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EDUCATION

Public health nurse education in the Nordic countries

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Abstract

Background: Higher education should promote critical reflection and guide students towards international activities. In the Nordic countries public health nurse educational programmes are mostly based on guidelines issued by national educational authorities, which describe students' learning outcomes.

Aim: The aim of this paper is twofold: to give an overview of public health nurse education and service in the Nordic countries and thereby discuss opportunities for collaboration within the programmes.

Data sources and compilation of data: National legislations for public health nurse education and services are used as data. Since all sources are written in the language of each country, all the authors wrote the parts that describe each countries conditions in English and contributed to the compilation of data.

Results: We found both similarities and differences in public health nurse education and services. Opportunities for collaboration between the programmes are discussed.

Conclusion: Critical reflection by the public health nurse students can be enhanced by arranging collaboration projects, an exchange of clinical placement, and joint master projects. Collaboration among academic staff within the educational programmes, in education and research, have the potential to enhance quality both within public health nurse education and in developing the profession of public health nursing.

KEYWORDS
educational program, international collaboration, Nordic countries, public health nurse, service, student

1 | BACKGROUND

Public health nursing (PHNing) is central to promoting primary health care services (PHCS) in communities. Most western European countries offer additional educational program for registered nurses (RNs) to become a public health nurse (PHN) (Salvage & Heijnen, 1997). In the Nordic countries, institutions of higher education (HE) offer educational program/courses in PHNing, often founded on national guidelines describing learning objectives and the profession's expected practice (Danish Ministry of Health, 2019; Finnish Ministry of Education & Culture, 2014; Norwegian Ministry of Education & Research, 2021; Swedish Ministry of Education & Research, 1993, 2020). HE should

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motivate students to become open-minded, critically reflective and grounded in evidence-based knowledge and proven experience, as well as develop the profession according to the needs of users and society (European Commission [EC], 2002; Frenk et al., 2010; GUNI, 2017). International exchange and mobility for students and academic staff are ways to stimulate reflection, innovation, and an international perspective, addressing both the local and global demands of society. In Europe, the Bologna Declaration describes a common system for HE institutions to compare curricula and harmonize degrees across countries, including the cycle of degrees, workload, and credits (EC, 2008; European Ministers in charge of HE, 1999, EC 2020).

In Europe the education and practice of PHNs have developed along with the public health movement that started more than 100 years ago, focusing on preventing illness and promoting the health of individuals and families in communities. The first qualified PHNs were examined in England in the late 19th century by Nightingale (Monteiro, 1985). The praxis of the PHN in the Nordic countries started in the first decades of the nineteenth century and developed concurrently over the following decades. In Sweden, PHNs were introduced by the county councils in the early 1900s, but not until 1920 was a formal education in place (Jakobsson, 2017). Iceland started the PHN practice back in 1915 (Pétursdóttir, 1969); however, the first Icelandic PHNs were educated abroad (Guðmundsdóttir, 2010). Until recently, PHN education program have been sporadic in Iceland (Líndal, 2016; Pétursdóttir, 1969). Even today basic nursing registration is the only requirement for employment in PHCS (Guðmundsdóttir, 2010). In Norway and Finland, courses in PHNing started in the 1920s–1930s (Clancy, 2007; Simoila, 1994). Finland implemented the Act of mother-child health clinics in 1944, and PHNs became statutory for municipalities in 1972 (Finnish Ministry of Social Affairs & Health, 1972; Simoila, 1994). In Norway, the education of PHNs was established in 1947, and the act regulating PHNs in all municipalities passed in 1957 (Schiøtz, 2017). In Denmark, the education of PHNs was established in 1937, and stipulated by law for all municipals in 1973 (Samberg & Rasmussen, 2012).

