

**By: Valerie Fleming
and
Anna Holmes**

Basic nursing and midwifery education programmes in Europe

**A report to the
World Health Organization
Regional Office for Europe**

March 2005



Basic nursing and midwifery education programmes in Europe

A report to the World Health Organization
Regional Office for Europe

March 2005

By: Valerie Fleming and Anna Holmes

Glasgow Caledonian University
World Health Organization Collaborating Centre for Nursing and Midwifery
Cowcaddens Road
Glasgow G4 0BA Scotland

Keywords

EDUCATION, NURSING – STANDARDS
MIDWIFERY – EDUCATION
GUIDELINES
EUROPE

Address requests about publications of the WHO Regional Office to:

- *by e-mail*
 - publicationrequests@euro.who.int (for copies of publications)
 - permissions@euro.who.int (for permission to reproduce them)
 - pubrights@euro.who.int (for permission to translate them)
- *by post*
 - Publications
 - WHO Regional Office for Europe
 - Scherfigsvej 8
 - DK-2100 Copenhagen Ø, Denmark

© World Health Organization 2005

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Where the designation “country or area” appears in the headings of tables, it covers countries, territories, cities, or areas. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers’ products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use. The views expressed by authors or editors do not necessarily represent the decisions or the stated policy of the World Health Organization.

CONTENTS

	Page
Preface.....	i
Acknowledgements.....	ii
1 Introduction and background.....	1
1.1 Higher education programmes.....	2
1.2 The present study.....	3
1.3 Outline of this report.....	4
2 Literature review.....	5
2.1 Previous research.....	5
2.2 Method.....	5
2.3 Defining competence.....	5
2.4 Conceptualizing competence.....	6
2.5 Assessment of competence.....	8
2.6 Chapter conclusion.....	11
3 Methods.....	12
3.1 Study design.....	12
3.2 Approval.....	13
3.3 Sample.....	13
3.4 Data collection.....	14
3.5 Data analysis.....	14
4 Introduction to data.....	16
4.1 Sample.....	16
5 Nursing findings.....	19
5.1 General description of responses.....	19
5.2 Integration of qualitative and quantitative data for selected questions.....	22
5.3 Chapter conclusion.....	34

6	Midwifery findings	35
6.1	General description of responses	35
6.2	Integration of qualitative and quantitative data for selected questions.....	38
6.3	Chapter conclusion	46
7	Conclusions, limitations and recommendations.....	47
7.1	Development of database.....	47
7.2	Assessment of progress	48
7.3	Limitations	49
7.4	Chapter conclusions	50
7.5	Recommendations.....	51
7.6	Concluding statement.....	51
8	References.....	52
	Annex 1. Complete list of questions.....	57
	Annex 2. Questions concerning legislation	60
	Annex 3. Questions concerning consumers.....	61
	Annex 4. Questions concerning curriculum.....	62
	Annex 5. Questions concerning entry to and exit from programmes.....	63
	Annex 6. Questions concerning quality of institutional processes	64
	Annex 7. Questions concerning qualifications of teaching staff.....	65

Preface

The Nursing and Midwifery Programme is one of many programmes within Country Policies, systems and Services (CPS) in the Division of Country support (DCS), WHO Regional Office for Europe. The Nursing and Midwifery Programme has a big influence on the stewardship, human resources allocation and service delivery.

This report presents the implementation of the educational principles subscribed to in the Munich Declaration. The report describes findings from a four year longitudinal study of nursing and midwifery education programmes in Europe. The study is popularly known throughout the World Health Organization European Region as the PAM study after the methodology used called Prospective Analysis Methodology.

The study is a milestone on the way to ensuring that a clearer understanding of nursing and midwifery basic educational terms in the Region. It represents one study amongst a group of studies related to the Munich Declaration and which altogether will provide the background to ensure that the results can enhance the status of nursing and midwifery.

A large amount of data was received from 36 countries in the WHO European Region and respondent from these countries are to be commended not only for the considerable amount of time and effort they have put into furnishing the data but also for the considerable progress they have made towards implementation of the principles.

Chapters one and two of this report provide some background about the region and the study. Chapter three discusses the approach used. Chapters four to six present the data which as been analyzed using both quantitative and qualitative methodologies, and chapter seven presents the conclusions and recommendations.

Acknowledgements

The authors of this report would like to thank the many people who have contributed to this study.

Mrs Ainna Fawcett Hennessy, Regional Nurse Adviser, WHO Regional Office for Europe, whose vision led to the study being carried out.

Professor Margaret Alexander who chaired the Expert Group who developed WHO European Strategy for Nursing and Midwifery Education and the guidelines, and others members of this group.

All those individuals and organizations who have commented on drafts of the Strategy.

Staff of the WHO Regional Office for Europe who collected and collated the data.

Dr Lis Wagner, Manager, Nursing and Midwifery Programme, WHO Regional Office for Europe, who worked on the final version and answered all the tricky questions.

Staff of Glasgow Caledonian University WHO Collaborating Centre who commented on drafts of this report.

