Additionally, the license holder must prove they have legally practiced nursing for at least three years within the past five years. If the nurse has practiced in a foreign country, they must provide a certificate issued by the competent authority of that country, confirming the legality of their nursing practice, issued no more than 12 months before submission.

1.4. Specializations

The nursing profession covers an increasing number of complex healthcare areas, many of which require extensive additional professional training in a specific specialized field. To ensure the highest quality of healthcare services, Lithuania has designated five specialized nursing fields [10], where only general practice nurses who have completed an appropriate nursing specialization program are permitted to practice.

Nursing specialization programs not only expand and deepen nurses' competencies but also enhance career opportunities, allowing nurses to remain competitive in the job market and choose more attractive positions.

Nurses with a general practice nursing qualification can further specialize through five non-formal education programs [10]:

- Operating room nursing,
- Anesthesia and intensive care nursing,
- Mental health nursing,
- Emergency medicine nursing,
- Community nursing.

2. Pediatric nursing

To practice pediatric nursing in Lithuania, a **General Practice Nurse License** is required [9]. Pediatric nurses do not need additional specialization. However, depending on the specific workplace and its requirements, nurses must complete mandatory training courses while obtaining and renewing their nursing license, which

must be updated every five years. This includes participation in First Aid training and other required educational programs.

Functions of a pediatric nurse: Organize and implement pediatric nursing and care. Assess children's nursing needs and help fulfill them. Educate patients, their family members, healthcare staff, and nursing students. Analyze the health education needs of children, their families, and groups, organize and conduct such education, and evaluate outcomes. Collaborate with other healthcare, social protection, and education system professionals, as well as institutions responsible for children's health. Develop pediatric nursing and carry out the nursing process, including assessing nursing needs, planning, providing care, documenting, summarizing, and proposing nursing practice improvement [2, 8].

Duties of a pediatric nurse: Provide nursing care for children of all ages, support their needs, offer preventive medical services, and provide community healthcare services in primary healthcare institutions, personal healthcare institutions, preschools, schools, and residential care homes. Plan nursing care by assessing the child's vital functions and completing official nursing documentation. Perform treatment and diagnostic procedures safely and efficiently, ensuring compliance with health and safety regulations for both the nurse and the children. Monitor and assess children's health status, recognize abnormal symptoms, immediately inform the physician of deteriorating health conditions, and provide first medical aid in life-threatening situations. Cooperate with colleagues and staff from other institutions involved in children's health care. Ensure the proper administration of prescribed medications, and inform families about their effects, possible side effects, and dosing schedules. Keep knowledge and skills up to date with current nursing practice and scientific advancements. Adhere to workplace regulations, internal policies, job descriptions, and professional ethics requirements stipulated by Lithuanian law [2, 8].

Competencies of a pediatric nurse: Recognize that children's health is the highest priority and protect their physical, emotional, and social well-being. Understand the importance of health education and promote a healthy lifestyle. Assess the health status and needs of newborns, infants, and children based on vital functions and educate parents on proper child care, encouraging parental involvement in child health. Understand life-threatening conditions in children and provide emergency medical assistance. Collect, analyze, and document health-related data. Collaborate with various professionals who impact child health. Understand children's nutrition principles and educate families. Provide nursing care for sick children and advise families on proper care. Implement infectious disease prevention measures and educate parents on their importance. Be knowledgeable about children's rights and social protections and advocate for them. Use medical regulations and guidelines in daily practice [2, 8].

Rights of a pediatric nurse: Receive the necessary tools and resources to perform professional duties safely. Access essential work-related information. Collect

epidemiological data on children's health and participate in scientific nursing research. Propose improvements in nursing science, practice, and quality. Cooperate with other healthcare, social protection, and education professionals. Refuse to perform tasks unrelated to patient care. Decline to perform procedures that contradict their moral beliefs provided that this refusal does not endanger the patient's life, that appropriate conditions and resources for the procedure are unavailable, or that the procedure has been prescribed by an unauthorized individual [2, 8].

2.1. Lawful work with children code (QR code)

As of November 1, 2024, the provisions of the Law on the Fundamentals of Child Rights Protection of the Republic of Lithuania require that all individuals working, engaging in activities, or planning to work or engage in any activities with children must have a Lawful Work with Children Code (QR Code). This code confirms that the individual has no criminal record for sexual offenses against children or adults, as well as no record of other serious or particularly serious intentional crimes [11].

2.2. Organizations and associations of pediatric nurses in Lithuania

Pediatric nurses in Lithuania join professional organizations to strengthen their profession. The largest professional organization, in which pediatric nurses actively participate is the **Lithuanian Nurses' Organization (LSSO)** [12].

Strategic areas of activity: Unifying and strengthening the professional nursing community. Enhancing professional qualifications and improving practical skills. Initiating, implementing, and expanding social dialogue at international, national, regional, and institutional levels. Improving the social, economic, financial, and psychological working conditions of nurses. Developing national and international cooperation among healthcare professionals. Promoting and advancing nursing science. Encouraging the implementation and development of nursing innovations. Strengthening nurse leadership and active participation in healthcare teams. Recognizing and sharing innovative achievements and best practices in nursing. Increasing awareness and attractiveness of the nursing profession. Developing and implementing a career pathway model for nurses [12].

Organizational priorities: Encouraging active participation and motivation among LSSO members. Developing leadership at all structural levels. Representing and defending the interests of the nursing community. Expanding and strengthening social dialogue, partnerships, and cooperation. Enhancing professional competencies, providing consultations, information, and training on trade union activities and representation. Promoting LSSO membership and financial sustainability [12].

Professional priorities: In collaboration with social partners, LSSO seeks to improve the legal regulation of the nursing profession, considering the needs of nursing service development. Expand and improve nursing services, increase autonomy and optimize financial and reporting systems. Enhance nurses' knowledge, skills, and motivation. Develop leadership and teamwork skills in healthcare settings. Promote nursing research and integrate findings into practice.

National and international engagement: LSSO collaborates with social partners and the international nursing community, participating in national and international professional, trade union, legal, economic, and scientific events, where discussions focus on improving the healthcare system and the quality of patient care [12].

2.3. Lithuanian Neonatology Association

Nurses practicing in neonatal disease departments, neonatal intensive care, and resuscitation units also participate in the Lithuanian Neonatology Association.

Vision: Every mother and every newborn should receive the best possible heal-thcare services tailored to their needs in a family-centered environment.

Mission: To foster teamwork among professionals and maintain high standards of safety, quality, and value in healthcare services. Promote a trust-based atmosphere. Recognize that all individuals deserve dignity and respect. Members of the association acknowledge and respect the individuality and diversity of patients and their families.

Objectives: Improve the quality of neonatal healthcare in Lithuania. Unite physicians, nurses, and other specialists (e.g., psychologists, social workers) involved in neonatal care.

Tasks: Encourage and support research in neonatology. Promote and financially support professional development for members, including participation in national and international neonatology conferences. Provide scientific, methodological, and practical support to healthcare professionals to improve maternal and neonatal health. Foster collaboration between organizations, institutions, and professionals involved in neonatology in Lithuania, Europe, and worldwide. Address ethical and deontological issues.

Association activities: Organizing national and international conferences and training courses in neonatology. Developing specialty standards and qualification criteria for neonatologists. Implementing internationally recognized medical terminology, diagnostic, and treatment methods. Maintaining professional relationships with national and international organizations with shared goals. Publishing research and professional literature [13].

2.4. Association of Anesthesia and Intensive Care Nurses

Nurses working in pediatric resuscitation and intensive care units are united by the Association of Anesthesia and Intensive Care Nurses (AITSD).

Objectives: Unite and strengthen the professional community of nurses working in anesthesia and intensive care to enhance, reform, and improve their work. Participate in developing regulatory acts and other documents related to the organization, training, and professional development of anesthesia and intensive care nurses. Coordinate member activities, educate professionals in labor law and other relevant areas, support professional development, and enhance professionalism. Represent and defend the interests of its members [14].

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Pediatric nursing in Poland

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1. Legal basis of the nursing profession

In Poland, the process of education and preparation for the profession of a nurse is based on numerous legal regulations that specify the requirements for education, obtaining qualifications, and work organization. Regularly updating and verifying these regulations by state authorities ensures compliance of education and professional standards with national and EU requirements.

Basic legal acts:

- a) The Act on the professions of a nurse and midwife specifies:
 - principles of performing the professions of a nurse and midwife,
 - obtaining the right to practice the profession,
 - vocational and postgraduate education [1].
- b) The Act on the Self-governance of nurses and midwives regulates:
 - functioning of professional organizations,
 - principles of professional responsibility of nurses and midwives [2].
- c) The Code of professional ethics of a nurse and midwife specifies ethical norms and standards of conduct [2, 3].
- d) Regulations of the Minister of Health specify, among others:
 - conditions for conducting studies for nurses and midwives [4],
 - requirements concerning the education of nurses and midwives [5],
 - requirements concerning postgraduate education [6],
 - type and scope of services provided independently by nurses and midwives [7],
 - list of active substances and diagnostic tests for which nurses may issue referrals [8].

2. The system of professional education of nurses in Poland

Nurse education in Poland is in line with EU directives, including Directive 2005/36/EC and Directive 2013/55/EU, which specify the minimum duration of education and program scope [9, 10].

Since 1999, nursing education has been implemented in accordance with the principles of the Bologna Process, which enables the creation of the European Higher Education Area (EHEA). This process aims to adapt education to European standards, making it easier for nurses to take up employment within European Union countries [11].

The basic requirements for professional nursing education in Poland are specified in the Act on the Professions of Nurses and Midwives and other legal acts specified by the Minister of Health and the Minister of Science and Higher Education after consulting the Supreme Council of Nurses and Midwives. These documents regulate the organization of the teaching process, requirements for the qualification of teaching staff, program content and learning outcomes, teaching base, including clinical education, and methods of verifying acquired competences [1, 4, 5, 12].

Nursing education is carried out in universities at the level of first-cycle and second-cycle studies.

First-cycle studies last at least 3 years (6 semesters) and include at least 4720 hours of classes and 180 points, of which 50% constitute clinical practice. According to the applicable standard, the nursing field is assigned as an educational discipline – of medical sciences or health sciences (as the leading discipline), decided by the university implementing the education discipline. The studies have a practical profile [1, 12].

The program of study includes six groups of classes (Preclinical sciences – 20 ECTS, Social sciences and humanities in nursing – 15 ECTS, Basic nursing sciences – 24 ECTS, Specialist care sciences – 34 ECTS, Practical classes – 41 ECTS, Professional practice – 46 ECTS, within which the student achieves detailed learning outcomes in terms of knowledge, skills and social competency. Each group of subjects is assigned a specific number of hours and ECTS points. The studies conclude with a diploma examination in the form of an Objective Structured Clinical Examination (OSCE), which includes both theoretical and practical components [12]. Practical classes are conducted by academic teachers with the right to practice as a nurse and at least two years of professional practice in the scope appropriate for the classes conducted. Professional practice is carried out under the supervision of a person with the right to practice as a nurse, who is an employee of an entity performing medical activities and performing professional tasks in the organizational unit of the entity in which the student is completing their professional practice, while the implementation of the professional practice is overseen by a supervisor from the university [12].

First-cycle studies may last fewer than 3 years – in the case of nurses who have a secondary school certificate and have graduated from a medical high school or a post-secondary school or a post-secondary school educating in the nursing profession; if after completing them, the nurse will obtain knowledge, qualifications, and skills corresponding to the knowledge, qualifications, and skills obtained after completing studies [1, 4].

Graduates of first-cycle studies may continue their education in second-cycle studies.

Second-cycle studies last at least 4 semesters. The number of class hours cannot be fewer than 1300 (including professional internships). The number of ECTS points required to complete second-cycle studies cannot be fewer than 120. The university providing the education has the competence to assign the nursing major to a leading scientific discipline – medical sciences or health sciences – as well as to define the profile of the major of study as general academic or practical [12].