PHNs have worked within PHCS focusing on areas important for the health of the population since the establishment of the profession. From the beginning, there has been a focus on reducing poverty, inequity, infectious diseases, and environmental pollution. This later turned toward a focus on lifestyle and psychosocial related illnesses and, in recent times, promoting people's well-being (Edgecombe, 2001; Schiøtz, 2017). The services and areas of services differ between countries with some offering support to parents and children and others to school children, the elderly, and persons with disabilities, often with the practice located near people's everyday environment (Edgecombe, 2001). Although the term "public health nurse" is not internationally consistent in literature or practice, The EU established in 2001 an initiative to develop a common education program in PHNing (Danielson et al., 2005). Thirteen EU countries developed a program describing the knowledge, skills and attitudes structured in three parts: compulsory and optional modules, and clinical placements. The competencies of PHNs are described in the following: identify and assess the health needs of individuals, families, and communities (I/F/C), and/or prioritize them in accordance with health needs, nursing standards and relevant policies; initiate or contribute to the delivery of public health actions or program from different care settings; facilitate and empower I/F/C to increase control of health determinates; work collaboratively with other professions and sectors; act as an advocate for I/F/C to improve health, and; evaluate the outcome of their own actions/program and/ participate in the evaluation of other health program (Danielson et al., 2005, p34). To facilitate the international exchange of students a section of 30 ECTS is recommended to be equal for all countries. However, in 2021, the education of PHNs still seems to be multifaceted.

Hence the aim of this paper is twofold: to give an overview of PHN education and service in the Nordic countries and thereby discuss opportunities for collaboration between the Nordic educational program.

2 | DATA SOURCES AND COMPILATION OF DATA

Since all the Nordic countries have National legislations for PHN education and services, and national PHN competence descriptions these were used as data. We also used the educational structure and curricula of one PHN program in each country as data. All data are publicly available. Regarding education, each one of the authors extracted data about admission criteria, ECTS/ EQF, amount of clinical education, courses in the elected programs and teaching criteria from each country respectively. Data about services were population to serve as PHN and types of services. Since all sources were written in the language of each country, all the authors wrote the parts that described each countries conditions in English. Thereafter, all authors contributed equally to the compilation of data.

3 | OVERVIEW OF PHN EDUCATION AND SERVICES PROVIDED IN THE NORDIC COUNTRIES

3.1 | Norway

3.1.1 | PHN education

The admission criteria for the PHNing program are a Bachelor of Nursing (BN) (180 ECTS) and 1-year of nursing practice (Table 1). The program is offered at the first cycle and advanced level (level 6), with courses totaling 60 ECTS (Norwegian Ministry of Education, 2005). However, several of the institutions have developed the program to the master's level, second cycle, level 7, amounting 120 ECTS (EC, 2008). In 2021 new regulations for PHN programs are given at level 7, prescribing a minimum of 90 ECTS with the possibility to take an additional 30 ECTS for a Master's in PHNing (Norwegian Ministry of Education & Research, 2021).

The new guidelines describe PHNing core competencies as; public health work; caring for children, adolescents, and their families; communication, relation and interaction; leadership, service development and innovation; and research, communication and subject

TABLE 1 Overview of key elements of education and clinical placement in PHN programmes

Country	Norway	Finland	Denmark	Sweden	Iceland
Admission criteria	Bachelor of Nursing & 1 year of practice as a registered nurse	General upper secondary school / Vocational education	Bachelor of Nursing & 2 years[d] of practice as registered nurse in specific areas and duration	Bachelor of Nursing & 0.5 – 2 years practice as registered nurse	Bachelor of Nursing, Employed by a health care institution and hired into an 80% learning position, financed by the Ministry of Health and Welfare
Total ECTS[a]/EQF[b]	From 60 to 120 ECTS/EQF Level 6/7[c]	60 of 240 ECTS EQF Level 6	90 ECTS EQF Level 6	75 ECTS EQF Level 7	60 ECTS EQF Level 7
Amount of clinical placement	15 ECTS	25 ECTS (minimum)	30 ECTS	9 – 30 ECTS	3 - 4 days per week
Population to serve	Parents and children from the age when the child is new-born until 20 years	People within their whole lifespan from pregnancy to elderly care	Parents and children from pregnancy until the age of 18 years	People within their whole lifespan	People within their whole lifespan, (after pregnancy > to elderly care)
Type of services	Family -Child Health Clinics School Health Service Youth Health Clinics	Maternity and Child Health Clinics School - and Student Health Care Occupational Health Care Health Care Centres Home Nursing Care	Home care visits PHN clinics School Health Care from 6–17 years	Primary Health Care Centrals Child Health Care Service (0-6 years) School Health Care of children (age of 6 - 19 years) Home nursing and palliative nursing at home	Well-Baby Clinics (0 - 5 years) School Health Care (age of 6–16 years) Walk-in Clinic at Health Care Centres Home Care Nursing