1 Introduction and background

For over half a century the World Health Organization (WHO) has acknowledged the need to strengthen the roles of nurses and midwives throughout the world. Since the first World Health Assembly passed its first resolution to this effect in 1948 (WHA 1.46, 1948), there have been many subsequent calls aimed at realizing the full potential of the two professions, with four further World Health Assembly resolutions to this effect being passed (WHA 42.27, 1989; WHA 45.5, 1992; WHA 49.1, 1996; WHA 54.12, 2001).

Such calls have also been very much to the fore in the European region. The 1988 Vienna European Conference on Nursing (WHO, 1989) nursing and midwifery professions from across Europe committed themselves to reorienting their education and practice so that they could more easily embrace the health agenda of the region. According to the World Health Organization (2000a, p.4) this conference:

marked a milestone for the nursing and midwifery professions across Europe. At this event, the important decision was taken to reorientate the education and practice of nurses and midwives so as to support more effectively the changing health agenda and WHO's health for all targets. The new focus for professional practice was to be on primary health care, with an emphasis on equity, health maintenance and promotion, disease prevention and community empowerment. This approach was to be underpinned by the appropriate use of technology, research and evidence-based practice, and by intersectoral and international collaboration. The essential contribution of high-quality nursing to better health was fully recognized.

Since that time there have been major changes in health care systems throughout Europe. Some countries' borders have been totally reorganized either through war or peaceful negotiation. Others' health care systems have been driven by poor health outcomes, while yet others' are being increasingly subjected to cost containment policies. Strategies have been developed in response to decentralisation and privatization, which include the rationalization of hospital sectors and movement of more and more acute care into people's homes or at least smaller health facilities.

Prevailing health problems which continue to face the region include the increasing gap between the health of the rich and poor and unacceptable mortality and morbidity statistics. In addition there is a resurgence of many infectious diseases such as tuberculosis, meningitis and hepatitis as well as sexually transmitted diseases such as HIV/AIDS and associated problems. Many countries and communities are faced with modern day killers such as cancer, cardiovascular disease and lifestyle related problems such as unhealthy diets, too little exercise, smoking, alcohol and substance misuse. Increasing numbers of some populations suffer from stress, mental ill health, increasing obesity and other chronic diseases, while others suffer the effects of poverty and unemployment. As the elderly population continues to increase in most countries there will be a corresponding increase in the demand for health care. As various wars continue in Europe, the numbers of refugees, orphaned children and homeless people continue to rise as well as the associated physical traumas.

In order to embrace such issues positively, the WHO Regional Office for Europe recognized the key contributions of all its nurses and midwives to promote positive change in the region. For nurses, this contribution entails not only caring for those who are sick, providing rehabilitative

care and enabling patients to reach their highest potential for health and independence, but also and of equal importance, primary and secondary disease prevention and the promotion of health for individuals, families and communities. For midwives, their vital role in public health, the promotion of women's and families' health and the reduction of maternal and infant mortality and morbidity are all affirmed.

Building on the lessons learned from Vienna, and to help to develop human resources for health, a second WHO Ministerial Conference on Nursing and Midwifery in Europe was held in Munich in June 2000. This conference addressed the unique roles and contributions of Europe's six million nurses and midwives in health development and health delivery (WHO, 2000a). At the conference the WHO's Strategy for Nursing and Midwifery Education in Europe was launched (WHO 2001a). The Strategy focused on the initial education of those entering the profession of nursing and/or midwifery. Its major aim was to state the fundamental principles of the initial preparation of nurses and midwives. It additionally acknowledged the link between such initial preparation and the continuing education of nurses and midwives once qualified.

Those who developed the Strategy noted:

It is intended to be a framework for change. Its implementation in the different Member States of the Region must be accompanied by an action plan. This plan will be specific to each individual Member State and will be devised by key stakeholders in each country. It will make clear the time scale and actions necessary for achievement of the Strategy. (WHO, 2001a, p. 3).

1.1 Higher education programmes

At the time of its launch, the basic education of both nurses and midwives within the Region varied greatly. Those countries within the European Union (EU) programmes adhere to EU legislation (1997 a & b) and guidelines relating to nursing and midwifery. These specify minimum requirements of 2300 hours theory and 2300 hours practice in programmes leading to the initial qualifications of nurses and midwives. Additionally, a minimum age of 18 for entry to nursing and midwifery programmes is specified. Conversely, many countries from eastern Europe retained programmes at secondary school level. These comprised for the most part a generic timetable with the inclusion of such subjects as the language of the country, geography, history and arithmetic, with the addition of a few hours per week on medical sciences. Even less time was given to nursing or midwifery in these curricula and in some countries the education programme for a nurse, a midwife and a laboratory technician was exactly the same, the position a person obtained at the end of the programme determining the profession (Fleming, 2002). These programmes included only a minimal amount of clinical practice. Successful nurses or midwives qualified from these programmes at the age of 18 and thus were eligible to practice in their respective countries.