The program of study includes four groups of classes (A. Social sciences and humanities – 19 ECTS, B. Advanced nursing practice – 40 ECTS. C. Scientific research and development of professional nursing practice – 15 ECTS and D. Professional internships – 10 ECTS). Additionally, the University offers at least 200 hours of classes (16 ECTS), which supplement the knowledge, skills, or social competence in groups A–C. The program of study provides the student with a choice of classes for at least 5% of the required ECTS points. The studies terminate with an examination consisting of the presentation of a research-based thesis diploma [12].

Nursing students acquire English language competence. In first-cycle studies, students acquire the ability to communicate in English at the B2 level, and in second-cycle studies at the B2+ level of the European System of Language Education [12].

First-cycle and second-cycle studies are conducted in full-time or part-time forms. The programs of both modes are identical, but the duration or part-time studies cannot be shorter than full-time studies, and the number of hours of professional classes must be the same [1].

Graduates of second-cycle studies in nursing have the opportunity to undertake doctoral studies (third cycle).

Supervision over the quality of nursing education in Poland is a key element of the education system, which aims to ensure a high level of professional competence of graduates and their readiness to practice the profession in accordance with national and European requirements. Various institutions, including academic authorities, government administration bodies and professional self-governance organizations, carry out this supervision.

3. Institutions supervising the quality of education

Ministry of Health – plays a primary role in supervising the nursing education system and developing legal regulations, norms, and standards that regulate nursing education. The Ministry cooperates with universities and the professional self-governance of nurses and midwives to monitor the quality of education [1].

Ministry of Science and Higher Education – is responsible for setting educational standards concerning the education of nurses and specifying requirements for the curriculum and teaching staff. These regulations are included in legal acts, such

as the Regulation of the Ministry of Science and Higher Education in educational standards for medical professions [1].

National Accreditation Council for Nursing and Midwifery Schools – plays a key role in assessing the quality of education. It is responsible for granting accreditation to nursing schools. The tasks of the National Council include:

- assessment of compliance of teaching programs with specified quality standards,
- visits to educational institutions and analysis of teaching results,
- applications to the Minister of Health for granting, withdrawing, or refusing accreditation [1].

4. The accreditation process and its importance

Accreditation of nursing schools is a formal assessment of the quality of the educational process. This process ends with issuing a certificate confirming that the School meets the requirements for the quality of education. Accreditation is granted for 3 to 5 years, which guarantees a high level of education and is also the basis for issuing professional certificates to graduates [1, 4].

The assessment of the quality of nursing education is based on several key mechanisms, including:

- visits and audits systematic inspections of universities by appropriate supervisory institutions, including visits aimed at assessing the quality of teaching and conditions of education;
- assessment of learning outcomes verification of competences acquired by the students, both in the form of theoretical and practical exams, including assessment of skills acquired during clinical internships;
- systems for assessing the quality of teaching universities maintain their own internal mechanisms for assessing the quality of lecturers' work, the quality of teaching programs, and adaptation to current labor market requirements [1].

District Chambers of Nurses and Midwives (DCNM) – maintain their own tasks in monitoring the implementation of vocational education at the local level. Their role includes supervising vocational training, organizing training and development courses, and supporting nurses in their professional development [1].

Supervision over the quality of nursing education in Poland is a complex process requiring cooperation between various government bodies, self-governance organizations, and universities. Thanks to this prearrangement, it is possible to create a system that ensures that nursing graduates are well prepared to work within the health care system in accordance with applicable standards and requirements.

5. The right to practice as a nurse

The right to practice the profession (PWZ) of a nurse in Poland is implemented and regulated by the **Act on the Professions of Nurse and Midwife**, which specify the formal requirements, competences, and principles that constitute the foundation of professional and ethical patient care. According to these regulations, candidates applying for the right to practice the profession of a nurse must meet certain criteria [1].

According to the Act, the right to practice the profession of a nurse is granted to a person who meets the following conditions:

- carries a certificate or diploma of completion of a Polish nursing school or an equivalent diploma obtained outside of the European Union, recognized by the authorities of the Republic of Poland, equivalent to a Polish diploma, meeting the requirements of the European Union,
- carries full legal capacity,
- enjoys good health, enabling the unimpeded performance of the profession,
- demonstrates impeccable ethical attitude.

In addition, the right to practise as a nurse is granted to a citizen of a European Union member state who holds a diploma, certificate or other document attesting formal qualification to practise as a nurse responsible for general care and meets the other conditions set out in the Act on the Profession of Nurse and Midwife [1].

The Act also specifies the requirements regarding the fluency of the Polish language, which are to be met by foreigners applying for the right to practice as a nurse in Poland. EU citizens must demonstrate appropriate language competency to take up employment in this profession in Poland [1].

The profession of a nurse covers a wide range of responsibilities, including:

- recognizing the patient's health condition,
- identifying nursing complications,
- planning and implementing nursing care,
- providing preventive, diagnostic, therapeutic, rehabilitation, and medical rescue care,
- carrying out medical orders,
- determining the type and scope of care and nursing services,
- conducting health education and health promotion,
- declaring death during a medical intervention.

The following are also considered to be part of the nursing profession:

- teaching the profession of nursing, professional development, and conducting scientific and research work in the field of nursing,
- managing teams of nurses and managing health care in healthcare institutions,
- administrative work related to organizing, supervising, or preparing health services in public and private institutions [1].

The district council of nurses and midwives appropriate to the facility establishes or grants the right to practice the profession. The specifics of a nurse competent for the place of work with the right to practice the profession are entered in a register kept by the district council of nurses and midwives. This data is collected and regularly updated [1, 2].

A nurse with the right to practice the profession may bear the title of "nurse". She/He is obliged to practice the profession with due diligence and in accordance with professional ethics, taking care of the patient's safety and professional confidentiality. In addition, a nurse enjoys the protection provided for public officials in the scope of performing professional activities [1].

Nurses are obliged to continue professional development, comply with the ethical principles contained in the Code of Professional Ethics of a Nurse and Midwife, and take care of the well-being of patients, which is the basis for assessing their professional conduct [1, 2].

Codex of Professional Ethics for Nurses and Midwives defines the ethical principles that nurses and midwives in Poland should follow in their daily professional work. This Code is a document that sets ethical standards for professional conduct and responsibility for the health and well-being of the patient. It also regulates professional relations within medical teams [1–3].

According to the guidelines of the Code of Ethics, a nurse is obliged to:

- respect for the patient's dignity by taking care of their privacy and individual needs,
- take responsibility for the quality of care by ensuring patient safety, compliance with medical standards, taking into account evidence-based practices,
- are obliged to maintain the confidentiality of information, except for cases required by law,
- equality in treatment regardless of age, gender, origin, or other characteristics,
- cooperation within an interdisciplinary team, acting with respect and responsibility towards other specialists,
- systematic professional development improvement of knowledge and skill,
- promotion of health and involvement in health protection initiatives [3].

6. Pediatric nursing

Pediatric nursing is a specialist field requiring thorough qualifications and proficient skills in providing medical services to patients ranging in age from neonatal to 18 years.

Nurses may begin working in pediatric wards after completing their first-cycle studies. In order to expand their specialist knowledge and skills in pediatric nursing, nurses have access to various forms of postgraduate education: specialist training,

qualification, and specialist courses conducted within a full-time or part-time enrollment [1, 6].

Specialization training in pediatric nursing is the longest form of postgraduate education. It lasts no fewer than 15 months and no longer than 20 months. Specialization is available to nurses who have the right to practice their profession, have worked in the profession for at least 2 years within the last 5 years, and have been admitted to the specialization program after conducting a qualification procedure via Medical Workers' Education Monitoring System (SMK).

As part of the training, the nurse acquires specialist knowledge and skills in care for newborns, children, and adolescents in hospital and outpatient settings, as well as legal aspects of pediatric nursing [1, 6].

Current legal regulations also take into consideration the specifics of education financing. The Ministry of Health, based on an annual basis, publishes a list of priority areas of specialization and the number of places that will be co-financed from the federal budget, which provides significant support for developing proficiency in pediatric nursing.

After completing specialist training, a nurse receives a specialist in pediatric nursing title, which authorizes the acquired competency, enabling her/him to independently plan, implement, and evaluate suitable care for pediatric patients [1, 6, 7, 8, 13].

As part of the **qualification course in pediatric nursing,** the nurse will expand their knowledge and skills in care for healthy and sick children and provide specific health services within the scope of pediatric nursing. The course can be started by a nurse who has the right to practice the profession, has at least 6 months of professional internship experience, and has been admitted to the qualification course after finalizing the qualification procedure through the SMK. The course lasts no longer than 6 months and ends with a theoretical exam, conducted in written or oral form or via a practical exam. After completing the course, the nurse receives a certificate confirming the acquired skills and knowledge, fostering the capacity to advance the quality of patient care [1, 6].

The specialist course allows one to deepen one's knowledge and skills to perform specific professional activities when providing patient care, preventive, diagnostic, therapeutic, or rehabilitation services in a selected area of pediatric nursing, for example, in caring for children with cancer or diabetes. The course lasts no longer than 3 months. It ends with a theoretical exam, which can be conducted in written or oral form or via a practical exam. Completion of the course is confirmed by issuing a certificate [1, 6].

The program of the specialist course **Care of a Child with Cancer** covers issues related to the epidemiology of cancer in children, early diagnosis, organization of oncological care, preventive measures, procedures related to chemotherapy and radiotherapy, and methodology of psychological support.

In turn, the program of the course Care for Children and Adolescents with Diabetes focuses on the specificity of the disease, education in self-control, pharmacological and non-pharmacological treatment methods, as well as psychological support for patients and their families.

Postgraduate training in pediatric nursing advances three main areas of competence concerning knowledge, skills and social fitness.

In terms of knowledge, the nurse acquires:

- specialist knowledge in the field of interpersonal communication processes in relation to the patient, family, and the terapeutic team,
- knowledge of epidemiology and the specifics of care management in the health care system,
- knowledge of current legal regulations and ethical standards concerning healthcare benefits in pediatric care [13].

In terms of skills, the nurse is able to:

- diagnose health complications and plan comprehensive child care, equally for the healthy and unwell,
- implement preventive, diagnostic, therapeutic, and rehabilitation procedures,
- monitor the patient's condition, interpret the results of diagnostic tests, and execute decisions concerning further actions [7, 8, 13].

In terms of social competence, the nurse develops interpersonal and organizational skills comprising:

- cooperation with the child, family, and the therapeutic team,
- delegating tasks, analyzing one's own competence, and fostering further professional development,
- maintaining high ethical standards and respecting the patient's dignity, regardless of their personal characteristics,
- utilizing IT systems and electronic medical records [1, 7, 8, 13].

7. Pediatric nurses' organizations and associations

There are many professional organizations in Poland that bring together nurses, including specialists in pediatric care. The most important of them are:

Polish Association of Pediatric Nurses, the aim of which is to conduct scientific activities in the field of pediatric nursing, support the improvement of professional qualifications, promote high standards of ethics and child care, cooperate with public and international institutions in order to promulgate novel methods of pediatric care [14].

Polish Nursing Association (PTP) is the first of the key scientific associations in Poland for nurses. The association aims to develop evidence-based practice, enhance education standards and cooperate nationally and internationally to improve the quality of health care. The association promotes integrating the Polish nursing community with global trends and practices by participating in international conferences,

symposia, and research projects. It is a member of international nursing organizations, including the International Council of Nurses (ICN), the European Federation of Nurses (EFN), and the World Health Organization (WHO). This cooperation grants Polish nurses access to global knowledge resources and healthcare methods [15].

Polish Association of Epidemiological Nurses (PSPE) – brings together nurses specializing in epidemiology, focusing on improving infection control standards in medical facilities, which is also carries value in pediatric care [16].

Polish Association of Oncological Nurses (PSPO) – brings together nurses working in oncology, supporting the development and improvement of oncological care for patients, including children with cancer [17].

Polish Association of Palliative Care Nurses – deals with improving the quality of care for patients in the terminal stages of diseases, including pediatrics, where both medical and emotional support is requisite [18].

Society of Surgical Nurses and Midwives – brings together specialists working in operating theatres, promoting the exchange of experiences and professional development, which also affects the quality of pediatric care in surgical circumstances [19].

Polish Society of Anesthesiology and Intensive Care Nurses focuses on developing competencies in anesthesiology and intensive care, which are also important in caring for children in critical conditions requiring support [20].