[a]ECTS = European Credit Transfer and Accumulation System were 60 ECTS credits are the equivalent of a full year of studies.
[b]EQF = European Qualifications Framework is a reference framework to compare qualifications from different countries ranging from level 1 to level 8.
[c]From 2023 the programme will be at 90–120 ECTS at level 7.
[d]From 2022 admission criteria will be 3 years of practice as a registered nurse in specific areas.

development (Norwegian Ministry of Education & Research, 2021). Both the "old" and "new" program have a salutogenic perspective and include 15 ECTS of clinical placements, where supervision is organized in a one-to-one relationship between the student and an experienced PHN. During clinical placement, academic staff have a peripheral facilitative role, meeting the student and the supervisor one to three times during the period. Ten University Colleges/Universities offer PHN programs (Lassemo & Melby, 2020). See Table 2, for examples, of curriculum at one of the institutions.

Criteria for being a teacher within the programme are being a PHN, having pedagogical qualifications and at least a master's degree. When offering master's programmes, at least 50% of the scientific staff must hold a PhD, and 10% must be professors (Norwegian Ministry of Education, 2017).

3.1.2 | PHN services

Norwegian PHN services consist of the promotion of mental and physical health as well as the monitoring of social and environmental conditions that contribute to improved health and prevent disease, injury, and disability (Norwegian Ministry of Health & Care, 2018), rather than diagnostics and therapies. The target group is primarily children and youth aged 0–20, and their families (Table 1). The family-child health services offer universal child health examinations free of charge, including identifying conditions that may affect children's safety and health, facilitating conditions for healthy development in children and providing guidance for parents and communities (Norwegian Ministry of Health & Care, 2018). Municipalities are responsible for managing the services in accordance with Norwegian regulations (Norwegian Department of Health & Care, 2011) contributing to locations of family-child health clinics, school health service and youth health clinics. More than 90% of Norwegian families participate in the children's health service (Statistics Norway, 2020).

3.2 | Finland

3.2.1 | PHN education

Admission criteria for PHN education is graduation from either upper secondary school or vocational education. The education consists of 240 ECTS credits including: nursing studies (180 ECTS) and PHN special studies (60 ECTS) (Table 1). The students graduate as RNs and PHNs with a Bachelor of Health Care (level 6)(Finnish Ministry of Education & Culture, 2014). Experienced RNs and midwives may also apply for post-qualifying PHN education. In 2014, 21 collaborative Universities of Applied Sciences (UAS) designed a common description of the PHN education comprising the core competencies of PHN: health promoting PHNing; PHNing of individuals, families, and communities; promotion of healthy and safe environments; PHNing in the surrounding society; and management and development of PHNing (Haarala, 2014). During PHN studies, the student performs a minimum 25 ECTS of clinical practice, mainly in PHCS, such as maternity- and child health clinics, school - and student health care, occupational health care, health care centres and home nursing care supervised by PHNs working in the field and a facilitating teacher. Syllabuses of UASs may differ, but all curricula are based on the core competencies (Haarala, 2014). See example, curriculum offered at one of the UAS (Table 2). PHNs can apply for a master's programme (level 7) either at UAS (Master of Health Care) or at a university (Master of Health Sciences), with an orientation in, for example, teaching or management. The criteria for becoming a teacher in the programme are three years' work experience as a PHN, having pedagogical qualifications and holding a master's degree (Finnish Ministry of Education & Culture, 2014).