A further change in the provision of nursing and midwifery education was taking place in the years between the Vienna and Munich conferences. This was the move to higher (university) education as the basic preparation for practice. While the first known university-based education programme for nurses was recorded as long ago as the 1920s in New Zealand (Chick, 1987), it was not until the 1950s that such programmes became widespread in North America and in the 1980s in Australasia. Europe therefore slowly became part of a world wide trend with countries such as Spain introducing bachelor's degrees as the minimum entry to nursing in 1989 and the United Kingdom completing the move to university-based education for the basic education of both nurses and midwives in 1996.

It was within this climate of change that the Strategy was developed, and although it does not specifically discuss the place of education, the 26 principles which were drawn up clearly make the assumption that education is to be delivered at university-level. Principle 6¹ (WHO, 2001a, p. 6–29), for example, states:

Admission to nursing (midwifery) education follows successful completion of secondary school education, with qualifications equivalent to those required by our country for university (or equivalent higher education institution) entrance. Alternatively, entry is based on formal accreditation of prior learning and/or relevant experience, which is a normal route of entry to the university (or equivalent higher education institution) concerned, and is acceptable to the nursing statutory body – where such exists.

Additionally principle 13b² (WHO, 2001a, p. 9–35) makes it very clear the curricula should be outcome-based (competency-based), stating simply “the curriculum is research-based/evidence-based”.

1.2 The present study

The WHO European Strategy for Nursing and Midwifery Education (WHO, 2001a) included a commitment to provide a series of tools to support those Member States that had requested assistance in implementing the Strategy. The key elements of that support included two prototype curricula (one for nursing and one for midwifery):

- key elements of curriculum design for practice-based professions, including competency-based education and training;
- teaching, learning and assessment strategies consistent with the principles of adult education;
- guidance on quality control and educational evaluation;
- criteria for the preparation of nurse and midwife teachers and mentors; and
- criteria for the accreditation of schools of nursing and/or midwifery; and
- criteria for national and international accreditation of certificated and experiential learning.

Additionally, a detailed research tool for use by each Member State in assessing its baseline position in relation to the fundamental principles of initial education for nurses and midwives was developed. This tool also assessed the Member States subsequent annual progress towards implementation of the Strategy as the Member States were asked to complete this tool annually. This tool, which is reported on in more detail in chapter three, forms the basis of this study.

The keys aims of the present four-year study are:

¹ Admission to nursing education follows successful completion of secondary school education, with qualifications equivalent to those required by our countries for university (or equivalent higher education institution) entrance. Alternatively, entry is based on formal accreditation of prior learning and/or experience, which is a normal route of entry to the university (or equivalent higher education institution) concerned, and is acceptable to the nursing statutory body – where such exists.

² The curriculum is competency-based.

- to develop a database that records the position of all European countries in relation to the initial preparation of nurses and midwives ratified in Munich (WHO, 2000b);
- to assess the progress of these countries over a four-year period towards full implementation of these principles on a regular basis; and
- to utilize the results politically to enhance the status of nursing and midwifery education throughout Europe.

1.3 Outline of this report

This chapter has provided some background about the present study. Chapter two introduces and critiques some of the relevant literature, in particular that pertaining to curriculum development and competencies of nurses and midwives. Chapter three outlines the methods used in this study and some of their limitations. In chapter four the data is introduced, while in chapter five the nursing findings and in chapter six the midwifery findings are presented and discussed in the context of Europe and globally. Finally in chapter seven the limitations of this study are discussed as well as the conclusions and recommendations.

2 Literature review

2.1 Previous research

As discussed in chapter one, the WHO Strategy for Nursing and Midwifery Education is firmly focused towards increasing the level of basic education which aims to equip nurses and midwives with the necessary skills for entering practice as autonomous practitioners. While other debates in the literature have focused on respective skills of graduate versus associate degree nurses (Casey et al, 2004; Delaney & Piscopo, 2004), this debate must be underpinned by one which rests on basic competence. Within the Strategy (WHO, 2001a), principles 13³ and 14⁴ state that new programmes must be firmly competence-based. Furthermore those responsible for the Strategy's development warn that the EU directives (EU, 1977; 1980), both of which are based upon competencies, must serve as a minimum standard. The focus of this literature review is therefore orientated towards competence.

2.2 Method

In order to adopt as unbiased an approach to this review as possible, the Cochrane Research Database (CRD) guidelines for those carrying out reviews (Mulrow & Oxman, 1997) was followed for the process of searching the literature. The initial review of the literature was undertaken by searching the key databases of CINAHL, MEDLINE, ERIC, PSYCHLIT, BIDS and the Royal College of Nursing, using the keywords "nurse", "nursing", "midwife", "midwifery", "practice", "clinical", "performance", "competence" and "assessment" and various combinations thereof. When these databases were exhausted, relevant articles were identified and obtained. Additional articles were then located from the reference lists. Finally a shelf search was carried out of nursing journals and reports published from the early 1990s until 2004.