Polish Association of Psychiatric Nurses and Nurses is an organization addressing psychological support for patients, of particular importance in pediatric care, where assistance in dealing with emotions is paramount [21].

The activities of these organizations sustain not only the exchange of experiences but also initiate legislative changes, shape training, and establish conferences, which contribute to the development of the profession and elevate the standards of care for the youngest patients.

8. Supervision over the performance of the profession of a pediatric nurse

The supervision of the nursing profession in Poland, including pediatric nursing, is based on the provisions contained in the Act on the Profession of Nurse and Midwife, the Act on the Self-Government of Nurses and Midwives and the Act on Consultants in Health Care and other legislations [1, 2, 22].

These regulations constitute the foundation for the functioning of the supervisory system, which includes both professional self-governance and public institutions, including the Ministry of Health and national and provincial consultants.

The main institutions responsible for supervision over the performance of the nursing profession in Poland include.

8.1. Public institutions

The Ministry of Health (MZ) is responsible for creating and amending legal regulations concerning the practice of the nursing profession, including pediatric nurses, ensuring their compliance with international standards. It supervises the nursing education system and cooperates with universities and training organizations to ensure a high quality of education and professional development of nurses. It cooperates with the professional self-governance of nurses and midwives and coordinates activities at the central and regional levels in order to improve the Polish healthcare system [1, 23, 24].

National consultants are responsible for issuing opinions and initiating change in the health policy regarding nursing, including, among others, in the area of pediatric nursing. Their tasks also include substantive supervision of postgraduate education and specializations of nurses, including specializations in the field of pediatric nursing, ensuring compliance with substantive and legal requirements [22].

Provincial consultants supervise the quality of nursing care in a given province, supporting local institutions in ensuring high standards of nursing care, including in pediatric nursing. An important task of consultants is cooperating with self-governing and local authorities' medical facilities to systematize nursing care. Consultants are also responsible for structuring training and conferences for nurses in the region, ensuring the professional development of nurses, including in the area of pediatric nursing [22].

National Health Fund (NFZ) – performs tasks related to the financing of healthcare services, including nursing services, in accordance with applicable regulations. It monitors the quality and compliance of services with applicable standards, conducts inspections of medical facilities, and finances reimbursement for medical device expenditures. The National Health Fund supports the development of coordinated care and organizes preventive care services in which nurses play a noteworthy role. Cooperation with nurses and sustainable financing of their work is of vital importance for the healthcare system in Poland [24, 25].

State Sanitary Inspection (Sanepid) – monitors compliance with sanitary and epidemiological regulations in healthcare facilities.

8.2. Professional self-governance

The professional self-governance of nurses and midwives, in accordance with the Act on the Self-governance of Nurses and Midwives, represents individuals practicing the profession of nurse and midwife and supervises their activities in the well-being of the general public. It is independent in performing its tasks and operates according to applicable law. Membership in the self-governance is mandatory for all nurses and

midwives. Its organizational units with legal standing are the Supreme Chamber of Nurses and Midwives and the district Chambers of Nurses and Midwives [2].

The Supreme Council of Nurses and Midwives (NRPiP), among others, analyzes and gives opinions on the direction of the development of health care and prepares conclusions on ethical guidelines. It establishes professional standards and professional qualification standards applicable to individual positions and specifies the principles of performing the duty to advance professional knowledge and skills by nurses and midwives. Furthermore, it represents the nurse and midwife community at the national and international level, maintains the Central Register of Nurses and Midwives, and drafts opinions on legal acts concerning health care and the principles of organizing health care and the medical professions. It also works to improve working conditions, pay and the professional status of nurses [1, 2, 24].

The District Council of Nurses and Midwives (ORPiP) carries out the tasks of self-governance within the scope of its chamber, maintaining a register of nurses, including specialists in pediatric nursing. It supervises the profession's performance, considers grievances, conducts disciplinary proceedings, and monitors compliance with professional standards. It organizes training and courses to improve the competency of nurses. The District Council represents the nursing community before public authorities cooperate with the federal and local government administrations. It is authorized to inspect professional practices in order to assess their compliance with the regulations of medical activity [1, 2].

8.3. Nursing management staff

The management staff plays a key role in managing nursing care at the local level and supervising the quality of work of nursing teams.

The role of the nursing management staff revolves around the effective management of nursing teams in order to ensure high-quality care for patients, including children and adolescents. Head nurses and ward nurses coordinate the activities of nursing teams, including delegating tasks and ensuring an even distribution of tasks. They supervise compliance with nursing care standards and monitor the quality of care and its compliance with established medical guidelines and procedures. The management staff is responsible for the training and professional development of subordinate nursing staff and ensuring comprehensive care through close cooperation with other medical team members [24].

All of the above-mentioned institutions cooperate, developing comprehensive legal acts that specify, among other things, the scope of competences, document templates and procedures for the recognition of professional qualifications and in the context of pediatric nursing.

Pediatric nursing in Poland is a dynamically developing field that requires continuous progression of skills. Modern technologies, progress in medicine, and incre-

asing requirements for quality of care pressure nurses to constantly improve their knowledge. The development of this field is crucial for improving the quality of care for children, adolescents, and their families.

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Pediatric nursing in Portugal

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1. Nursing profession – education system, right to practice the profession (who issues it?)

The nursing profession in Portugal has undergone several changes, largely influenced by the evolution of nursing education. The first nursing courses in the country emerged in the late 19th century. These were practical courses conducted in hospitals in major cities such as Lisbon, Porto, and Coimbra [1].

The first officially structured nursing course was established at the University Hospital of Coimbra. It lasted two years and was supervised by physicians [1]. In the 20th century, the first Professional Nursing School was founded in Lisbon, followed by other nursing schools, most of which were managed by religious orders.

During the Estado Novo regime, which governed Portugal for 41 years, new requirements were introduced for nursing education. A minimum of nine years of schooling was mandated for entry into the program, and the General Nursing Course was extended to three years. Additionally, it was decided that only diploma holders could practice as nurses. At that time, female nurses working in hospitals were required to be single or widowed without children [2].

With the introduction of Decreto-Lei nº 36 219, 1947, reforms were made to address various challenges within the nursing profession. Since nursing was predominantly a female profession, men were permitted to work as nurses only in Psychiatry or Urology. In 1949, Decreto 37.418 led to the establishment of Portugal's first structured and organized Nursing Career framework [2].

Over the years, several reforms took place. In 1963, female nurses were allowed to marry, and in 1965, nursing education became independent of medicine. For the first time, nurse led nursing courses (Decreto 46:448). At this stage, nursing education was overseen by the Ministry of Health, and the curriculum aimed to prepare nurses for both hospital and public health roles. A balance between theoretical learning and practical training was maintained through internships. By 1973, new nursing schools were established in district capitals where none previously existed, except in Aveiro and Setúbal due to their proximity to Porto and Lisbon, respectively [2].

Political changes also impacted nursing education after the April 25th Revolution, which ended the Estado Novo dictatorship. 1976 the General Nursing Course was restructured to train nurses to integrate into the newly established National Health Service (SNS). By 1979, another change increased the minimum educational requirement for nursing students to eleven years of schooling [1]. In 1983, Post-Basic Nursing Schools were created in Lisbon, Porto, and Coimbra, offering specialized training for nurses with at least two years of professional experience [3].

In 1988 [4], nursing education was integrated into the Polytechnic Higher Education system. This led to shared oversight by the Ministry of Health and the Ministry of Education, and nursing programs began awarding the academic degree of Bachelor's. From this point forward, nursing schools were granted autonomy to develop their own curriculum, moving away from a standardized national syllabus. In 1999, the nursing degree was extended to four years, granting a Licentiate degree [1, 5]. Today, nursing specialization programs are offered by various nursing and health schools, aligning with the broader evolution of nursing education. These programs are classified as the second cycle of the Bologna Process, leading to a Master's degree. This continuous scientific, technical, ethical, and professional evolution has contributed to developing and certifying nursing in Portugal.

In April 1998, the Portuguese Nursing Association Order of Nurses ("Ordem dos Enfermeiros") was established as a public legal entity. The government delegated regulatory and supervisory authority over the nursing profession to this organization [6]. The Order of Nurses regulates the profession in Portugal and grants the titles of Nurse or Specialist Nurse. Newly graduated nurses must submit their diplomas to the association to obtain a professional license, a mandatory document for practicing in both the public and private sectors. This requirement also applies to Portuguese and foreign nurses who have completed their education abroad and wish to work in Portugal.

The first Master's degrees in Nursing Sciences were introduced in 1991 at the Portuguese Catholic University [1]. These programs gained greater significance and structure with the Bologna Process in 2006, which positioned the Master's degree as the primary route for specialization and advanced study. This shift reinforced nursing as a scientific and academic discipline, fostering research and development in the field. Today, Master's programs play a crucial role in research, specialization, and professional qualification for nurses in Portugal.

Beyond Master's and specialization programs, nurses can further advance their skills through Doctoral programs in Nursing. These programs contribute to the creation of new knowledge and foster innovation in healthcare, including pediatric nursing. The first doctoral programs in Nursing were launched in Portugal in 2005 at the Institute of Health Sciences, University of Lisbon.

2. Pediatric nursing

2.1. Qualifications (courses, specialized training)

In a professional context, pediatric nursing in Portugal requires specialized academic training to provide care for newborns, children, and adolescents. Nurses holding a Licenciate's Degree in Nursing are qualified to "(...) provide nursing care to human beings, whether healthy or ill, throughout the life cycle" [7]. This population scope includes the entire pediatric age range. It is important to clarify that the concept of pediatric age in the healthcare context in Portugal was initially established by an order from the Directorate-General of Hospitals on February 24, 1987, defining it as up to 14 years and 364 days for consultations, emergency care, and hospitalization [8]. This definition was later modified by Order in dispatch n°. 9871/2010, which extended the pediatric age range (up to 17 years and 364 days) for care in pediatric services (emergency services, outpatient consultations, day hospital, and hospitalization) within the National Health Service.

Obtaining a Licenciate's Degree in Nursing is, therefore, the minimum requirement for professionals to practice their profession in the fields of child and pediatric health in Portugal. During this first cycle of studies, students acquire essential theoretical and practical knowledge for providing general nursing care to children and families in the pediatric field. All Licenciate of Nursing programs offered by different higher education institutions include a variable number of hours/ECTs in child and pediatric health nursing.

Based on Benner's five levels of nursing competence, this framework can be applied to child and pediatric health nursing. A newly graduated nurse, or one without prior experience in pediatrics, is considered a novice, relying strictly on rules and guidelines. At the next stage, the advanced beginner begins to recognize recurring situations in pediatric care, but still requires supervision and support. The competent nurse, usually with two to three years of practice, is able to plan and prioritize care, demonstrating greater efficiency in managing pediatric cases. The proficient nurse develops a holistic view of the child and family, anticipating needs and responding with flexibility in more complex situations. At the highest level, the expert nurse in child and pediatric health nursing is one who has acquired expertise empirically and/or through continuous and specialized training grounded in scientific evidence [9]. While some nurses begin their professional careers directly in pediatrics with only their general educational foundation, others invest in specialized training before entering this area.

Since the emergence of different specialties, it has been possible to practice in the pediatric field with specific competencies in providing care to children and families in both health and illness contexts.

The Pediatric and Child Health Nursing Specialty (EEESIP) has changed over time, similar to the general or basic nursing course. In 1942, [10], the course for

Child Care Nurses was created as a predecessor to the Pediatric Nursing specialty. In 1983, one of the specialized courses created was the Child and Pediatric Health Nursing Specialization Course (CEESIP) [3].

Historically, in 1988, with Decree-Law 480/88 [4], specialized higher education courses in nursing (CESE) were created at various schools, some of which had curricula focused on pediatrics. These CESE courses were equivalent to a licenciate's degree for professional and academic purposes.

In 1999, Postgraduate Specialization Courses in Nursing were introduced in various fields and taught at accredited higher education institutions [5]. The General Regulation of Postgraduate Nursing Courses, approved in 2002 [11], was part of the evolution of nursing education and regulation in Portugal, in line with the reorganization of higher education and the modernization requirements of nursing. This regulation ensured a more structured specialized education, recognized by the Portuguese Nurses' Order and aligned with the European Higher Education Area. It brought greater uniformity, credibility and professional recognition than previous legislation.