3.2.2 | PHN services

The basis of a PHN's practice is promotive and preventive work as well as an empowering point of view (Haarala, 2014). According to the Health Care Act (Finnish Ministry of Social Affairs & Health, 2010b), municipalities have an obligation to organise equal PHCS for the population, such as maternity and child health clinics, school and student health care, occupational health care, health centres and home nursing services, all working fields of PHNs in Finland. Health examinations and counselling must be carried out in a systematic way so that the participation of individuals and families, and the developmental environment of a child or adolescent, is taken into account (Finnish Ministry of Social Affairs & Health, 2011). Over 99% of families use the services of maternity and child health clinics (Finnish Institute for Health & Welfare, 2020).

3.3 | Denmark

3.3.1 | PHN education

A PHN programme applicant must hold a BN, participate in clinical practice for at least two years fulltime and have clinical experience within two of six following areas, one of which for a minimum of eight months: neonatology, paediatrics, home nursing, paediatric psychiatry, maternity care or general practitioner (Table 1) (Danish Ministry of Health, 2019). The PHN programme is at level 6, consisting of 90 ECTS, of which 60 ECTS are theoretical and 30 ECTS are clinical placements in a municipality: three months for the first semester and three months for the second semester. The first semester focuses on children, youngsters, and families with ordinary needs; the second on children, youngsters, and families with developing and special needs; and the third on developing the PHNs' practice and a thesis. See example of courses offered at one of the institutions in Table 2.

The criteria for becoming a teacher in the theoretical part of the education is being a PHN, having pedagogical qualifications and holding a master's degree.

TABLE 2 Example of curricula

	Norway	Finland	Denmark	Sweden	Iceland
Compulsory courses	Framework and regulations (10 ECTS)	Work methods of health promotion (5 ECTS)	PHN role, profession, education, and political perspective in Denmark (2 ECTS)	Health promotion and preventive nursing, general medicine, and public health (15 ECTS whereof 6 ETCS involves clinical placement in a health care centre)	Health prevention in the community (5 ECTS)
	Health and development of children and youths (20 ECTS whereof 5 ECTS involve clinical placement)	PHNing of pregnancy and birth (5 ECTS)	Health promotion and prevention for children, young and families with ordinary needs (20 ECTS)	Family, child, and school health care (15 ECTS whereof 4.5 ECTS involve clinical placement in child health care centre and 4.5 ECTS in school nursing)	Assessment of physical and psychological health (5 ECTS clinical practice and assignments)
Compulsory courses	PHN methods of work (10 ECTS)	PHNing of children and family (5 ECTS)	Clinical placement in the care of children, youngsters, and families with ordinary needs (15 ECTS)	Pathology and prescription rights for certain medications (15 ECTS)	Supportive interviewing and family nursing (5 ECTS clinical practice and assignments)
	Clinical placement (10 ECTS)	PHNing of school children and young people (5 ECTS)	Health promotion and prevention for children, young and families with special needs (21 ECTS)	Home care and advanced nursing in home care (15 ECTS whereof 6 ETCS involve clinical placements in community home nursing)	Clinical pharmacology (5 ECTS clinical practice and assignments)
	Philosophy of science and moral philosophy (10 ECTS)	Occupational and community health care (5 ECTS)	Clinical placement in the care of children, youngsters, and families with special needs (15 ECTS)	Master-degree project in public health nursing (15 ECTS)	Nursing care service for a selected high-risk group (5 ECTS clinical practice and assignments)
Compulsory courses	Research methods (10 ECTS)	Expertise in PHNing (5 ECTS)	Research methods (2 ECTS)		Clients with diversified health problems (5 ECTS clinical practice and assignments)
	Plan for master thesis (10 ECTS)	Clinical placement – PHN of children and families (8 ECTS)	Thesis (15 ECTS)		Health care and health promotion (10 ECTS)
	Master thesis (30 ECTS)	Clinical placement – Family counselling and group work (2 ECTS)			Health and health services: Positions, aims and trends (10 ECTS)
		Clinical placement - PHNing of pregnancy and birth (5 ECTS)			Subject relevant for the programme/ the studentt's specialistt's field (10 ECTS)
Compulsory courses		Clinical placement – PHNing of school children and young people (5 ECTS)			
		Clinical placement –Occupational and community PHN (5 ECTS)			
		Development work of PHN (5 ECTS)			
Selective course	Subject relevant for the programme/thesis (10 ECTS)				