Mulrow & Oxman (1997) emphasize the preference that should be given to well designed Randomised Controlled Trials as a more reliable research method in the production of evidence to underpin new projects. However we believe that this is not a suitable method to explore this area as no competencies have yet been identified to test in this manner. Thus the CRD guidelines were not used for reviewing the articles. This review concentrates on defining competence, conceptualizing competence and assessing competence.

2.3 Defining competence

Competence is probably one of the most commonly used words in education in the present time, but there are still problems involved in clarifying the meaning of the word. Within the nursing and midwifery literature there appears to be no clear definition of the term "competence", with often confusing and contradictory statements being made (Giro, 1993). Giro is supported by Bradshaw (1997; 1998) who, having highlighted the uncertainty in the definition of competence, went on to discuss the problems caused by such a situation and made a number of recommendations regarding the assessment of the competence of the nurse (Bradshaw, 1998). Watson et al (2002) further suggest that competence is a nebulous concept which is defined in different ways by different people. Conversely, according to May (1999), the literature on

³ The curriculum is research-based/evidence-based. The curriculum is competency-based.

⁴ The specified competencies include the ability to practice in hospital and community settings and as a member of the multi-professional health care team.

clinical competence does highlight several points of agreement. These include the requirements of essential cognitive, psychomotor and affective skills and the enhancement of skills acquisition through formal knowledge and clinical experience with decision making and critical thinking being an integral part of the learning process.

From a US perspective, Nagelsmith (1995) summarizes competence as a combination of knowledge, skills, attitudes and values. She also notes that often there is a perceived need to specify competencies, and that these will vary depending upon the context. This has direct relevance to the diversity within the WHO European Region. Gonczi et al (1990, p. 6) earlier provided a clearer definition of professional competence as:

The competence of a professional derives from their possessing a set of relevant attributes such as knowledge skills and attitudes. Those attributes which jointly underlie competence are often referred to as competencies. So a competency is a combination of attributes underlying some aspect of successful professional performance.

While (1994) makes an important distinction between the concepts of “competence” and “performance”. She concluded that since competence is concerned with perceived skills it cannot be directly measured, whereas performance as actual situated behaviour is open to measurement and reflects what nurses actually do in clinical practice. This problem is not unique to nursing but also very relevant to midwifery (Worth-Butler et al, 1994). This issue is further discussed in section 2.4.

Eraut (1994) presents a useful distinction in literature from the United States of America between the term “competence”, which is given a generic or holistic meaning and refers to a person’s overall capacity, and term “competency”, which refers to specific capabilities. Xu et al (2001), from China, build on this possibility that “competency” and “competence” are two different concepts. They conducted a study in order to identify the underlying competencies which contributed to effective nursing performance. In their view, competence and competencies are job-related, referring to a person’s capacity to meet job requirements by producing qualified outputs. By contrast, competency and competencies are person related, meaning that it is the underlying attributes of individuals that leads to effective and/or superior performance in a job.

It is clear that definitions of competence have thus become synonymous in causing further confusion between competence and performance (Watson et al., 2002). For instance Worth-Butler et al. (1994) and Norman et al. (2000) suggest that concepts of performance and competence are inseparable, while Eraut (1994) and Gonczi et al. (1993) have different perspectives and are convinced that competence integrates attributes with performance. These issues are further discussed in the next sections.

2.4 Conceptualizing competence

Gonczi et al. (1994) describe three ways of conceptualizing competence.

- a behaviourist- or specific task-approach, which depends upon observation or performance for evidence;
- an attribute- or generic skills-approach and general attributes that are crucial to effective performance, which relies on generic competence being instilled in practitioners; and
- an integrated- or task attribute-approach.

Another model of competence with a different focus has been developed for the medical profession by Eraut and Boulay (2001). This encompasses six key domains all of which also have direct relevance for nursing and midwifery:

- core values, which, they anticipate, will be learned largely through discussion, problem-solving exercises, workshops and practical experience;
- characteristics or salient expressions of these values which are likely to require at least some formal instruction in addition to opportunities for practice and formal feedback;
- integrative skills, or applications, of the values and characteristics, for which theory may be less important and the main approach to learning is acquiring experience in realistic settings;
- communicative competence, which they anticipated to be the least well defined area patient interaction zone;
- management competence, meaning teamwork, management and leadership skills; and
- judgement, according to whether they use a broad or narrow definition of competence, they will define judgement either as an advanced level of competence or as that area of expertise which goes beyond competence.

Juceviciene and Lepaite (2005) adopted a multidisciplinary approach to the conceptualization of competence. They developed levels of professional activity and then combined these with Bowden's (1997) competence levels. From their perspective, competence is a hierarchical structural unity, because performance in different hierarchical levels demands different levels of competence:

- The *behaviour competence* is necessary for the operational work performance (the first level of activity); it has to satisfy the demands of the work place and it has to be formed of clearly stated constituent parts; so, more exactly, it is referred not to the competence, but to the separate competencies.
- The *added competence*, based not only on the behaviour, but also on certain knowledge, is necessary for work improvement (the second level of activity).
- *Integrated competence* is necessary for the change of the internal and external work conditions; it is based on the integrity of behaviour and knowledge that conditions the essential change of activity.
- The *holistic competence* is necessary for the new work development and the transfer of qualification to new situations; it is conditioned by holistic approach toward education.