Postgraduate specialization in nursing does not confer an academic degree but grants the professional title of specialist in a specific area [6].

According to general regulations, postgraduate specialization courses in child and pediatric health nursing include theoretical units and clinical internships in child and pediatric health units. This allows for developing the technical and scientific skills necessary to provide care to pediatric populations in hospital and community settings.

Currently, for career advancement in nursing with the title of specialist in child and pediatric health, a professional Master's degree is required [12].

2.2. Scope of tasks and competences of a pediatric nurse

As previously mentioned, in the second half of the 20th century, changes in the skills required of nurses led to modifications in academic and professional training. This has resulted in the development of an increasingly complex, specialized, and demanding professional practice.

Nurses today are considered a highly relevant professional and scientific community in the functioning of the Portuguese healthcare system. With the evolution of Portuguese society, expectations regarding nursing care have increased, requiring a high level of technical, scientific, and ethical qualifications to meet increasingly demanding health standards in professional practice. This applies to both hospital settings and health centers, whether public or private, as well as independent practice. Consequently, the need arose to regulate and oversee the professional practice of nurses, leading to the creation of the Order of Nurses and the approval of its Statut [6].

In their professional practice, nurses are required to demonstrate technical/scientific and ethical/moral competencies that enable a practice based on reflection, commitment, and responsibility [13]. In line with this perspective, which establishes the

Common Competencies of the Specialist Nurse, was introduced [14]. The specialties currently recognized by the Order of Nurses are listed in Table 1.

Table 1. Specialties recognized by the Portuguese Order of Nurses

Nurses specialities			
•	Community nursing		
•	Medical-surgical nursing		
•	Rehabilitation nursing		
•	Child and pediatric health nursing		
•	Maternal and obstetric health nursing		
•	Mental health and psychiatric nursing		

Source: Ordem dos Enfermeiros [15].

This regulation outlines both common and specific competencies assigned to nurses. The definitions are the following:

- a) Common competencies: "These are competencies shared by all specialist nurses, regardless of their specialty area. They are demonstrated through a high capacity for designing, managing, and supervising care, as well as through effective support for specialized professional practice in training, research, and consultancy".
- b) Specific competencies: "These competencies stem from human responses to life processes and health problems within the defined scope of each specialty. They are demonstrated through a high degree of care adaptation to people's health need [14].

As previously mentioned, specialist nurses, regardless of their area of specialization, share a set of common competencies, which are illustrated in Table 2.

Table 2. Common competencies of the specialist nurse

Common competencies			
•	Professional, ethical, and legal responsibility		
•	Continuous quality improvement		
•	Care management		
•	Development of professional learning		

Source: [14].

A specialist nurse is a nurse qualified with a specialization course in nursing or a course of advanced specialized studies in nursing. They are awarded a professional title recognizing their scientific, technical, and human competence to provide, in addition to general nursing care, specialized nursing care in their area of expertise. The Order of Nurses, as already mentioned, is the regulatory body for the nursing profession in Portugal. Within the Order of Nurses, there are also Specialty Colleges. The College of Child and Pediatric Health Nursing is responsible for establishing the essential competencies for specialization in pediatrics, certifying specialist nurses, and defining standards and best practices for newborn and child/adolescent care. Additionally, the Order of Nurses plays an active role in organizing congresses, publishing guidelines, and supporting research in pediatric nursing [16].

The Child and Pediatric Health Specialist Nurse (EEESIP) provides specialized care in partnership with the child and family, adopting a conceptual model centered on this binomial. This specialty intervenes in the age range from birth to 18 years, and in special cases, such as chronic illnesses, disabilities, or impairments, its role in caring for the child and family may extend to 21 or 25 years, ensuring a well-considered and successful transition to adulthood. The scope of the EEESIP's practice includes complex areas and acquiring knowledge and skills to anticipate and respond to emergencies. This specialist also has competencies to assess families and respond to their needs, particularly in adapting to health changes and family dynamics, by implementing anticipatory care to prevent illness and promote child health [17].

As previously mentioned, the EEESIP competency profile integrates, in addition to common competencies, a set of specialized clinical competencies that serve to regulate certification and inform citizens about what to expect from EEESIP. Table 3 presents the specific competencies of the EEESIP, their descriptions, competency units, and evaluation criteria.

Table 3. Specific competencies of the EEESIP

Competency 1: Assisting the child/youth and family in maximizing health

Descriptive: Considering the child's natural dependency, their progressive autonomy, and the child/family dynamic as the focus of EESIP care, a caregiving partnership is established with both. This partnership aims to promote health optimization by ensuring appropriate care routines and parenting management.

Competency units:

- 1. Develops and manages, in partnership, a health plan that promotes parenting, the ability to manage care routines and the social reintegration of the child/youth.
- 2. Early diagnoses and intervenes in common illnesses and risk situations that may negatively impact the life or quality of life of the child/youth.

Competency: 2. Caring for the child/youth and family in situations of special complexity

Description: Effectively mobilizes resources to care for the child/youth and family in particularly demanding situations arising from their complexity, utilizing a broad spectrum of approaches and therapies.

Competency units:

- 1. Identifies vital function instability and life-threatening risks, providing appropriate nursing care.
- 2. Manages pain and well-being in a differentiated manner, optimizing responses for the child/youth.
- 3. Provides appropriate nursing care for rare diseases.
- 4. Delivers care that enhances health outcomes by utilizing a variety of common and complementary nursing therapies strongly supported by evidence.
- 5. Supports the adaptation of the child/youth and family to chronic illness, oncological disease, disability, or impairment.

Competency: 3. Providing specific care in response to the child and youth's life cycle and developmental needs

Description: Considering the developmental specificities and demands of each stage within this life cycle phase, effectively responds by promoting the maximization of developmental potential from early attachment to youth.

Competency units:

- 1. Promotes child growth and development.
- Systematically fosters attachment, particularly in the case of sick or special-needs newborns.
- 3. Communicates appropriately with the child and family, considering developmental stage and cultural background.
- 4. Encourages adolescent self-esteem and self-determination in health-related choice.

Source: Adapted from Regulamento n. o 422/2018 [17].

The corresponding competency units and evaluation criteria are designated for each specific competency to ensure a structured and objective assessment process.

Each competency unit defines a specific area of expertise or action within the broader competency, while the evaluation criteria establish measurable indicators to assess the effectiveness and quality of the professional's performance in that unit.

Example of Competency Assessment - Competency No. 1

To avoid overly exhaustive reading, the evaluation criteria for each competency unit are designated alongside the specific competencies. As an example, for *Competency No. I – Assisting the child/youth and family in maximizing their health*, we present the evaluation of the competency unit:

"Develops and manages, in partnership, a health plan that promotes parenting, the ability to manage care routines, and the social reintegration of the child/youth".

The evaluation criteria are as follows:

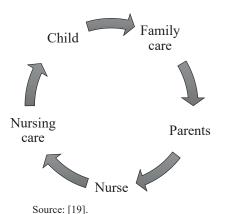
- a) Negotiates the active participation of the child/youth and family throughout the caregiving process, fostering independence and overall well-being.
- b) Communicates with the child/youth and family using age-appropriate, developmentally suitable, and culturally sensitive techniques.

- c) Employs motivational strategies to encourage the child/youth and family to take on their roles in health management.
- d) Provides knowledge and facilitates the learning of specialized and individualized skills, empowering children/youth and families to develop competencies for managing specific health and illness processes.
- e) Actively seeks opportunities to work with the family and child/youth to encourage health-promoting behaviors.
- f) Assesses and utilizes existing information regarding the structure and context of the family system.
- g) Establishes and maintains networks of community resources to support children/youth and families requiring care.
- h) Participates in school health programs.
- i) Supports the inclusion of children and youth with health and special educational needs.
- j) Collaborates with community stakeholders to improve access to healthcare services for children/youth [17].

Over the years, specialist nurses have continued their work with dedication, striving to achieve the best outcomes in their ability to observe, analyze, and determine the most appropriate options to meet the needs of children and families.

In this context, it is essential to highlight the nursing process as a fundamental working tool for nurses. This process relies on the International Classification for Nursing Practice (ICNP), a standardized language developed by the International Council of Nurses (ICN), which aims to unify concepts, categorize nursing diagnoses, outcomes, interventions, and establish a common terminology for nurses worldwide.

Figure 1. Partnership model of care (adapted from Anne Casey [19])



Child – May need assistance in meeting growth and development needs.

Family care – Provided by nurses in the absence or incapacity of the family.

Parents – Provide family care to help meet the child's needs.

Nurse – Provides additional care related to health needs.

Nursing care – May be provided by the child or family with guidance and support.

Anne Casey's Partnership Model of Care is often referenced in relation to EEESIP competencies. This model advocates for the active involvement of parents

in providing care to the child, considering them as partners. Its main concepts include child, family, nurse, health, and environment [18]. In this model, nurses provide care that includes the family, recognizing that family support is essential during illness and hospitalization. Nurses empower families by developing parental skills to meet the child's needs. Empowering caregivers provides knowledge that increases parents' confidence in caring for their sick child, giving them a sense of control over their lives [19, 20]. The schematic explanation of the Partnership Model of Care is presented in Figure 1.

Still, within this context, EEESIP provides care for children and families based on family-centered care, which is founded on the principle that the family is an integral part of the care team. In this approach, the family acts as a partner in the care provided to the child [18].

A specialist is someone with specialized knowledge, someone dedicated to a particular field of science, or an expert. Therefore, an EEESIP must first reflect on the essence of the science they study. Since nursing is fundamentally about "caring", it is crucial to reflect on "caring for the child and family". This involves a partnership between nurses, children, parents, and/or families, aiming at disease prevention, health promotion, and maintenance, and, above all, the adaptation of the child/family to various life conditions, whether physiological or pathological. The EEESIP is a professional qualified not only through experience but also through education and practice. They are prepared to explain, interpret, and disseminate new knowledge or information regarding children and families, always based on the best scientific evidence to ensure the safety and quality of nursing care provided to this binomial.

2.3. Organizations, associations of pediatric nurses

The pediatric nursing associations in Portugal play a crucial role in this specialty's research, education and evolution. These organizations support and encourage nurses specializing in pediatrics to develop skills that promote excellence and high-quality care for the pediatric population. Collaboration between these organizations and healthcare institutions is vital for advancing pediatric nursing in the country, aligning with national practices and international standards.

In Portugal, there are two associations focused on this area:

1. Associação Portuguesa de Enfermagem Pediátrica e Neonatal (APEPEN), established in August 2012 in Covilhã, is composed primarily of nurses with experience or contact in Pediatrics and Neonatology. It is an association dedicated to the qualification and development of pediatric and neonatal care nursing.

The association aims to promote the excellence of nursing care across different levels of care and areas related to Pediatrics and Neonatology. It also serves as a platform to disseminate, standardize, and encourage the development of nursing practices in Pediatric and Neonatal Units.

The association's objectives are: a) To foster the development of Pediatric and Neonatal Nursing; b) To engage in activities that promote and improve care for children and families; c) To support and contribute to enhancing the quality of life of the Pediatric and Neonatal population; d) To encourage continuous education in Pediatrics and Neonatology through meetings and events; e) To collaborate in the development, implementation, and planning of National and International policies; f) To make the knowledge exchange among nurses in the Pediatric and Neonatal fields easier; g) To promote research in Pediatric and Neonatal Nursing [21].

2. Associação de Promoção e Apoio ao desenvolvimento da Enfermagem Pediátrica (APADEP) was established in May 2017 following the initiative of a group of nurses from the Pediatric Hospital of Coimbra.

The foundation of APADEP was driven by these nurses' recognition that it is possible to enhance support, experiences, and specialized knowledge in Pediatric Nursing through regular, joint, and systematic work that supports defined objectives and strengthens social, cultural, and professional aspects.

In the field of Child Health, APADEP aims to:

- support and promote scientific studies,
- collaborate in planning and implementing projects that contribute to the development of healthcare for children, youth, and families,
- support and develop training for healthcare professionals,
- promote social support activities for children and families,
- create informational spaces within child and youth health to promote health literacy [22].