3.3.2 | PHN services

The PHNs' practice is health promotion and primary prevention. The target group is children and youngsters from prenatal state until 18 years of age, along with their families (Table 1). The PHNst' play an important role during the child's first year in supporting the family through health promotion and prevention when guiding and counselling families (Danish Ministry of Health, 2019). The PHNs offer home visits, visits at PHN clinics, cooperation with day care, school nursing, and courses for parents pre –and post-partum (Danish Ministry of Health, 2019). The municipalities are obligated to have PHNs, and by law, families with a new-born child are offered at least five home visits during the child's first year. 99 % of Danish families receive these free-of-charge visits. The 1 % who refuse are followed-up by the general practitioner. In school nursing the PHN will assess children for at least two mandatory visits during elementary school (Danish Ministry of Health, 2019).

3.4 | Sweden

3.4.1 | PHN education

PHNing is a postgraduate programme in specialist nursing in PHCS, second cycle, with a one-year Master of Science in Nursing (MSN) (75 ECTS) (Swedish Ministry of Education & Research, 1993, 2020) (Table 1). To be accepted to one of the around 20 university programmes, the minimum requirement is holding a BN (180 ECTS) and often a minimum of 1 year of nursing practice. In Sweden, The HE Ordinance (Swedish Ministry of Education & Research, 1993, 2020) set the degree objectives in specialist nursing on an overarching joint level between all specialist nursing degrees for each programme with its own specific objectives. The curricula is slightly different between the universities, in terms of set-up of courses and length of clinical placements, but the public health perspective along with a salutogenic and preventive viewpoint are nationally anchored in the national description of PHNs competences, namely nursing care, public health, medical science, nursing pedagogy and leadership as well as the core competencies of ethical competence, person centeredness, team work, improvement knowledge and quality improvement, patient safety and nursing informatics (Swedish District Nurses Association, 2019). See Table 2 for example curriculum. The PHN education gives eligibility for doctoral studies. The competence requirements for teaching in the programme are holding a PHN or MSN degree and competence in higher education pedagogy. To grade students, a doctoral degree is required.

3.4.2 | PHN services

The Swedish PHNs professional field comprise a salutogenic perspective to help, advise, care and treat a person and family at all stages of life, taking into account physical, psychological, social, cultural and existential aspects (Swedish District Nurses Association, 2019). The working field can comprise primary care, child and school health care, home care nursing, elderly nursing, and palliative care (Table 1). Within primary care, the PHN work self-dependently with patients who have, e.g., hypertension, diabetes, astma/copd, incontinence and heart failure. Since 1994, PHNs may prescribe medical technical products, specifically regulated medications, and vaccinations (Swedish National Board of Health & Welfare, 2016) within their field of practice. Child and school services are free and follow national programmes monitoring children's and adolescent's health, development and living conditions and the vaccination programme for all children (Swedish National Board of Health & Welfare, 2016). Primary care is organised by county councils and home care nursing by the municipalities at a low cost.

