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Manuscript Title:

Public Health Nursing Education in Ireland and Norway: A Comparative Analysis.

Corresponding Author:

Helen Mulcahy. MSc (Nursing), BSc (Nursing), DN, HDipPHN, RGN, RM, RPHN.
College Lecturer and Coordinator BSc Nursing Studies.
School of Nursing and Midwifery, Brookfield Health Sciences Complex, College Road,
University College Cork (UCC) Ireland, T12 AK54
Email: helen.mulcahy@ucc.ie
Telephone: 00 353 87 9587685

Authors:

Helen Mulcahy. MSc (Nursing), BSc (Nursing), DN, HDipPHN, RGN, RM, RPHN.
College Lecturer and Coordinator BSc Nursing Studies. UCC, Ireland.

Patricia Leahy-Warren. PhD, MSc (research), HDip PHN, BSc, RPHN, RM, RGN.
Professor, Chair Academic Council Graduate Studies, Senior lecturer, Director of Graduate Studies. UCC, Ireland

Hilde Laholt. PhD, Associate professor, MSC (research) PHN, RGN.
University lecturer and program coordinator at the master program in Public health nursing.
UiT, The Arctic University of Norway, Norway.

Lloyd Frank Philpott MPH, PGDip PHN, PGDip EN, PGDip HP, PGC HP, BSc, Dip Nurs,
RGN, RPHN

College Lecturer and Programme Coordinator of the Postgraduate Programme in Public Health Nursing. UCC, Ireland

Lise-Marie Bergvoll, MSc, PHN.
University lecturer, Department of Health and Caring science.
UIT, The Arctic University of Norway, Harstad, Norway

Anne Clancy. PhD, Msc (research) PHN, RSCN, RGN.
Professor at the master program in Public health nursing.
UiT, The Arctic University of Norway, Harstad, Norway.

Public Health Nursing Education in Ireland and Norway: A Comparative Analysis

Abstract

Background: Public health, primary health care, and nursing are founding principles of public health nursing. Thus, the underpinning curriculum needs to reflect these core principles. Public health nursing educators sought to delve deeper into curricula and training of PHNs in Ireland and Norway. **Objective**: To compare PHNs' educational training in Ireland and Norway through a collaborative process. **Design**: This study used a descriptive comparative design. **Sample:** A panel of expert educators (the authors) compared national Public health nursing education strategies, guidelines, and curricula used to train PHN students. **Results**: Four core categories emerged from the analysis: general characteristics, theoretical and empirical knowledge base for PHNs practice, applying theory to clinical practice, and professional/ethical dimensions for practice. Results revealed more similarities than differences in both countries' educational models. The central difference related to the specialist role in Norway versus the generalist role in Ireland. **Conclusions**: Workforce requirements drive the delivery of Public Health Nursing programs and educational curricula. However, it is imperative that educators evaluate their curricula in terms of fitness and practice, not just purpose.

Keywords: public health nursing, education, practice, Ireland, Norway

Background

Public Health Nursing is founded on the principles of public health, primary health care, and nursing. Thus, the curriculum that guides future practitioners' education should reflect these principles in order to prepare healthcare trainees to promote health and provide primary, secondary, and tertiary care to individuals, families, and communities. As all countries can benefit from gaining knowledge about others' educational practices (Gosse & Duffy, 2020), the present research aims to undertake a comparative analysis of public health nursing education in Ireland and Norway.

An Erasmus Exchange Program for academic public health nurses (PHNs) from Ireland and Norway encouraged the present research. The Erasmus Program, established in 1987, is the European Union's (EU) program to support education, training, youth, and sports in Europe (European Commission, 2021*).* Previously, authors HM, PLW, and HM conducted a comparative study on public health nursing models in Ireland and Norway (Clancy et al., 2013) and concluded that further comparisons would benefit the wider community. Generally, public health nursing education aims to provide students with the skills necessary to meet the needs of their population (Phelan et al., 2018). As public health nursing education varies across countries (Clancy et al., 2013), a comparative analysis of educational models can draw attention to similarities and differences among the guiding philosophies in the different programs. Given the numerous geographic and demographic similarities between Ireland and Norway, undertaking a comparative analysis of public health nursing education was deemed timely to reorient the Irish Health Service to community care (Government of Ireland, 2017) and add Master's level education for PHNs in Norway (Government of Norway, 2021). Indeed, ongoing examination of postgraduate education is a legitimate endeavor in any country aligned with the Bologna process (Cabrera & Zabalegui,

2021), which seeks to bring more coherence to higher education systems across Europe (European Commission, 2021).