2.4. Pediatric nursing supervision

In Portugal, Clinical Supervision in nursing is defined as "a dynamic, systematic, interpersonal, and formal process between the clinical supervisor and the supervisee, aimed at structuring learning, building knowledge, and developing professional, analytical and reflective competencies. This process seeks to promote autonomous decision-making while emphasizing the protection of the individual, safety, and the quality of care" (Article 2, paragraph g) [23].

The clinical supervisor is the "nurse responsible for the supervision process who possesses concrete knowledge and systematic thinking in the Nursing and Clinical Supervision field, with demonstrated competence and experience in professional practice within this area. In a supervisory relationship, they promote personal and professional development. They practice professionally, ethically and legally, adhering to legal standards, ethical principles and professional ethics, ensuring a dynamic, interpersonal and formal support process with the supervisee, fostering competency development and guaranteeing a safe socio-professional transition and the quality of care" (Article 2, paragraph e) [23].

The Order of Nurses, as the regulatory body, is responsible for overseeing professional practice and establishing specific norms and guidelines for both general nursing and specialties, including Pediatric and Child Health Nursing. "Its purpose is to regulate and supervise access to the nursing profession and its practice, approve, according to the law, the respective technical and ethical standards, ensure compliance with the legal and regulatory norms of the profession, and exercise disciplinary power over its members" (Article 3, paragraph 2) [6].

In Portugal, healthcare institutions, in order to maintain the quality and safety of care provided to patients, undergo accreditation processes by external entities such as the King's Fund Health Quality Service and the Joint Commission International. There are also guidelines issued by national bodies aimed at the continuous improvement of care, such as the Health Regulatory Entity (ERS), the Central Administration of the Health System (ACSS), and the Directorate-General of Health (DGS).

Audits and accreditation processes in healthcare institutions are essential tools in supervising nursing practice. In this context, pediatric units are ensured to align with international quality standards.

Nurses' academic education is supervised by higher education institutions, which operate under the regulation of the Agency for the Evaluation and Accreditation of Higher Education (A3ES). This supervision ensures that academic programs meet the curricular standards required for the specialty [24].

According to the recommendations of the Order of Nurses, the guidance and supervision of students should be carried out by professionals who possess at least the same level of education/specialty that the student aims to achieve during their academic journey [25].

The supervision of pediatric nursing in already trained professionals also involves quality initiatives and continuous improvement, with performance monitoring and evaluation programs, such as the Integrated Performance Management and Evaluation System in Public Administration (SIADAP) [26].

In Portugal, a supervisor role does not require a specific academic qualification beyond basic nursing education. However, training pathways are available to deepen skills in this area, such as postgraduate courses and master's degrees in clinical supervision, as well as the possibility of developing additional competencies recognized by the Order of Nurses (OE).

According to the Ordem dos Enfermeiros, the recognition of the inclusion of Clinical Supervision (SC) in nursing within clinical practice settings, as well as its key role in the professional and personal development of nurses during formative processes or integration into professional life, aiming for excellence and safety in care, was highlighted in the Professional Development Model [27].

The Regulation on Differentiated and Advanced Competence in Clinical Supervision [23] emphasizes the importance of clinical supervision in the practice of the profession, the quality of care, and its regulation.

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Pediatric nursing in Sweden

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1. Education system: undergraduate program

1.1. Qualifying for the nursing program

Nursing is one of Sweden's most vital healthcare professions [1]. It complies with the International Code of Nursing (ICN), whose main purpose is to guide nurses in giving care and ethically supporting patients of all ages with various care needs [2]. In Sweden, Universities and colleges are directly accountable to the central government. The Office of the Chancellor of the Universities and Colleges provides the government with information needed for future higher education planning [3]. The Swedish Higher Education Authority is an autonomous government agency whose responsibilities include legal oversight, managing statistics, and ensuring the quality of higher education and research. The operations are governed by directives from the Government, which outline the areas of responsibility and the tasks that are expected to be carried out [4].

To become a registered nurse, a student must complete a study program of three academic years. The three-year nursing program leads to a Degree of Bachelor of Science in Nursing. To be eligible for acceptance at a nursing program, basic and specific qualifications are required [5]. Basic qualifications for entry include a high school or a vocational degree in Swedish level 2 or 3 and English level 6 the latter with a minimum grade of E. Another alternative is to have an International Baccalaureate (IB) exam. If specific courses are not included in the high school diploma, students may take complementary courses at a municipal adult education center (komvux) or folk high school [6]. Prerequisites for acceptance in the nursing program are: a. Swedish language at levels 2 & 3, which are equivalent to level C1 according to the Common European Framework of Reference for Languages (GERS); b. English language (level 6 or C1), c. Mathematics (level 2a, 2b or 2c), Science (naturvetenskap, level 2), and Social Studies (level 1b or 1a1+1a2) [5]. If students from abroad want to study nursing in Sweden, they initially send their high school degree to the Swedish Council for Higher Education (*Universitets- och Högskolerådet*, UHR) for evaluation and recognition of foreign requirements, free of charge. If the students are missing prerequisites, they are able to take supplementary courses [6]. However,

several specific qualifications may be needed at each University, and this information is provided on each faculty's website. Some Universities have open spots for both high school diploma students along with students who take a national high school examination called The Swedish Scholastic Aptitude Test (SweSAT, *högskoleprov*), which covers mathematics and verbal knowledge. However, in every case, the applicants must meet the prerequisites [7].

An application to a nursing program is submitted through the website *antagning.se*, which is held in Swedish. This website is for programs held in Swedish, and the website is for English programs at *universityadmissions.se*. The application period is open one semester before the program starts. Some Universities may even require written examinations in Natural Sciences, Swedish or English language, and Logical Thinking. Most of the programs are campus-based with some lectures held digitally but there are a few distance-based programs with obligatory presence in courses [8].

1.2. Educational content of the nursing program

All nursing programs in Sweden include theoretical studies, practical sessions, and clinical practice in various healthcare settings. Each course is assigned a specific number of credits based on the European Credit Transfer and Accumulation System (ECTS). These programs are aligned with European Union (EU) directives that facilitate free movement for working in other member countries. They include established requirements for theoretical courses, practical sessions, and clinical practice [9]. If the nursing program is completed abroad, it may be necessary to take a complementary program [10]. The conditions for theoretical and clinical practice are stated as follows:

"The training of nurses responsible for general care shall comprise a total of at least three years of study, which may, in addition, be expressed with the equivalent ECTS credits and shall consist of at least 4 600 hours of theoretical and clinical training, the duration of the theoretical training representing at least one third and the duration of the clinical training at least one half of the minimum duration of the training". Member States may grant partial exemptions to professionals who have received part of their training on courses which are of at least an equivalent level (European Union, 2013) [11].

An example of the courses per year with credits is presented in Table 1. Most of the courses are nurse-oriented, and some are medical-oriented. Several are chain courses, so the prior courses must be completed before continuing to the next level.

There are a total of 34 Universities with Nursing programs in Sweden [12]. The nursing profession is developing endlessly. Nurses continue acquiring knowledge through courses, seminars, and conferences after graduation. This is according to how Universities adapt their academic content depending on society's needs [13].

Table 1. Example of nursing program courses in Sweden

Courses	ECTS Credits*
Year 1	
Introduction to nursing profession	7,5
Anatomy and physiology I	7,5
Nursing theory and practice I	7,5
Introduction to scientific research methods	7,5
Anatomy and physiology II	7.5
Clinical skills in caring and learning	7,5
Professional caring: person-centered and safe care	7,5
Humans' diseases I	7,5
Year 2	
Humans' diseases II	7,5
Global and sustainable health	7,5
Humans' diseases III	7,5
Nursing theory and practice	7,5
Emergency nursing care	7,5
Mental health: sustainable and person-centered care	7,5
Professional care: evidence-based care and informatics	7,5
Health promotion	7,5
Year 3	
Nursing for complex needs	7,5
Research methodology for data collection and analysis – planning of thesis	7,5
Independent thesis composition	15
Leadership in nursing	7,5
Professional care: teamwork and management	22,5

^{*1,5} credits = 1 week.

Adapted from: Linnaeus University (2025) [5].

2. Nursing practice license: having the right to practice the profession

After completing the nursing program and attaining the degree, all graduates must apply for a license to practice nursing at the Swedish National Board of Health and Welfare (*Socialstyrelsen*). The Board is the designated authority under Europe-

an Community Directives for the mutual recognition of diplomas and certificates relating to the health professions. Furthermore, it ensures that nurses work according to national healthcare standards and regulations, including meeting the required qualifications and maintaining their license to practice, as well as taking action for malpractice incidents. The board even conducts audits and oversees healthcare organizations to ensure safe and effective practices [14].

The nursing profession is considered "protected"; only those with a legitimate practice license may be called registered nurses. Apart from the application, other criteria must be filled in, such as a clear criminal record and adequate Swedish, Danish, or Norwegian language skills (applies even for residents in Sweden, Denmark, Norway, and Finland). Furthermore, an eligible passport or a national identification card is required. A name change document is needed if the name has been changed after completing education (for example, a marriage certificate). Information registration for persons who have applied for and received a license is obligatory. However, as a registered member of the Health Care Professional Registry (*Hälsooch sjukvårdspersonal*, HOSP), several rights are secured when personal data is processed. The last step in all cases is submitting the application along with the receipt of the payed fee [15]. Applicants must be in possession of a Swedish registration or coordination number (*personnummer* or *samordningsnummer*; respectively) to submit the application [16].

Licenses are granted, and no renewal is necessary. In cases of malpractice, the National Board of Health and Welfare has the right to withdraw a license after a decision by the Medical Responsibility Board [14].

2.1. Nurses with a degree from countries within the European Union (EU) or European Economic Area (EEA)

If the applicant does not possess a Swedish registration or coordination number at the time of application submission, The Swedish National Board of Health and Welfare will request the Swedish Tax Agency (*Skatteverket*) to issue one [15]. Once the number is issued, the Swedish Tax Agency will call the applicant for identity confirmation at a service office in Sweden or a passport authority office abroad if the applicant resides in another country. Applicants may apply for a registration or coordination number before applying for a license to practice [16].

When applying for the license, all nurses must indicate where they attained their degree, and the options are in Sweden, within the EU or EEA, out of the EU or EEA, or have attained the degree in a non-European country but have worked in a European country for a minimum of 3 years. The applicant must choose a European country if the degree is attained in the United Kingdom by December 31st, 2020. If, after that date, the choice is" non-European Country" [15]. The participants also need to send

copies and translations of the nursing degree attained in their homeland and a current Certificate of Good Standing or Certificate of Current Professional Status, which is not older than three months, as well as a certificate that the nursing program which was completed fulfills one of the following articles in the EU-directive 2005/36/EG: 23, 31, 33, 33a. If the respective authority in the applicant's country is not able to issue any of the above certificates, copies of a certificate of education according to Article 11 of EU Directive 2005/36/EC may be submitted along with documents from the faculty where the degree was attained, describing the courses and their duration [17]. The time from application to receiving the license is approximately 6 weeks.

2.2. Nurses with a degree from non-European countries or non-European Economic Area (EEA)

There are different ways to attain a license to practice nursing in Sweden if the degree is gained in non-European countries. To be able to study and work in Sweden, a residence or work permit from the Swedish Migration Agency (*Migrationsver-ket*) is necessary [18]. In addition, there are five steps in the application process: 1. Education review/assessment. 2. Completion of a knowledge test. 3. Completion of a course about Swedish regulations. 4. Completion of clinical service and 5. Payment and submission of the fee receipt and application. The license received has no expiration date but may be withdrawn in the event of unsuitability, gross incompetence, or serious crime [19].

If the applicants do not have a completed education or are not comparable to Swedish education, they may take complementary courses to get a Swedish degree and then apply for a license for the nursing profession. Information on how to apply and what is required to be admitted to various courses can be found on the websites *antagning.se* and *studera.nu*. The University or college where the applicant is admitted may assess whether study time is shortened with previously completed courses [19].