However prior to the development of all of these models, Eraut (1994) argued that competence is not a descriptive but a normative concept. He proposed that competence cannot be generally defined but needs to take account of the context. Earlier still, Benner (1984) took this into consideration when she illustrated the developing nature of competence in qualified nurses. Benner tied competence into experience, as well as the context in which the experience is occurring. Judgements about the quality of work, on a continuum from being a novice, who is not yet competent in that particular task, to being an expert acknowledged by colleagues as having progressed well beyond the basic level of competence, is closely related to the context in which the nurse or midwife is practising. Eraut (1998) claimed that this merely reduces the concept of competence to one of the attributes of performance.

Eraut's views are supported by Worth-Butler et al (1994) who argue that while there are many models which conceptualize competence, ensuring such models are of practical relevance especially in midwifery is more difficult. In their view the most appropriate models of competence conceptualize competent professionals as people who have learned an adequate overarching set of skills and knowledge to do their job satisfactorily. They further acknowledge that the concept of a competent midwife, itself is not simple and involves interaction of different skills, abilities and knowledge in a wide variety of different situations.

It is with these doubts in mind that we now turn to how competence has been assessed in the literature.

2.5 Assessment of competence

A number of articles dealing with the development and use of clinical skills were of relevance although most were not research based. A literature review on assessment of competence in nursing carried out by Robb et al (2002) highlighted that while there were many tools available for assessing competence, none of them had been derived from research whose findings were generalizable to the nursing population as a whole. Those of particular relevance to both nursing and midwifery in Europe are critiqued below.

Cox et al (1998) described the development of a skills manual to be used within the Common Foundation Programme of a Higher Education Diploma in Nursing. The assessment scheme of Bondy (1984) is used to assess the skills listed within the manual and has been found to be useful not only in assessment, but also in the identification of learning opportunities by qualified staff and clarification of necessary skills to be learned for the student. However, it is unclear as to how the skills included in the manual were identified. Woolley et al (1998) developed a clinical performance manual that focuses not only on the acquisition of practical skills, but also on other aspects of nurse performance. Various assessment strategies are included within it. Although the authors indicate that their work was based on the work of del Bueno (1983 & 1990), it is again unclear exactly how the various components of the clinical performance manual have been identified. Despite these criticisms, the use of a clinical performance manual is an interesting means of not only assessing the competence of the student, but also of assisting the student to identify appropriate learning opportunities in clinical placements.

Over forty years ago Smith and Kendall (1963) constructed evaluative rating skills anchored by examples of expected nurse behaviours identified by head nurses in the United States of America. To begin with, groups of head nurses were asked to identify qualities common to registered nurses before formulating general statements representing definitions of high, low and acceptable performance for each quality. The groups were then asked to submit examples of behaviour in each quality, and these were edited into an expectation of specific behaviour. Further groups indicated independently what quality was illustrated by each example. Where there was a lack of consistency in allocation of examples to qualities, that quality was eliminated. Finally rating scales were formed for the remaining qualities with a scale developed from the definitions of high, low and acceptable performance. This was a thorough piece of research and they produced an effective tool for that time. Although the role of the nurse has changed from that time this tool could still be a very valuable approach to ascertaining competencies throughout Europe.

The importance of Smith and Kendall's pioneering work has been acknowledged in other areas of work with Fogli et al (1970) applying it to develop job criteria in a completely different

setting: that of the grocery trade. The method was again employed in nursing by Dunn (1986) to develop a tool that could be used to measure and record the development of skills by student nurses in a variety of clinical areas used in a training programme in England. The examples given indicate that the tool is useable, but the data in Dunn's study does not seem to be saturated, as the tool includes a "miscellaneous" group. If care is taken to ensure that the data is saturated, the method used by Smith and Kendall (1963), Fogli et al (1971) and Dunn (1986) offers the researcher a useful method for developing a tool to assess clinical competence in both nursing and midwifery for use in the early part of the twenty-first century.

Other methods of assessment tool development were found in the literature. It is interesting to note that some of the steps followed by the authors discussed below are very similar to steps utilized by Smith and Kendall (1963). Schwirian (1978) developed a tool to evaluate the performance of nurses who had been qualified for one to two years. She used concepts and measures identified in a literature review, materials and instruments shared by other researchers and educators, and operational definitions of both "effective nursing performance" and "a successful nurse" obtained from directors of basic schools of nursing in the United States of America. Obtaining statements which define effective nursing performance reflects Smith and Kendall's attempt to anchor rating scales with examples of expected nurse performance. An effective tool for the self/peer/supervisors' assessment of nurses from qualification up to the point that two years of practice as a qualified nurse was obtained. The nurse's role has continued to develop, so it would have to be updated for use at this time using a similar approach.