In Ireland and Norway, PHNs have been identified as key players in the delivery of primary care services, particularly primary prevention and health promotion (Clancy et al., 2013). In Ireland, preventive nursing services were introduced in 1915, mandated by the Notification of Births (Extensions) Act 1915, while the public health nursing role was introduced in 1924 with the School Health Service. However, it was not until 1960 that a separate register for PHNs was established by the regulatory body, the Nursing and Midwifery Board of Ireland (NMBI, 2015), leading to the formalization of public health nursing education and practice in Ireland (DOH, 1966).

Norwegian public health nursing, child health clinics, and school health services were founded in the early 1900's (Schiøtz et al., 2003), 1911, and 1918, respectively. The first school of public health nursing opened its doors in 1947. However, it was a Government Act in 1958 that formally established that PHNs should assist local physicians in disease prevention (Schiøtz et al., 2003). During the Acquired Immunodeficiency Syndrome (AIDS) epidemic in the 1980s (Økland & Glavin, 2005), PHNs began to provide counseling services, which later developed into the establishment of contraceptive and sexual health clinics as well as adolescent health clinics.

The development of the public health nursing roles in both countries was similar, emphasizing the need to formalize education. Continued examination of the coherence of postgraduate education is a legitimate endeavor of any country (Cabrera & Zabalegui, 2021). Therefore, the present research, conducted by PHN academics with a history of collaboration, sought to delve deeper into PHNs' education and training in Ireland and Norway.

Study Aim

The current study aimed to compare and contrast PHNs' educational training in Ireland and Norway to (1) delineate the collaborative processes involved in identifying, analyzing, and synthesizing documents relevant to public health nursing education; and (2) critically analyze the curricular structure and content to identify gaps and provide recommendations.

Methods

Design

This study used a descriptive comparative design. Strategic, syllabi, and operational documents at national (Ireland and Norway) and Higher Education Institution (HEI) levels (University College Cork [UCC], UiT The Arctic University of Norway [UiT]) were examined. Convening a panel of experts in public health nursing education in both countries had obvious advantages owing to their in-depth knowledge of the educational programs (Avella, 2016). A conventional qualitative content analysis (Hsieh & Shannon, 2005) investigated and compared the provision of nursing education for PHN students. In addition, relevant national public health nursing education guidelines and the curricula of educational programs at UCC and UiT were analyzed.

Data Collection

The authors, who comprised the expert panel, held monthly online meetings to discuss all the curricular drivers and dimensions of the identified programs and related documents. Consensus was reached to include the documents that best underpinned public health nursing curricula relevant to both countries (Table 1).

All documents were converted to Microsoft Word format for ease of review. The Norwegian documents were translated to English using Online Document Translator (2021) and back translated by the Norwegian members of the team. A template was developed and

circulated to all team members (n = 6) requesting a minimum of two proposed questions to guide data extraction. A total of 22 questions were returned, which were reviewed, color-coded, and grouped into six categories (i.e., eligibility, ethical content, curricular, clinical placement, practice orientation, and population focus) by a group member (HM). The team reviewed and endorsed these categories.

A large working table was constructed with the headings being the six agreed categories under which data were to be extracted from the identified documents (Table 1). Team members were assigned documents mainly from their non-native country, as it was considered that this approach would encourage an immediate focus on similarities and differences.

To ensure auditability and transparency, experts then reviewed what had been extracted by the non-native reviewers to confirm accuracy or revise misinterpretations. These phases prompted detailed academic discourse at the monthly team meetings. Data extraction phase outputs were circulated to the team and discussed prior to reaching consensus, thus further enhancing the rigor of the process. Following consensus, four final core categories emerged.

Findings

The findings fell within four core categories: general characteristics, theoretical and empirical knowledge base for PHN practice, applying theory to clinical practice, and professional/ethical dimensions for practice. Table 2 presents the key similarities and differences that emerged from the comparative analysis.