Swedish language skills are not required for the first step of the process but are mandatory for steps 2–5 of the application process. A certificate of the language degree or certificate is sent at step 5, at the latest. In the meantime, the applicants can work as healthcare professionals that do not require a license, such as dental nurses or pharmacy technicians. Getting a license can take various time periods, usually 2–4 years from the time the education is reviewed until license approval [19].

Complementary education

Swedish language skills are necessary to work as a nurse in Sweden. To show the adequacy of the language skills, a certificate or passing grade is necessary in Swedish level 3, Swedish as a second language level 3 (*Komvux*), Swedish level C1 (GERS) or a national high school examination, making the participant eligible for university studies. Norwegian or Danish at the respective levels is also acceptable,

and a copy of a certificate or degree is required to be submitted. A final way to prove language adequacy is through a caregiver/professional who may assess the applicant's written and oral communication skills in Swedish and must fill in a form where the assessment process is described [19].

3. Pediatric nursing

3.1. History of pediatric nursing

Pediatric nursing in Sweden has evolved over time, focusing on improving children's healthcare under a family-centered care perspective. In the 18th century, Sweden introduced preventative care and consultations for families, while the 20th century saw the first establishment of health centers, offering advice on childcare and vaccinations while significantly reducing child mortality. By the 1930s, financial support for families and the construction of hospitals where parents could stay with their children helped address the trauma of separation. Today, pediatric nursing includes primary care, specialized services like palliative, intensive, and neonatal care, along with digital health services and family support [20].

Sweden's entire healthcare system has evolved through reforms [21]. In recent years, Swedish healthcare reforms, initiated mainly by local authorities, have focused on topics such as improving primary care and restructuring the hospital sector. National reforms have aimed at enhancing patient benefits, ensuring regional equality, and addressing issues like waiting periods, primary and psychiatric care, and coordination of services [22]. The above reforms have developed pediatric nursing as well. An important step in pediatric nursing expansion was the foundation of The Swedish Pediatric Nursing Association (*Riksförening för barnsjuksköterskor*) in 1975, which until today advocates for pediatric nurses and offers a platform for collaboration, with consideration to professional development [23].

3.2. Qualifying for a pediatric nurse: courses and specialized training

3.2.1. Qualifications

Pediatric nursing is presently a well-established specialty, and nurses receive specialized training through university programs and master's courses that include a family-centered care approach, actively involving the family in decision-making processes.

The responsibility for continuous professional education for all employed nurses falls not only upon themselves but also on the employer [24]. After obtaining a nurs-

ing degree and a professional license in addition to having worked for a period of at least 1 year as a registered nurse, the nurse may apply for post-graduate education in any of the 12 recognized specialist areas (e.g., pediatric care, midwifery, intensive care, district nurse within primary care, etc.) [25]. To qualify and work with pediatric patients as a specialist nurse specifically, the nurses must complete a specialist nurse program of 1–2 academic years (60–75 credits) depending on how intensive the program is, and that leads to a Postgraduate Diploma in Specialist Nursing-Pediatric Care or Primary Health Care respectively [26, 27].

3.2.2. Pediatric nursing programs. General information

The specialist nursing programs typically consist of seven courses, and during these, students acquire knowledge and demonstrate an understanding of concepts, models, and theories in health sciences. At this level, knowledge is deepened, critical thinking is prompted, and skills and abilities are profoundly trained. The pediatric nursing programs offer expanded knowledge to be able to care for pediatric patients in various settings to prevent illnesses and promote well-being. The students will also be able to administer clinical practice by using evidence-based knowledge to connect learned theories and models to the specialist nurse's core competencies: person-centered care, team collaboration, evidence-based care, quality development, safe care, and informatics. Moreover, the students learn to use knowledge according to each situation in both simpler and more complex cases. Furthermore, research methodology courses are held for students to attain profound knowledge of how research is produced, both theoretically and from the idea conception to thesis composition [26].

During training, students learn and increase their empathy through reflection (from knowing "that" to knowing "how"). All components of the program give the opportunity to apply core competencies described above in health care for children and adolescents while always compliant with the United Nations Convention on Human Rights and the physical, mental, and social development of children and adolescents. In addition, students practice supporting children who are in danger and have mental health problems [26].

The studies, depending on the University, are mostly conducted in the form of modified distance learning. The teaching methods mainly consist of seminars, lectures, clinical placement, and thesis supervision. Teaching is primarily conducted in Swedish, but teaching in English occasionally occurs [26].

Compulsory courses (1–60 credits)

An example of courses provided in a pediatric nursing program is presented in Table 2. The courses are planned to cover advanced knowledge of health care for children of all ages, health promotion, disease prevention, and vaccinations. Other

aspects relevant to these courses are inter-professional and inter-sectoral collaboration, as well as current laws and regulations while considering both a diversity perspective and ethical issues. It also introduces developing the skills needed to utilize research findings and thereafter implementing methods to develop the profession. Among the above, students learn about leading, organizing, administering, and developing sustainable care from healthcare science and administration perspectives. The degree project course is an independent one, and prerequisites are a Nursing Bachelor Degree of 180 credits, with a thesis in the undergraduate program being complete (15 credits) and a license to practice nursing issued by the National Board of Health and Welfare [26, 27]. When the course is completed, the students are invited to publish their theses in an academic platform called "DiVA" portal [28].

Table 2. Courses of a pediatric nursing program

Course	ECTS credits	
Specialist nursing and public health work	5	
Family health care with specialization in child and student health care	12,5 (theoretical studies + practical training)	
Medical science with specialization in pediatrics	7,5	
Pediatric nursing in clinical practice	7,5 (theoretical studies + practical training)	
Elective course in scientific methodology	7,5	
Leadership and improvement	5	
Degree project with specialization in health care for children and adolescents	15	

Adapted from: Borås University [26].

3.2.3. After the completion of the Pediatric Nursing Program

After completing the education by corresponding to the curriculum requirements, the students obtain the degree title "Postgraduate Diploma in Specialist Nursing – Pediatric Care" upon application to the University. They then have the option to continue for a master's degree within the main field of Health and Caring Science, which lasts 1 year (60 credits), and after completion, they attain the degree title "Degree of Master of Science with a major in Caring Science". The degree certificates are bilingual (Swedish/English) and are accompanied by a Diploma Supplement in English. Degrees are issued after application in a specific digital platform for students (*Ladok*). Students who have completed the program and fulfilled the course requirements of 60 credits are eligible to apply for doctoral studies [26]. In health sciences/nursing, although a master's degree in Health and Caring Sciences

is not a prerequisite for doctoral studies, it is both merited and eases the transition to a more advanced academic level of education.

Students in Sweden have a powerful influence on the courses and are requested to fill in course evaluations in relation to the objectives of the program. The results of the evaluations are reviewed by subject from both course coordinators and program managers, and course reports are published. Students are also invited to complete an evaluation of the entire program at the end of the last semester of the program. Students have the right to elect a fellow student to represent them in the preparatory and decision-making bodies of the Academy [26].

3.2.4. Attaining a license to practice

To practice Pediatric Nursing, an application must be submitted to the National Board of Health and Welfare with a copy of the pediatric nursing degree. If applicants have received their Nursing degree and Specialist Nursing degree abroad, it is accepted to submit applications for both nurse and specialist nurse simultaneously and attach a bank statement of the payments of two separate fees. Otherwise, the process of receiving a nursing license must proceed before applying for a specialist nurse position (for more information, please read subsection 2). Other documents needed are a copy of a certificate showing the level of education according to Article 11 of the EU Directive 2005/36/EC and a copy of supplement documents from the University describing the courses in the program. All the above-submitted documents must be translated into Swedish or English [17].

3.3. Scope of tasks and competencies of a pediatric nurse

Pediatric nurses' main duties are observing and assessing the child's health status at the first meeting, continuously administering medications, and performing nursing procedures. Pediatric nurses collaborate interprofessionally to ensure that the child is assessed and cared for holistically, delivering excellent care, including health promotion, preventative measures, and vaccinations until they reach adulthood. Pediatric nurses perform other important tasks: supporting, caring, and guiding parents and guardians about the child's health, development, and well-being [29].

The skills required for a pediatric nurse to care for children of all ages and their families are to show empathy for them and their families and exhibit strong oral and written communication skills alongside strong teamwork skills, both inter- and intraprofessionally. In addition, pediatric nurses should exhibit stress tolerance and administration of efficient care in emergency situations, good knowledge of children's development besides childhood diseases, and pedagogical skills to be able

to inform and educate parents and children, adjusting the process to their level of understanding [30].

Pediatric nurses work in numerous placements where children and adolescents are located. The most common workplaces include:

- pediatric wards,
- specialised children's wards (e.g., Pediatric Intensive Care Unit (PICU), pediatric cancer ward, pediatric cardiology unit etc.),
- neonatal wards,
- pediatric clinics,
- schools,
- health centers and
- private pediatric surgery clinics [31].

The pediatric nurse's specialty combines theoretical knowledge and practical skills with expertise in ethics, sustainable development, Swedish laws and regulations, medical technology, pedagogy, and scientific methodology. The pediatric nursing programs cover a wide range of knowledge in these areas. After completing the program, pediatric nurses independently provide care in primary, general, and specialized child and adolescent care settings, prioritizing interventions in complex and advanced nursing situations [26].

Pediatric nurses are equipped to advocate for children's and adolescents' rights to receive care in child-friendly environments, share relevant knowledge about work environments, pursue lifelong education, promote research, and support professional development. They also work in accordance with the Convention on the Rights of the Child, strengthen collaboration with Nordic and European countries, and contribute to the broader nursing community by focusing on the well-being of children and their families [29].

Graduate pediatric nurses can work evidence-based, integrating the latest research with practical experience. They demonstrate broad knowledge of the nursing process, observing and assessing the needs of children and families, making diagnoses, planning, implementing interventions, and evaluating outcomes while tailoring care to the unique needs of each child or adolescent and their family. Additionally, they coordinate care with other specialties and manage complex situations, providing holistic, family-centered care. They also implement preventative measures and promote healthy lifestyle choices for children of all ages. Pediatric nurses exhibit advanced pedagogical skills when interacting with children and families at follow-up checks. Furthermore, they are competent in performing various examinations and treatments, ranging from inserting intravenous peripheral catheters to providing advanced treatments and end-of-life care [26].

To earn a Postgraduate Diploma as a Specialist Nurse in pediatric care, students must demonstrate empathy toward children and families, accurately assess each child's situation, and choose appropriate interventions based on scientific, social, and

ethical considerations with a holistic perspective, particularly regarding human rights. Students reflect on their knowledge and pursue continuous learning to enhance their career competence. They must also show the ability to independently assess, plan, implement, and evaluate care to promote children's physical, mental, and social health while preventing illness and complications. Additionally, they demonstrate the capability to recognize and address complex care needs at different developmental stages, as well as perform health examinations and vaccinations, and provide accurate information to support decision-making for children and their families [26].

If pediatric nurses wish to continue their education after their specialty, they may apply for a Master's program, where they are offered the opportunity to focus more on research development by understanding, critically reviewing, and discussing ethical aspects of science. The Master's program lasts for one or two academic years, depending on how intensive the program is, gives 60 credits, and is achieved after the student has developed the ability to understand, critically review, and act on issues relating to research, ethics and quality assurance in the health field on a scientific basis [32].

In order to successfully complete the Master's program, the students must demonstrate the following concerning knowledge and comprehension: a deep understanding of health sciences and an insight into current research apart from development work, and advanced knowledge of scientific methodology, particularly methods of health care science. Regarding skills and abilities, the student should be able to integrate knowledge and analyse, assess and handle complex health-related phenomena, issues, and situations even with limited information, and demonstrate the ability to independently identify, plan and carry out advanced tasks within specific time frames. Furthermore, the students must be able to present their arguments on various health-related topics and tasks, base them on relevant evidence, and converse with their peers while validating the skills required to participate in research. In addition, they need to demonstrate the ability to make correct assessments in care sciences regarding relevant scientific, social, and ethical aspects. As far as work is concerned, the students must be able to have insight into the limitations of science and its role in society, in addition to the ability to identify their need for further knowledge and to take responsibility for their knowledge development. Lastly, students must be able to take into consideration diversity and sustainable development, as well as international cooperation in an ever-changing society, when making decisions concerning health problems and health promotion [32].