3.5 | Iceland

3.5.1 | PHN education

In 2015 a diploma and mastert's PHN education was launched (Artic Council, 2020) with the 7th level of EQF as entry level (Table 1). The aim is to deepen RNs' special clinical and academic skills, thereby enhancing PHNing in Iceland. See table 2 for example courses. Teachers in the theoretical part need to have a PhD, while in the clinical parts they must be a MS in PHN. After a diploma graduation, PHNs can earn an additional 60 ECTS for a master's degree. With an MSN and 2 years of 100% mentored employment at a health care clinic, the RN can apply for a specialist in primary care nursing certificate.

3.5.2 | PHN services

Primary health care clinics offer "general medical care, nursing, health protection and preventive medicine, emergency and casualty treatment" along with pregnancy care, well-baby clinic, school health nursing and home care nursing (Icelandic Ministry of Health, 2007). PHNs assess and offer basic nursing services to individuals, families, and groups through consultation, education and prevention. PHNs are the primary staff in well-baby clinics (0 – 6 years), school nursing (6-16 years), home care nursing, walk-in clinics for acute emergency/health problems and special clinics for persons with long-term illnesses (Icelandic Ministry of Health, 2007). An Icelandic nursing license is the only requirement to be hired as a PHN (Icelandic Ministry of Health, 2007).

4 | DISCUSSION

The fundament for achieving a degree in PHNing in all Nordic countries is a BSN. Finland is the only country where experience as RN is not a prerequisite for admission to a PHN programme. Instead, the PHNing courses are parallel to the BN courses (Finnish Ministry of Education &

Culture, 2014). In Iceland, Sweden, and Norway, the PHN educational programmes are on level 7 (Artic Council, 2020; Norwegian Ministry of Education & Research, 2021; Swedish Council for HE, 2021), whereas the programmes in Finland and Denmark are at level 6 (Danish Ministry of Health, 2019). The extent of the education is between 60 to 75 ECTS, and for Norwegian PHNs this extends to 90 ECTS (Norwegian Ministry of Education & Research, 2021). In all countries, except Iceland, ministries of education or health establish guidelines for PHN educations.

The dimension of theoretical courses within the programmes varies from 2- 20 ECTS, and to arrive at a more uniform education and practice in the Nordic countries, a minimum ECTS for theoretical courses should be considered. Between the countries, there are similarities in the PHN courses, such as the PHNing framework and the development of children and adolescents. The programmes in Denmark and Sweden offer compulsory courses focusing on children, families, and other groups with special needs, in addition to advanced home nursing. Subjects within pharmacology and prescriptions for certain medication are part of mandatory education in Sweden, Norway, and Iceland (Icelanic Ministry of Health, 2020; Norwegian Health Directorate, 2015; Swedish National Board of Health & Welfare, 2018). PHNs in Finland can start contraception for girls in school or student health care, and PHNs with special education can prescribe certain medications and vaccinations (Finnish Ministry of Social Affairs & Health, 2010a).

PHNs in Finland, Sweden, and Iceland (Finnish Ministry of Social Affairs & Health, 2010b; Icelandic Ministry of Health, 2007; Swedish District Nurses Association, 2019) promote the health of citizens throughout their lifespan and offer consultations with the target population at health care centres/clinics. PHNs in Denmark and Norway offer services to parents, children, and adolescents (Danish Ministry of Health, 2019; Norwegian Ministry of Health & Care, 2018). PHNs in Denmark mostly carry out their services by home visit, and in Norway most of the PHNs' practice is carried out at family- child health clinics, which is also the case in Finland and Sweden. In all Nordic countries, children access free school health care run by PHNs. In Swedish and Icelandic PHN programmes, students can choose whether to focus on the health care of the elderly, or on children, adolescents, and their families. In Finland, PHN students have mandatory theoretical studies in all areas of PHNing, whereas in Denmark and Norway, courses related to PHNs for adults are not part of the programme (Danish Ministry of Health, 2019; Norwegian Ministry of Health & Care, 2018).