O'Connor et al (1999) also focused on developing a tool to monitor the progress of newly qualified nurses during the first year after qualification in England. They used a reactive Delphi technique (McKenna 1996), in which respondents were asked to "react" to material prepared previously rather than them generating lists of items. This technique was used with a group of senior nurses who were asked to consult on an initial list of competence statements, which the authors identified as being developed by the English National Board for Nursing, Midwifery and Health Visiting (ENB). However, the authors fail to reference the source of these statements. This method asks respondents to respond to previously prepared material, in this case the ten ENB key characteristics of a registered nurse, rather than to generate lists of items as in the research discussed above. The group of senior nurses used the material from the ENB to devise statements which would form a framework for assessing the competence of nurses on qualification and then at intervals during their first year of practice. These statements were then reviewed by a larger number of senior nurses in practice, who were also asked to indicate the expected level of performance at the point of qualification, at eight weeks following qualification and then at one year post-qualification using a Likert scale. The pilot study gave some indication that the tool is valid and reliable; a larger full-scale study is at present in progress.

Gorham (1962) used a critical incident technique to identify staff nursing behaviours that contribute to patient care. His research was carried out in the United States of America. General staff nurses, station (ward) supervisors, nursing office supervisors, physicians and patients participated in the identification of critical incidents. These were categorized on the basis of the behaviours involved in the incidents. The categories identified formed the basis of a number of different tools for the assessment of staff nurse performance (Gorham, 1963), but none of these would be applicable today. However, the use of a critical incident technique offers the potential to researchers and educators for the characterization of roles and then for the development of a variety of types of assessment tool. This method would also be applicable in the assessment of nursing or midwifery students' performance at different levels of their educational programmes.

Although they did not develop an assessment tool, the work of Khoza and Ehlers (1998) in South Africa is relevant to this literature review, as they focused on how the competencies of newly qualified nurses were viewed by senior professional nurses. They developed a questionnaire from the information gathered in a literature review on the competencies of newly qualified nurses and surveyed almost four hundred senior professional nurses. The results of the questionnaire are interesting as this group identified a number of deficits in the skills of the newly qualified nurse. This concurs with the findings of the Peach Report (UKCC, 1999).

Bramadat et al (1996) also focused on what is required of a new graduate, but specifically those entering community nursing practice in Canada; thus their work has direct relevance to Europe where the emphasis is moving towards community-based practice. They also explored how students could be better prepared for practice in this area. A semi-structured interview guide was developed to guide focus group discussions with community health nurses at staff nurse-level, administrators and educators. The results are concurrent with the results of the other studies exploring the skills necessary for newly qualified nurses. The authors did not go on to develop an assessment tool, as the intention had been to inform the content of nursing education programmes.

Fitzpatrick et al (1997) developed a detailed scale for the assessment of nursing students by synthesis of material obtained from the Slater Nursing Competencies Rating Scale (Slater 1967), the literature and expert opinion. The scale was tested in three separate institutions in the south-east of England. However, the authors acknowledge that particular skills are required for effective use of the scale, thereby rendering it less useful in the practice setting.

Girot (1993) used an entirely different approach to research the issue of competence in clinical practice. She adopted a phenomenological approach to explore what the concept of competency meant to ward sisters and how they viewed the competence of student nurses. Although the analysis of the data stopped at the level of a thematic analysis, she identified four major themes: trust, caring, communication skills and knowledge/adaptability. The ward sisters considered that these four areas were representative of competence. Some insight was gained into the expectations that the ward sisters had of students at different stages of the programme. Further data collection and a deeper phenomenological analysis would have provided greater insight into the issues explored. This in turn could inform the discussion on assessment of nursing students' performance.

A study carried out by Fleming et al (2001) moved beyond the development of tools to assess competence to their utilization. It compared the competencies of midwives in Scotland who qualified either by direct-entry or after achieving a nursing qualification used a tool developed by a local maternity hospital to assess competence. The authors concluded however, that the skills' inventory used was limited, as it was originally designed for experienced midwives' use, while for the purposes of their study it had to be used also for newly qualified midwives. Additionally, it tended to focus solely on psychomotor skills whereas as discussed above, skills need to extend beyond this domain.

Likewise the study by Persad et al (1997) addressed the issue of competence through participants reporting their own skills in abnormal situations such as managing a twin birth, suturing a perineum or siting an IV infusion by choosing an option in a given checklist from unwilling to very competent. Because unwilling does not necessarily mean incompetent, there were immediate concerns about the validity of the scale utilized in this study. However, it is noteworthy that this article also focuses solely on psychomotor skills.