3.4. Organisations and associations for pediatric nurses

In Sweden, the existing organizations and associations dedicated to pediatric nurses provide valuable support, education, networking opportunities, and advocacy at every stage of their careers, in addition to tools to stay updated on best practices in pediatric care. The main ones are:

The Swedish Pediatric Nursing Association (Riksförening för barnsjuk-sköterskor)

The Swedish Pediatric Nursing Association is the leading association for pediatric nurses in Sweden. Through this association, they can share knowledge and resources critical for administering excellent pediatric nursing care. This leads to promoting their professional development, taking advantage of opportunities for continued education, participating in conferences, workshops, and seminars on various pediatric nursing topics, and receiving guidance on evidence-based specialized practices. At conferences, resources and networking opportunities in the country and abroad are provided for those who are interested in research. The Swedish Pediatric Nursing Association also represents pediatric nurses in Sweden, improving healthcare policy on their behalf. In order to have access to all the above, pediatric nurses can become members by paying an annual fee [23].

Swedish Association of Health Professionals (Vårdförbundet)

The Swedish Association of Health Professionals is the core professional organization for healthcare professionals in Sweden, advocating for all nursing specialties, including pediatric nurses, and providing various resources for them. Moreover, it provides educational opportunities, such as workshops on various aspects of nursing, including pediatrics. It offers legal and professional support to nurses regarding their practice and workplace issues and represents them if needed in situations such as salary negotiations in addition to working hours and conditions. All the above is provided through membership, attained by paying an annual fee [33].

Other associations and organisations

Other relevant associations for pediatric nurses include: a) The Swedish Neonatal Society (*Svenska Neonatalföreningen*), which promotes evidence-based practices in caring for newborns and premature infants, organizes networking and research events [34]. b) The Swedish Society for Child and Adolescent Psychiatry (*Svenska Föreningen för Barn- och Ungdomspsykiatri*) has specialized pediatric psychiatric care branches [35]. c) The Swedish Society of Medicine (*Svenska Läkaresällskapet*) is responsible for collaborating with pediatric doctors and participating in networking events. It includes the Swedish Society of Pediatrics, which shares similar goals with the above associations [36].

3.5. Pediatric nursing supervision

Sweden's healthcare system is structured so that it offers guidance, support, and professional development while promoting well-trained, skilled nursing professionals. Supervision in Pediatric Nursing aims to ensure nursing practice is performed safely, efficiently, and according to Sweden's healthcare standards. Specifically for

pediatric nursing, supervision is important during education and professional training for maintaining excellence in administrating care for children and adolescents while supporting pediatric nurses in their professional development. Hospitals and health-care organizations have training programs for supervisors to ensure they understand how to effectively guide and support nurses in their professional growth [37].

Clinical supervision functions as a mentorship for graduated nurses (including specialty nurses) who are often assigned to a mentor for a specific period of varied time according to the setting. The mentor's role is to provide support, help with reflection, assist in tasks if needed, share clinical expertise, and ensure that the new nurses work evidence-based and according to national guidelines while combining theory with practical skills. This is after specific training [38–40]. For example, in more specialized wards such as Pediatric Intensive Care Unit (PICU), a new nurse is introduced to gradually take over pediatric patients and their families independently and care for up to 2 patients per pass after 8 weeks [40].

Decision-making is a key aspect of nursing, with senior nurses guiding new colleagues in reflecting on and choosing the best solutions for complex cases. This is particularly crucial for challenging cases, such as palliative care or organ donation discussions, as well as decisions around pain management and effective communication. Ethical support is also often necessary, and supervisors help ensure decisions align with Swedish healthcare values and patient rights. Peer review allows colleagues to discuss challenging cases, share knowledge, and support each other, fostering continuous learning and ensuring high-quality care for patients [37]. Support from a mentor and senior nurses is offered regularly, and meetings during the first year are common to assess progress and adjustment [30].

Challenges like emotional stress, burnout, communication difficulties with parents, or ethical dilemmas may arise in care. Supervisors provide emotional support and practical guidance, including check-ins to assess nurses' well-being and offer psychological support or recommend professional therapy if needed [39].

Pediatric nurses are required to engage in continuing education to remain updated on the latest nursing practices [30]. As part of the supervision process, employers may evaluate their employees' participation in professional development programs, motivating them to enhance their skills and competency [30, 38, 41]. Pediatric nurses must also renew their Cardiopulmonary Resuscitation (CPR) certification periodically through seminars organized by their employers [42]. The Swedish National Board of Health supervises pediatric nurses to ensure compliance with national healthcare guidelines and maintain required qualifications, intervening in malpractice cases [14]. Lastly, the Swedish Pediatric Nursing Association offers workshops and conferences, providing guidance and feedback to nurses while fostering the exchange of best practices [23].

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Pediatric nursing in the United Kingdom

Matthew Carey, Robin Hyde

This chapter will present the landscape surrounding professional regulation of nursing within the United Kingdom (UK). A historical outline with UK legislative perspectives related to nursing in general and details surrounding pediatric nursing specifics will be shared. Further, a summary of the UK educational system leading to professional registration will be discussed, whilst specifics surrounding the qualifications and associations supporting nursing education, including the mechanics of practice supervision arrangements, will be discussed.

1. Professional nursing legislation and regulation in the UK – a historical to present day synopsis

In 2019, the UK celebrated 100 years since the introduction of the 'Nurses Registration Act,' the legislative bill presented in and supported by the then UK parliament leading to statutory nurse regulation within the UK. Royal assent to the bill was granted in December 1919, culminating in the creation of the General Nursing Council (GNC) for England, Wales, Scotland and Northern Ireland [1]. Before this, nursing within the UK was largely provided in an informal nature, performed by a predominantly ill-equipped workforce, with the evolution of formal training and curricula often attributed to Florence Nightingale. However, Nightingale had not formally undertaken specific training herself and was said to be largely opposed to nursing regulation within the UK. Instead, the influence over statutory regulation within the UK is considered to be due to the tenacity of Ethel Bedford Fenwick, a Hospital Matron at St Bartholomew's Hospital in London, who formed the British Nurses Association (BNA) in the late 19th Century [1]. The association petitioned for nursing regulation with the later Royal College of Nursing (RCN) founded in 1916, joining and supporting the matter, strengthening the ultimate bill presented to the UK parliament [1]. In the years proceeding the 1919 Nurses Registration Act, the rapid evolution of the nursing 'register' ensued with the specialisms of general nursing as well as supplementary additional components encompassing male nursing, mental health nursing, fever nursing, and sick children's nursing [1].

During and in the years immediately after the Second World War, the UK, like many other countries, struggled with a shortage of nurses. This led to the introduc-

tion of supporting roles and legislative change in the UK with the introduction of the Nurses Act of 1943, establishing a roll of Assistant Nurses, later re-termed the State Enrolled Nurses (SEN) by the Nurses (Amendment) Act 1961 [1]. In 1948, the National Health Service (NHS) was founded; the aim was (and still is) to provide healthcare services free for all at the point of delivery. The introduction signalled a period of further rapid development of nursing spanning into the 1960s and 1970s. During this time, nursing education and training in the UK were largely delivered in Schools of Nursing situated or attached to hospital settings. However, during the 1970s and 1980s, concerns were raised regarding the consistency, quality, and nature of training offered across the UK. A new statutory framework for nursing education was introduced, resulting in the passing of another parliamentary act, the Nurses, Midwives, and Health Visitors Act, 1979 [1]. This culminated in the abolishment of the GNC and the creation of a new national regulator for nursing, midwifery, and health visiting, the United Kingdom Central Council (UKCC), encompassing four national boards for each country in the UK [1, 2]. From this point, nursing education moved away from Schools of Nursing and was shifted into the Higher Education sector, largely recognised in the UK as the birth of the Project 2000 curriculum for nursing and the introduction of supernumerary student nurse training [1, 2]. Further, the State Enrolled Nurse role was abolished during the same period in the late 1980s. In the decades thereafter, nursing became a diploma-level academic qualification with a mixture of university-based theoretical teaching and practice-based learning within clinical placements, largely known in the UK as the Project 2000 curriculum [2].

Nonetheless, by the early 21st Century, nursing had needed to modernise significantly due to a complex landscape of ageing populations, increased demand, and a movement towards expanding a flexible and responsive graduate workforce, with the gradual decline of diploma-level awards influenced by the wider adoption of degree level qualifications [3]. In 2001, the UKCC was superseded by the Nursing and Midwifery Council (NMC), which was established again by parliamentary decree. At the time of writing, the NMC remains the UK independent professional and statutory regulator for nurses, midwives, and nursing associates (an associate role in nursing) introduced in the last decade to England only (at the time of writing) [4]. The NMC is responsible for the professional regulation of nurses across four field specialities, including adult, children, mental health, and learning disability nursing [4]. The NMC is responsible for setting proficiency standards for pre and post-registration nursing (and midwifery) education, with the last review of pre-registration education in nursing culminating in the Future Nurse Standards, 2018 [4, 5]. All nurses, regardless of field, are required to adhere to and demonstrate practice in line with the professional code of conduct [6].

2. Pediatric nursing

In the 100 years plus of nursing legislative and regulatory change within the UK, pediatric nursing has evolved significantly to keep pace. Whilst it is beyond the scope of this chapter to outline the changes in depth, it is important to acknowledge that nurses specifically trained and educated in caring for infants, children, and young people has been hard fought for and has long been advocated despite growing concerns towards generic preparation in the UK [7].

During much of the 20th Century, children's nursing was a supplementary aspect following state registered general nurse (SRN) education [2]. Albeit the introduction of the aforementioned 'Project 2000' approach to preparation for nursing in the UK brought with it, a common foundation programme approach of eighteen months of training all nurses had to complete coupled with 18 months of specialist training in a chosen field i.e., *adult, childrens, mental health or learning disability*. In the early 21st Century and subsequent years, childrens nursing evolved again with the establishment of the NMC and expansion of degree-level programmes, with nurses no longer needing to complete a common foundation programme, instead being enabled to specialise solely in their chosen field from the beginning of their programme.

Whilst children's nursing is the term applied by the NMC, it is interesting to note current perceptions from engagement with those within the profession. Indeed, a recent cross-sectional survey of pre-registration programme leads in children's nursing education by Reynolds, Edge, Neill et al. [8] indicated the preferred terms of nurses who care for infants, children, young people (CYP), and their families are Child Health Nurses and Children's Nurses. However, a few universities have adopted the Children and Young People's Nursing title in their programme titles to more accurately reflect the age range beyond 'child' an 'children' [9, 10].

As noted in the cross-sectional survey and at the time of writing, only the United Kingdom and Italy still provide pre-registration nursing education leading to registration in an area of children's/pediatric nursing [8]. This differs from the broader global context, which, based on the evidence available, relies upon generalist nursing education to care for people across the lifespan and who will qualify as a Registered Nurse [11].

3. Qualifications (courses, specialized training)

In the UK, several routes and qualifications are available for those undertaking a pre-registration programme to register as children's nurses. Most universities or Higher Education Institutes (HEIs) offer these at degree or, increasingly, master routes for pre-registration programmes. In addition, a limited number of diploma's routes into nursing are still offered whilst the introduction of degree apprenticeship

routes in England has increased alternative employer-led pathways into nursing. All of which leads to qualification as a registered nurse in one of the fields of nursing aforementioned. Most of those entering nursing within the UK will apply for a pre-registration nursing programme via the Universities and Colleges Admissions Service (UCAS), a charity that manages applications for all HEIs in the UK [12].

3.1. Bachelor of science pre-registration routes

Those undertaking a pre-registration as a BSc will generally do so entering onto a three-year Bachelor of Science (BSc) in a nursing subject within one of the four fields of nursing, which in pediatrics would be Child Health Nursing or Children's Nursing. It should be noted that all graduates that successfully complete their programme will all register as Registered Children's Nurses under the current NMC recognised registered titles [13]. Those undertaking the three-year BSc programme, may do so full-time (three years) or through a part-time route (four years or longer). Part-time routes are unique to HEIs; however, more programmes are seen to be offering these routes. The more common full-time route programmes are broken down into each year, which are also referred to as 'parts' of the programme, e.g., year one-part one, year two-part so, and so on. Regardless of whether full-time or part-time, all nursing students across all fields on a BSc pre-registration programme will complete three parts [8]. This is slightly different for nursing students on the Master's routes into nursing, which will also be explored.