General Characteristics

Tables 1 and 2 present the educational models' general characteristics related to program objectives, entry requirements, recruitment, sponsorship, funding, and registration. The development of the curriculum by the relevant HEIs in both countries is informed by

population needs, research evidence, pedagogy, clinical and regulatory stakeholder input, and university regulations. There are similarities and differences in the entry requirements to the PHN education programs in both countries (Table 1). For instance, in Ireland, applicants must be registered as a general nurse and have three years of post-registration clinical experience, whereas in Norway, only one year of experience is needed.

Recruitment and sponsorship of students to HEIs for PHN education differs across countries. In Ireland, the Health Service Executive (HSE) determines recruitment and sponsorship; the latter includes payment of fees, student salary, and subsequent employment on successful program completion. In Norway, the HEIs independently recruit their candidates and sponsorship is not part of this process. Unlike Ireland, the Norwegian Department of Education provides universities with the funding necessary for an agreed number of students. The universities prioritize which programs they will support based on societal needs. As Norwegian public universities and colleges do not have tuition fees, candidates can apply to undertake HEI public health nursing education based solely on an interest in pursuing that career; applicants with the highest grades are prioritized for available places.

On successful completion of 60 European Credit Transfer System (ECTS), graduates in Ireland predominantly enter clinical practice to comply with their recruitment and sponsorship obligations. Meanwhile, since 2011, graduates in Norway have the option to complete an additional 60 ECTS and obtain a master's degree.

Theoretical and Empirical Knowledge Basis for public health nursing practice

The theoretical and empirical knowledge requirements for PHNs have a humanistic and biomedical basis in practice (Table1). This model of care encompasses all the determinants of health and well-being and, as such, syllabi cannot be prescriptive. The

philosophy of preventive care and health promotion is the predominant pedagogy driving PHNs' education in Norway. While this contrasts with the preventive/curative mixed approach in Ireland, PHNs' education in Ireland remains focused on health rather than illness. The Framework and Regulations for PHNs and curricular documents in both HEIs reflect the need for each student to practice safely and autonomously while considering ethical issues that reflect current trends and inequalities in society (Table 2). This ensures that PHN are adequately trained as reflective and independent practitioners.

In Ireland, the purpose of public health nursing education and training programs is to enable students to acquire the knowledge, skills, and competences to provide nursing care across the lifespan (NMBI, 2015). Inherent within this generalist role is the evidence-based knowledge requirement for the curative remit[1]. However, the health lens of public health nursing predominates in the National documents where "health promotion" is paired with "health" and "health education" (NMBI, 2015). On the other hand, the emphasis in the Norwegian curriculum is on health promotion and prevention, reflecting the Norwegian national guidelines (Ministry of Education and Research, 2005) pairing of "health promotion" with "prevention."

Application of Theory to Clinical Practice

Clinical placement is an important component of the public health nursing programs in both Ireland and Norway. The number of hours/weeks for clinical practice placement is determined by each country's regulatory body (NMBI, 2015, Ministry of Education and Research, 2005). There are variations between countries in relation to length of placements and within countries in relation to timing and structure (Table 2).

[1] Remit is defined as "the types of activity that a person or organization has responsibility for " https://dictionary.cambridge.org/dictionary/english/remit

In both countries, preparation of preceptors is important as they hold a significant responsibility in educating, assessing, and determining successful completion of clinical placements. The guidelines are very specific about the nature and outcome of clinical placement and how it should be supported (Ministry of Education and Research, 2005; NMBI, 2015), but they are left to individual HEIs to coordinate and deliver. In both Ireland and Norway academic staff at the HEIs collaborate with preceptors in planning the placement as well as in clinical assessment of each PHN student. Education of preceptors in terms of pedagogy and in assessing the program's learning outcomes is undertaken by the HEIs in collaboration with their clinical partners.

In the community setting, all health determinants need to be considered and, thus, care delivery is more complex in this context. Norwegian and Irish PHNs in training are supported to learn about these health determinants specific to their placement area and thus conduct a community profile and health needs assessment. This profile is used to determine care needs and interventions to meet the needs of individuals, families, and communities in their respective areas.