2.6 Chapter conclusion

The overarching emphasis of the WHO European Strategy for Nursing and Midwifery Education is upon competence. This literature review has shown that while there is a considerable body of nursing literature and a lesser one of midwifery literature on the topic there is still neither a clear definition of competence that can be used as a guiding principle nor a tool which can be used to assess competence across various settings. This dilemma has been experienced by the Expert Group who in the Strategy (WHO, 2001a) who did not define the term. Instead they used the term “competency”, which they defined as, “a broad composite statement, derived from nursing and midwifery practice, which describe a framework of skills reflecting knowledge, attitudes and psychomotor elements” (WHO 2001a).

It is this definition that underpins the data analysis in this study. The next chapter considers the methods used in this study.

3 Methods

3.1 Study design

In order to fulfil the aims of this study a descriptive survey design using a prospective analysis methodology (PAM)⁵ was used. This methodology was first adopted by the World Health Organization during an inter-regional workshop for nurses (WHO, 1989). It involves the development of a set of principles in relation to which respondents are asked to rate their own positions. In essence it is almost identical to a self reporting questionnaire, a research tool which is often the method adopted in survey research (Parahoo, 1997). Thus for the purposes of this report the word “questionnaire” and “question” will be used when referring to the data collection tool and “principles” when discussing the achievements of the respondent countries.

The questionnaire comprising twenty-six major principles (annex 1) three of which had sub-principles, was designed by an expert group acting as consultants to WHO Regional Office for Europe in midwifery and nursing education (WHO, 2000a p. 3) drawn from nursing and consumer organizations from throughout Europe. The expert group’s presentation of “the fundamental principles which must guide the initial education of nurses and midwives throughout the region, so that they will be competent” was significantly revised following an extensive consultation process with key stakeholders (WHO, 2001a, p. ii). The final questionnaires for nursing and for midwifery were almost identical with only one question, number 10⁶, differing between the two disciplines.

The questionnaire comprised three parts:

1. Part one consisted of a series of principles based upon each of the fundamental principles of the initial preparation of nurses and midwives. Respondents were asked to make forced choice responses, ticking either “yes” (meaning that the principle has already been achieved in the country) or “no” (indicating that it is not yet achieved) in response to each principle. If a “no” response was recorded, respondents were asked to state if moderate change required to be implemented or if major change required to be implemented.
2. Part two asked respondents to summarize responses to part one but provided no new information.
3. Part three asked respondents to elaborate on responses in part one to which they had replied “no” and list the step-by-step changes needed, stating who would be involved in and given the responsibility to make the changes, and the time scale involved. Respondents were also asked to provide any further information of relevance to the question which was not covered by the forced choice responses.

For the purposes of this report, parts one and three are discussed, but part two, which simply provides an easy to read summery, is not referred to further.

⁵ The reader is cautioned that in many of the respondent countries this study has simply become known as the PAM study.

⁶ Qualification as a midwife may be achieved either via a programme based on prior qualification as a nurse or via direct-entry programme.