There are different stages or 'levels' of academic qualifications in the UK, although these differ in other areas of the country, e.g., Scotland. Pre-registration nursing students commence their programme in part one, which is assessed at Level 4 (Level 7 in Scotland), part two at Level 5 (Level 8 in Scotland), and part three at Level 6 (Level 9 in Scotland). Level 6 equates to a degree with honours (BSc) and Level 10 (BSc) in Scotland. Students undertaking pre-registration at MSc will do so at level 7 or Level 11 (Scotland) [14].

3.2. Apprenticeship routes into nursing

An apprentice in the UK is someone who works and studies to gain skills and knowledge in a specific area of work or job role, enabling the apprentice to be paid whilst they undertake learning [15]. In 2017, apprenticeships in nursing were introduced in the UK (although currently not available in other parts of the country, e.g., Scotland), which has enabled the NHS and private organisations to capitalize on developing their staff in existing roles to undertake an apprenticeship and emerge as a Registered Nurse (RN) [16]. For example, a professional in another role, such as a Health Care Assistant (HCA), Assistant Practitioner (AP), or Nursing Associate

(TNA) working in a UK organisation may be offered the opportunity to apply and train to become a Registered Nurse if they hold the relevant qualifications and meet the entry criteria for the HEI pre-registration programme [17]. If meeting the entry criteria, the HCA, AP, or TNA will be able to access and undertake the pre-registration programme. On occasions, some applicants may hold existing training that can be used as a record of prior learning, which could be aligned to the current programme to enable students only to undertake certain parts of the programme.

3.3. Master of science pre-registration routes

A more recent emerging approach to pre-registration nursing education is the inclusion of post-graduate routes into nursing. There is a growing number of graduates who may have a qualification in a previous subject and who have decided to pursue a qualification in nursing. For these types of students, there may be the option to undertake a shortened route of studying as a post-graduate but in a pre-registration nursing programme. These applicants need to meet the entry criteria on UCAS, which may differ between HEIs. One consensus is that these prospective students should hold a BSc in a 'relevant subject'. An example, although not limited, may include applicants with previous training in another healthcare professional role. It is likely that some of their training experience may be utilised in the application to demonstrate a record of prior learning. This could be credits in relevant modules or practice-related hours that can be 'transferred' to the pre-registration route. This may allow students to shorten their pre-registration programmes. These students will undertake the qualification at Level 7 Masters (UK) or Level 11 (Scotland) [13].

3.4. Dual registration pre-registration routes

As the UK educates nurses in the four fields, there are emerging programmes within HEIs that enable student nurses to complete a programme leading to registration in two of the four fields, or dual registration. For example, students at the University of Plymouth in the Southwest of England undertake three years or parts in their primary field (e.g., children's nursing), enabling them to attain a BSc and register as a children's nurse. The student would then continue into a post-graduate route in their second field, assessed at Level 7 to award them with an MSc and registration in their second field on completion. Note: placements across the four-year programme would be in a mix of areas related to each field [18].

3.5. Context of pre-programmes designs: theory and practice

In relation to courses, these are expected to align with the Standards for Registered Nurses set by the Nursing and Midwifery Council [19] and the academic

regulations within each of the universities or Higher Education Programmes that deliver these programmes. It should be noted that academic regulations differ across the different institutes, leading to some structural or design differences within nursing programme provision across the UK. This is further complicated by the location of the HEI within the UK, whereby, for example, the variety, scope, and setting of practice placements may differ nationally depending on capacity and availability. Practice placements may be informed by the locality and available NHS services; for example, some parts of the UK may only have district 'general' hospitals with integrated services for children, young people (CYP), and their families, whereas some may have local children's hospitals designed specifically to cater to CYP and their families.

The NMC Part 3 standards for pre-registration programmes [19] expect nursing students to learn and be assessed across theory, simulated learning, and in-practice environments. Higher Education Institutes must adopt a curriculum offering 50 percent theory and 50 percent practice, which equates to 2300 hours each (and expected for placement hours to register), of a combined minimum of 4600 hours [19]. Some of the practice hours may take the form of approved simulated practice learning activities up to 600 hours of the 2300 required. The theoretical structure differs across different programmes offered by HEIs. Generally, programmes apply a mixture of general modules across the fields of nursing and modules specific to children's nursing, both elements in varying guises (Reynolds, Edge and Neill et al. (2024) [8].

Generally, practice placements for children's nursing students will take place in locations that are expected to meet the needs of infants, CYP, and their families. These are across a range of community and acute settings, usually within the NHS. The expectation to provide student nurses with placements that are relevant to their field has remained generally unchanged in the UK, especially for children's nursing [8].

3.6. Specialist training and post-graduate education

Qualified registered Children's Nurses (CNs) in the UK have access to several specialist roles or levels of practice post-registration. It could be argued that specialisms naturally develop through exposure to the specific healthcare settings where the CNs are based. However, specialist training exists for RCNs as well as postgraduate training programmes and routes towards recognised specialist practice. Examples of training for CNs include Paediatric Immediate Life Support courses developed for professionals who are expected to manage and treat paediatric patients in emergencies [20] and more advanced courses, such as the Advanced Paediatric Life Support Course [21]. Postgraduate workforce developments are emerging that enable the acquisition of advanced knowledge and skills in children's nursing. For example, across settings, RNs and other health professionals can engage and study towards a formal qualification in Advanced Clinical Practice to become Advanced Clinical

Practitioners (ACP). These healthcare professionals are educated in Master's programmes with the specialist knowledge and skills to expand their scope of practice and meet the needs of patients and those they care for (NHS England, 2025) [22]. A small number of HEIs offer programmes in Advanced Clinical Practice in Paediatrics/Paediatrics and Child Health [23]. Those in an ACP role function under the four pillars of clinical practice: leadership and management, education, and research [22]. No specific framework currently exists for paediatrics; however, one is in development within the UK [23].

Another area for consideration is the role of Health Visitors (HVs), which are specialist community public health nurses (SCPHNs). Health Visitors can be RNs or midwives and cater to the needs of families of children aged 0 to five. This is a public health role aimed at improving health and well-being as well as promoting health and preventing ill health [24]. Another specialist role within SCPHN is that of school nurses (SNs), who work with school-aged CYPs and their families to improve health and well-being outcomes. As with HVs, SNs can be either registered nurses or midwives who train in these roles (NHS, 2025b) [25].

One final specialist role to consider is those nurses who work with neonates in neonatal intensive care. Similarly to SCPHNs, neonatal nurses may be RCNs or RNs in adult health. There is no specialist training for neonatal nurses as part of pre-registration. However, there is specialist training available via post-grad programmes as Advanced Neonatal Nurse Practitioners (NHS England South East, 2025) [26].

4. Scope of tasks and competences of a pediatric nurse

A pediatric nurse's tasks and competencies are largely informed by the NMC Standards of Proficiency for registered nurses. These standards present proficiencies that inform the knowledge and skills required for all nurses to demonstrate when caring for people from across the lifespan. The proficiencies have been grouped under 'platforms' and further supported by two annexes' outlining specific communication and relationship management skills (Annexe A) and specific nursing procedures that all Registered Nurses should be able to demonstrate and perform safely [13]. These proficiency standards inform the development of pre-registration programmes and outline the guidelines for student nurses to meet. There are seven platforms of nursing 1. Being an accountable professional, 2. Promoting health and preventing ill health, 3. Assessing needs and planning care, 4. Providing and evaluating care, 5. Leading and managing nursing care and working in teams, 6. Improving safety and quality of care, and 7. Coordinating care. Each platform is further broken down into a set of outcomes to reflect the proficiencies for professional practice for all registered nurses [13].

The Annexes not only set out expectations for knowledge proficiencies but also identify a set of advanced skills that RNs require. Annexe A: Communication and management proficiencies presented in the Platforms inform a specific set of skills that must be met. In addition, Annexe B: Nursing procedures outlines an ambitious set of procedures that a new RN must be able to demonstrate [13]. A key approach adopted by HEIs with regard to the Annexes is to embed many of these as part of practice placement learning in pre-registration programmes. Some HEIs have also embedded these into simulated practice learning.

5. Organizations, associations of pediatric nurses

The following section outlines brief details of key organisations within the UK, which include professional unions, networks, and associations to inform policy and children's nursing practice.

The Royal College of Nursing (RCN) is one of the largest and oldest unions and professional bodies that supports over 500,000 nurses, midwives, and students within the UK and internationally. Established in 1916, the main functions of the RCN are to represent the professional interests of those working in the public, voluntary, and private sections to provide influence on national government bodies, improve the working conditions, and endeavor to raise the overall profile of nursing and midwifery communities (Royal College of Nursing, 2025) [27].

The Association of British Paediatric Nurses (ABPN) is a well-known and long-standing organisation that advocates for the interest of children's nursing. The ABPN represents the oldest children's nursing organisation in the UK, which was established in 1934. The organization's members represent generations of nurses, academics, and world-renowned UK-based professors who have contributed to influencing the care and service of children and young people through evidence-based practice and education. In addition, the ABPN is recognised as advocate to inform national policy and lobby for ensuring pre- and post-registration education is of the highest standard (APBN, 2025) [28].

The Association of Chief Children's Nurses (ACCN) represents another UK-based organisation comprised of clinical leaders and the most senior nurses responsible for caring for CYP and their families within over 100 UK healthcare organisations. The vision of its membership is to inform national policy aimed at CYPs and their families and advocate for the highest quality and standards of care (ACCN, 2025) [29].

Considering the ACCN and its representation of nursing leaders, the UK also has a long-standing network of children's nursing academics that represent HEIs and providers of pre- and post-registration nursing education. **The Children and Young People Nurse Academics UK** network **(CYPNAUK).** The CYPNAUK is a forum of academics representing most HEIs offering education to children's nursing, who-

se vision is to lobby, empower, and influence children and young people's nursing. The organisation also focuses on the educational standards and evidence-base of children's nursing to inform policy and children's nursing workforce (CYPNAUK, 2025) [30].

The Fit for Children and Young People project (Fit4CYP) represents a national and international body of research dedicated to exploring the readiness for practice for children's nurses. The project team led by Dr Matt Carey and Professor Sarah Neil and represented by most of the organization above aims to inform the evidence and knowledge gap concerning the availability and structure of children's nursing education and how this impacts the care provided to CYP and their families (Carey, Neill, 2025) [31].

6. Pediatric nursing supervision

Within pre-registration for all nurses, regardless of field, three core roles exist in the supervision and assessment of student nurses in clinical practice. As informed by the NMC [32] these roles are the Practice Supervisor, Practice Assessor, and Academic Assessor. Practice Assessment is a key foundation of the standards, which are embedded into pre-registration programmes developed by HEIs. Generally, all student nurses, when on placement, regardless of setting, will be allocated a Practice Supervisor, usually another registered nurse, who works alongside the student for the duration of their placement. The student nurse may have several Practice Supervisors and may also work with other qualified nurses and allied healthcare professionals. The Practice Supervisor is responsible for contributing to the student's knowledge and skills through feedback, supervision, and instruction to inform learning in practice. Formal Assessment in practice is allocated to the role of Practice Assessor, whose responsibility is to assess the student's overall performance in meeting the proficiencies for practice and, importantly, programme outcomes [32]. The final role in the triad of student assessment is the Academic Assessor, responsible for collating and confirming students' achievements of the proficiencies and programme outcomes [33]. This role is usually reserved for the nursing academic within the student HEI, which is linked to the student and their practice placement, although aspects may differ between pre-registration nursing programmes.

Once registered, newly qualified children's nurses (NQCN) may be provided the opportunity to undertake a preceptorship programme offered by some healthcare organisation as part of the NQCN early career employment. The function of preceptorship programmes, which NHS employers largely offer, is to welcome and integrate NQCN or preceptees into the workforce, building and consolidating new knowledge and skills as these are translated into practice. Preceptees will likely undergo mandatory training, knowledge, and skills development, usually under the supervision and guidance of another qualified member of staff (NMC, 2020b) [34].

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