Professional/Ethical Dimensions for Practice

The overall purpose of the Norwegian and Irish programs is to educate reflective and independent PHNs with high professional and ethical standards. The analysis revealed that an ethical focus is present in the national guidelines, module descriptors, and course booklets in both countries. Public health nurses in training must integrate accurate and comprehensive knowledge of ethical principles into their clinical practice and this competency is clinically assessed by preceptor PHNs. The UCC course booklet (School of Nursing and Midwifery, 2020) refers specifically to students being educated to understand "ethical issues influencing the practice of public health nursing." The UiT course booklet (UiT, 2020) refers to ethical values related to the practice of public health nursing and research ethics. Findings also show

there is less focus on nursing philosophies and professional clinical judgement in the UiT course booklet (2020).

Discussion

Preparation for Practice

The findings illustrate fundamental differences in terms of recruitment for PHN students between countries. The key role played by respective health services/municipalities in selecting and educating PHNs for practice reduces the HEIs' autonomy in Ireland. In Norway, students have greater autonomy and self-determination for career choice and program priority. A related difference between countries is the option for students in Norway to continue onto a master's degree immediately following completion of their public health nursing education. While this option is available in Ireland, it is not encouraged, as the HSE expects that their graduates will enter the workforce in a full-time capacity. It could be argued that Norwegian students who proceed to master's level education can acquire greater skills in appraising current best evidence because of a longer academic period in which to strengthen their critical thinking, ethical, and research skills (Massimi et al., 2016). However, it is unclear whether this difference in education level between the countries influences PHNs' critical thinking skills necessary to make complex decisions as autonomous practitioners.

Theoretical and Empirical Knowledge Basis for Public Health Nursing Practice

National curricular guidelines in Ireland are more recent than those in Norway. They are very broad and encompass preventive, curative, palliative, maternal, and child health care related to the PHNs' generalist role. Public health nursing education and training in Ireland is also underpinned by public health guidelines (Department of Health, 2017; Houses of the Oireachtas, 2017).

Meanwhile, PHNs' role in Norway is more specialized, providing health promotion and preventive services to children 0-20 years old and their families. Their curriculum emphasizes health promotion and prevention (UiT, 2020), reflecting the association between "health promotion" and "prevention" mentioned in the Norwegian national guidelines (Ministry of Education and Research, 2005), which implies that both approaches have equal status. In a discourse analysis of the guidelines, Dahl et al. (2013) found more emphasis placed on biomedical knowledge than in social-scientific/humanistic knowledge, which is interesting as public health nursing in Norway has moved from a biomedical focus on prevention towards a health promotion approach (Schiøtz et al., 2003). It could be thus assumed that health promotion would dominate the Norwegian narrative. However, the findings reveal that the intention is to educate reflective professionals who can integrate both knowledge forms in their professional practice. In the Irish documents, "health promotion" is paired with "health" and "health education." This implies that the curriculum has a health, salutogenic focus, rather than an illness focus. However, in practice, health supporting services in Ireland are limited to children under five years of age (Clancy et al., 2013).

Even though the overall purpose of the Norwegian and Irish programs is to educate reflective and independent PHNs with high professional and ethical standards, there is less focus on nursing philosophies and professional clinical judgement in the three Norwegian documents. This can be the result of a trend in Norway towards trans-professionalism, which is evident in the introduction of common university courses for public health professionals. The intention is to promote collaboration across professionals from different fields and develop mutual and interchangeable skills (Mahler et al., 2014). Unfortunately, this could result in a weakening of the link to core nursing values and less awareness about specific nursing competencies and how they contribute to public health (Laholt et al., 2021).

Analysis of the documents has heightened the authors' awareness of what underpins the knowledge basis for PHNs' education in Ireland and Norway. The overall purpose of both programs is to educate reflective and independent PHNs with a high professional ethical standard. However, a broad remit with a broad knowledge base in Ireland can make it difficult to ensure an evidence-based public health nursing practice in all patient/client groups. Furthermore, awareness of specialized nursing competencies can be weakened if a focus on nursing is lacking, as is the case in the Norwegian curriculum.

Application of Theory to Clinical Practice

The findings show that structures are in place in both countries to ensure that rigorous attention is paid to achieving clinical competency. To this end, clinical placements through preceptorship and the application of relevant theory to practice take place. As programs in both countries prepare graduates for "safe and effective practice," the curriculum needs to accommodate the nurses' remit, whether it is generalist or specialist. The learning outcomes in the different modules detail the specific competencies the students *can, shall,* and *should* have to prepare them for their independent roles as PHNs in Norway and Ireland.