Clinical placements differ between the countries as well as within programmes in one country, like Sweden and Finland. The PHN programmes in Iceland and Finland consist of larger parts of clinical practice than in Norway and some of the programmes in Sweden. Students in Sweden, Denmark, Iceland, and Norway are experienced nurses when entering the programme. For all countries, clinical placement is supervised by experienced, practicing PHNs and evaluated by academic staff. In Denmark, Finland and Norway, clinical placement is offered as separate courses, but in Iceland, clinical placement and theoretical education is mainly combined. Clinical practice in Denmark consists of 30 ECTS, and one of the courses is related to children and young persons with special needs. In Norway, clinical training in services for children and school children are mandatory.

Interestingly, the structure, content, and level of PHN programmes within and across Nordic countries differs somewhat, but a focus on preventing illness and promoting health among children, adolescents, and families is integral to all programmes and services. The social structures in the Nordic countries have much in common, and all PHNs' practices are based on the Nordic model with a welfare state promoting the well- being of its citizens (Iqbal & Todi, 2015). Even though this provides all citizens equal and free or low-cost care, PHNs face challenges such as an increasing elderly population and more multi-cultural citizens (Brandenberger et al., 2019). However, PHNs in Norway and Denmark have no authority to offer services to the adult population (Danish Ministry of Health, 2019; Norwegian Ministry of Health & Care, 2018). More than ever, PHN students need to develop competence to meet the population from different perspectives, perform care that is meaningful to the population and support healthy living. One way to develop critical reflection and cultural competence among PHN students is to challenge their 'taken for granted standpoints' and allow them encounter different education and health care systems and ways of performing PHNing (Crithley et al., 2009; Sloand et al., 2008). This might enhance their reflection on conditions in society as well as ways of promoting health and preventing illness. A way to start international collaboration is to develop PHNing courses that students in the cooperating institutions can take part in, although one of the first premises for the exchange of students is the willingness of academic staff. A first step may be to agree on subjects that are possible to cooperate on and adjust courses in the programmes in a way that creates opportunities for exchange. The different levels of educational programmes can, however, be challenging in cooperation. Subjects like strategies, tasks, population of PHNs, and knowledge of children and families' development can be of mutual interest regarding learning outcomes, while scientific methods and work will have different learning objectives depending on the level of the programme. However, despite the programme level, cooperation across borders will give the students international perspectives on the services, their profession, and society. Courses act as an advocate for I/F/C to improve health, as the EU programme proposed by Danielson et al. (2005) is not described in any of the Nordic PHN programmes offered by the institutions represented within this paper. This might be something to develop in international collaboration. To succeed with cooperation, planning and organisation is a premise, besides good support from information technology solutions. The ongoing pandemic shows that it is possible to cooperate across borders with the help of technology and that exchange does not have to include travels. In collaboration, language might be a hinder; however, most students in the Nordic countries manage English as working language.

Since all the programmes collaborate with health care organisations on clinical placements, these may also take part in the collaboration. Other possibilities are collaboration in research projects and academic staff giving lectures across borders. To succeed in collaboration, one should have in mind that implementation takes time and calls for flexibility by those involved (Danielson et al., 2005).

5 | CONCLUSION

This paper describes similarities and differences with a focus on education, level of EQF, amount of ECTS, as well as the services of PHNs. The educational programmes of PHNs in Norway, Finland and Sweden are largely guided by national guidelines. Finland is the only country that has PHN education as part of a BN. The PHN programme in Finland and Denmark are at level 6 while the programme in Norway, Sweden, Iceland is at level 7. PHN education in Finland, Iceland and Sweden has a lifespan focus while the education in Denmark and Norway places focus on children and youth. Clinical practice is great part of education in Iceland, while home care visits are used to a greater extent in Denmark than in the other countries. Differences within the programmes and within the services might stimulate critical reflection. On the other hand, a proportion of similarities might be a premise for collaboration to give credits for courses students have on exchange. Critical reflection by students within PHN education programmes in collaboration projects, practice exchange, joint master projects and academic staff collaboration in education and research have the potential to enhance quality both within PHN education and in the development of the PHN-ing profession.

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DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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