Successful completion of the public health nursing programs entitles graduates to be registered as PHNs with the NMBI and the Directorate of Health in Ireland and Norway, respectively. Education for PHNs practice in Ireland and Norway should reflect the current health issues facing the population. The current vision for health (DoH, 2013; Norwegian Directorate of Health, 2017), acknowledges population diversity, health inequalities, and the need for all health services to address current challenges. PHNs' vital role in the prevention of infectious diseases has been evident during the current pandemic, as they have played a pivotal part in COVID-19 immunization and related services in both countries (Norwegian Nurses Organisation, 2020; INMO, 2021). Indeed, PHNs were redeployed into preventive,

curative, and even acute care owing to the current COVID-19 pandemic (NRK Broadcasting company, 2020; INMO, 2021).

PHNs have also been described as a flexible workforce prepared to meet public health challenges (Clancy & Svensson, 2010). The role of being a standby workforce creates challenges in providing PHNs with a sufficient knowledge base. If practice is constrained, for example, to curative over preventive care or the deployment of staff to meet the ongoing demands of a global pandemic, then the theory-practice gap widens.

Knowledge is not a static entity. Currently there is no plan in either country to monitor how Public Health Nursing registration is maintained. In the absence of regulatory monitoring to maintain competence for practice, health services generally take the lead in continuous professional development.

Professional/Ethical Dimensions for Practice.

The importance of developing ethical awareness is specified as vital when assessing students during their clinical placements. Developing practical moral knowledge and promoting clinical wisdom (Aufderheide & Aristotle, 2020) is a long-standing tradition in ethics (Van der Zande et al., 2013; Baykara et al., 2014; Hilli, 2014). Ethical awareness is important, and a link must exist between theory and practice (Hilli, 2014). Students can be at risk of imposing their own values on individuals and community groups who come from a wide and diverse cultural, religious, and ethnic background (Marcelin et al., 2019). Discussions amongst academics, preceptors, and students can help verbalize tacit ethical dimensions of a clinical situation and stimulate ethical reflection on choices made and actions taken. Ethical reflection cannot be separated from the professional who carries out the action. Thus, it is essential for trainees to develop moral sensitivity to mitigate unconscious bias. Educational systems are not only influenced by professional ethical guidelines, but also by context, historical circumstances, and societal discourses. Cultural and religious ideologies

influence institutional practices and can determine which practices are accepted and which are not. Norway has traditionally had more liberal politics related to abortion, contraception, and divorce as compared to Ireland, which has been influenced by a catholic, religious ideology. Recently, however, more liberal legislation has been introduced in Ireland.

Limitations

Although the present research brought together an experienced team of academics from two countries to examine public health nursing curricula, some limitations must be considered. First, documents for review were not readily available in a common language; however, the methodology employed permitted a detailed analysis of national and HEI documents. Second, it can be argued that the countries' national guidelines are not comparable, as the Irish guidelines are from 2015 and the Norwegian guidelines are much older. However, the national guidelines (Ministry of Education and Research, 2005) from Norway have a broad focus and the core elements remain the same in the updated version (Government of Norway, 2021). Moreover, national guidelines, course booklet, and detailed module content were compared; therefore, the authors believe that the data are comparable. Lastly, only two higher education institutions were examined, and while they provided relevant insights into public health nursing education, the findings are not exhaustive. The research can, however, inspire similar studies in other countries.

Conclusion

Public health nursing practice in Ireland and Norway originated in the 19th century, with formal regulation and education dating back to the early 20th century. Despite geographical and demographic similarities, the scope and remit of practice differs. Spanning the decade of academic collaboration between the authors in interrogating the evidence, it was clear that the impact and outcomes of public health nursing practice differed. A rigorous process was used to examine the relevant curricular documents, with findings illustrating

more similarities than differences between both countries in terms of underpinning frameworks. In terms of similarities, both curricula were rooted on the principles of public health and public health nursing evidence. The fundamental differences related to PHNs' role and funding. In Ireland, students receive a one-year academic program, whereas in Norway this extends to two years. The latter facilitates advanced critical thinking skills, although the impact of this extended training is unknown in terms of population outcomes.

Therefore, it is recommended that this gap is addressed to examine which model best determines fitness for practice and purpose in the longer term. It is imperative for all educators to evaluate their curricula in meeting the vision of their programs.

Data availability statement

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

Abbreviations

DoH: Department of Health

DPHN: Directors of Public Health Nursing

ECTS: European Credit Transfer System

EQF: European Qualifications Framework

EU: European Union

HEI: Higher Education Institutes

HSE: Health Service Executives

INMO: Irish Nurses and Midwives Organization

IRE: Ireland

NMBI: Nursing and Midwifery Board of Ireland

NNO: National Nursing Organizations

NOR: Norway

PGDPHN: Postgraduate Diploma in Public Health Nursing

PHN: Public Health Nurse

RGN: Registered General Nurse

RNID: Registered Intellectual Disability Nurse

RPN: Registered Psychiatric Nurse

UCC: University College Cork

UiT: UIT The Artic University of Norway

UNESCO: United Nations Educational, Scientific and Cultural Organization

WHO: World Health Organization

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Table 1

Overview of the documents included for analysis

Documents analyzed	**Irish**	**Norwegian**
	Nursing and Midwifery Board of Ireland (2015) Public Health Nursing Education Programme – Requirements and Standards.	Ministry of Education and Research (2005) Framework and Regulations for Public Health Nursing (Rammeplan translated)
Higher Education Institution	University College Cork (2020) Postgraduate Calendar with links to Book of Modules UCC College Calendar 2020/2021	UiT, The Artic University of Norway (2020) Official detailed content of modules (UIT, 2020)
	School of Nursing and Midwifery (2020) Postgraduate Diploma in Public Health Nursing Course Booklet	UiT, The Artic University of Norway (2020) Official detailed content of modules (UIT, 2020)

Table 2

Overview of similarities and differences in Ireland (IRE) and Norway (NOR)

Key areas	Similarities (at national and HEI level) *	Differences (at national and HEI level) **
General Characteristics of PHN Education	• Post registration specialist course • The European Qualifications Framework (EQF) level 9 • Applicants must be registered general nurses	• National guidelines due for update 2022 (NOR) • Eligibility in terms of longer pre-course experience (Ire) • National recruitment and sponsorship process (IRE) • HEIs involved in national recruitment (IRE) • Masters' level (NOR), postgraduate Diploma (IRE) • Funding source differs (IRE and NOR) and municipalities can offer grants (NOR) • Generalist practice, preventive and curative lifespan approach (IRE)

Key areas	Similarities (at national and HEI level) *	Differences (at national and HEI level) **
		• Specialist practice, children and young adult population, health promotion, and prevention focus (NOR)
Theoretical and Empirical Knowledge Base for PHN Practice	• Humanistic and biomedical knowledge base for practice in both national curricula • Reflects need for advanced knowledge related to individuals, groups, and communities • All modules underpinned by learning outcomes	• Difference in emphasis regarding health promotion - theoretical underpinnings and integration • Nursing competencies more prominent in Irish documents • Knowledge for lifespan practice (IRE) • Common courses with other professionals comprise 50% of the PHN postgraduate course and 30% of the total PHN Master program at UiT (NOR)

Key areas	Similarities (at national and HEI level) *	Differences (at national and HEI level) **
Applying Theory to Practice	• Students supported in application of theory to practice by PHN preceptors. (IRE, NOR) • Close relationships fostered between HEIs and preceptors (IRE, NOR) • Community profiling and health needs assessment are key skills (UiT, UCC) • Preceptorship guidelines and preparation	• Minimum timeframe of clinical placement – 12 weeks UiT compared with 18 weeks in UCC. • Variations in credit weighting of clinical placement modules (5 credits (UCC) v. 20 credits (UiT))
Professional/ Ethical Dimensions for Practice.	• Expectation to practice in accordance with professional/ ethical guidelines • Ethical focus in documents in both Ireland and Norway related to aspects of	• Focus on ethical values (NOR) Focus on ethical issues that influence practice (IRE) • In depth knowledge of research ethics and ethical theories related

Key areas	Similarities (at national and HEI level) *	Differences (at national and HEI level) **
	equality, diversity, and inclusion.	to health and illness (NOR).

**** bullet points***

***** bullet points with either NOR or IRE; UCC or UiT; depending on whether local or national after each point***