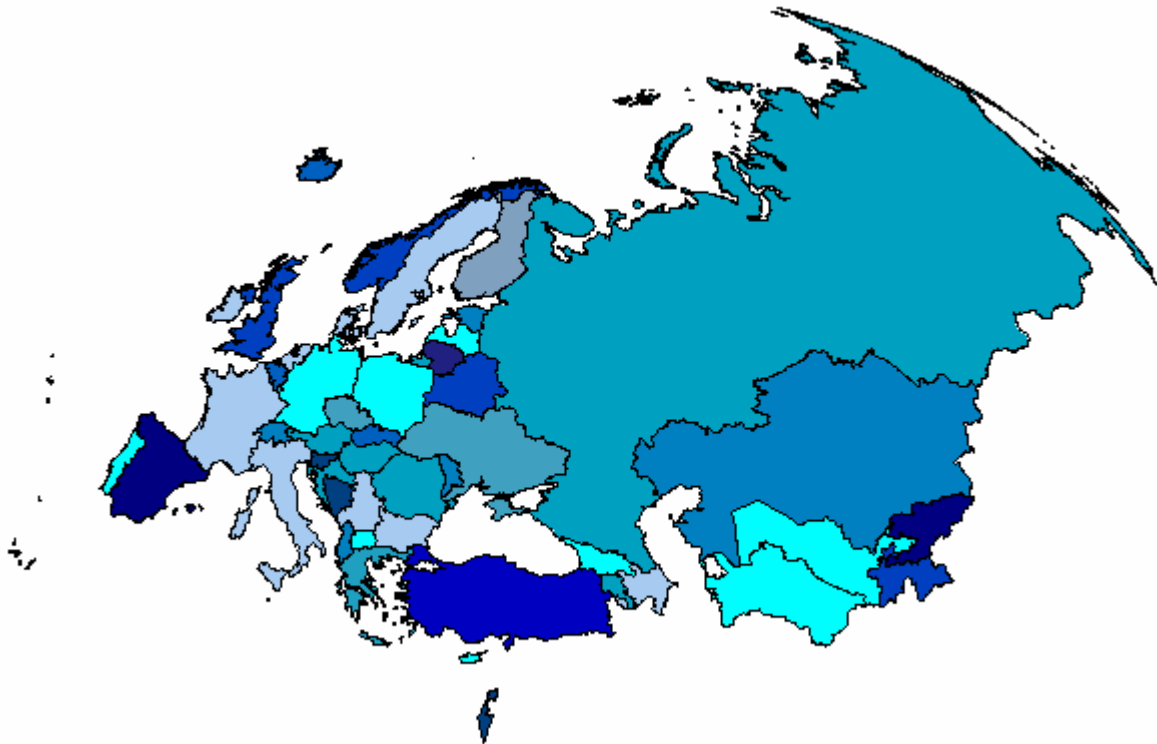
3.2 Approval

The study was approved by the WHO Regional Office for Europe. It was not required to be submitted to any ethics committees as it did not involve data relating to patients. Consent to participate was assumed by the completion of the questionnaire. All data collected was treated in confidence, being handled only by the WHO team involved. Data was stored in locked filing cabinets and non-networked computers. On completion of the project hard copies of raw data were retained at the WHO Regional Office for Europe.

3.3 Sample

The population of this study was the Chief Nursing Officers of each of the 52 countries with representation at the World Health Organization European Region. The Region spreads from Greenland in the north-west to the Pacific coast of the Russian Federation in the east and Cyprus in the south and includes Israel.

Fig 3.1 World Health Organization European Region



The sample was a census of the entire population, with questionnaires being sent to each Chief Nursing Officer in the 52 Member States. These were initially sent from the WHO Regional Office for Europe in Copenhagen in early 2001. Where Member States had a Chief Nursing Officer these were personally addressed to the current holder of that office, but where there was no one holding this office they were instead sent to the Minister of Health. As no Member States had senior midwifery representative at government level, Chief Nursing Officers or Ministers of Health were sent both questionnaires.

3.4 Data collection

The questionnaires were sent by the WHO Regional Adviser of the Nursing and Midwifery Programme with a covering letter referring back to the Strategy. Respondents were reminded that as part of the Strategy, they should set up their own country implementation group for the Strategy. It was recommended that these groups should include:

key representatives from policy making at ministerial level, from nursing and midwifery education, from hospital and primary care management and practice, from other health care professions, and from patients and other interested lay people (WHO, 2001a, p. 1–2).

The inclusion of as wide a group as possible would ensure a broader perspective of the two professions could be reached not only in completing this study but also in the further development of nursing and midwifery.

It was pointed out that completion of the questionnaire was an important first step in the consultative process, as it would enable respondents to identify areas where action has to be taken in order to implement the Strategy and the likely timescale necessary to achieve the required changes. Its completion would also enable the WHO Regional Office for Europe to identify countries' need for support. Additionally, it would begin to provide a baseline profile of nursing and midwifery education in the Region, and over time, will show progress towards implementation of the Strategy.

Instructions for the completion of the questionnaires were included in the first two pages of the bound document in which it was clearly stated that the questionnaire should be completed annually. The instructions also warned that the initial completion would be time consuming but essential if future progress was to be measured accurately. They further included the request for separate questionnaires to be completed for each of the two disciplines of midwifery and nursing in each country as they were possibly at different stages of their development.

Prospective respondents were advised that in the preparation of this report confidentiality would be preserved. Each country has thus been allocated a unique ID number of which it has been informed so that it can compare its own position with that of others should it wish.

Questionnaires were sent by post in early 2001, with a covering letter asking for their completion and return to the WHO Regional Office for Europe by May 2001. One reminder letter was sent to those countries which did not complete the analysis. In 2002 and 2003 this process was repeated.

3.5 Data analysis

As this study utilized both quantitative and qualitative approaches, appropriate databases for the analysis of the different parts were used. Completed data for part one were entered into the Statistical Package for Social Sciences version 12 database so that appropriate statistical tests could be carried out in relation to each return and various comparisons made between returns. Quantitative comparisons were drawn between nursing and midwifery and between first and subsequent returns where these were available.

To enable more detailed comparisons to be drawn between countries' responses, after entering all data into the database, countries were labelled in two different ways. First, those that were

located in former western and former eastern Europe were identified and comparisons made between the two groups. Second, those countries that were in the EU at the time of data collection were made into one group; those that were at that stage accessing the EU (now member states of the EU), formed a second; and those who remain out of the EU formed the third group.

In part three where respondents were asked to tick one or more relevant boxes and/or make additional comments, these were transcribed into tabular form so that qualitative comparisons could be drawn between countries or between different returns for the same country. It was also possible to make comparisons between nursing and midwifery within or between countries. Where responses were unique to one country these were noted for analysis purposes. Each question generated its own table as the options given were different for each question. It was thus not possible to make comparisons between the different questions. Some qualitative comparison has also been made utilizing the same groups as for the quantitative part of the work.

Links were made between the negative responses in part one and the reporting of whether “moderate” or “major” changes were required to be made. These were in turn linked to the responses made in part three, but no cross comparisons could be drawn because of the design of this study. Where these links have been included in the report is in comparisons between nursing and midwifery and first and subsequent returns.

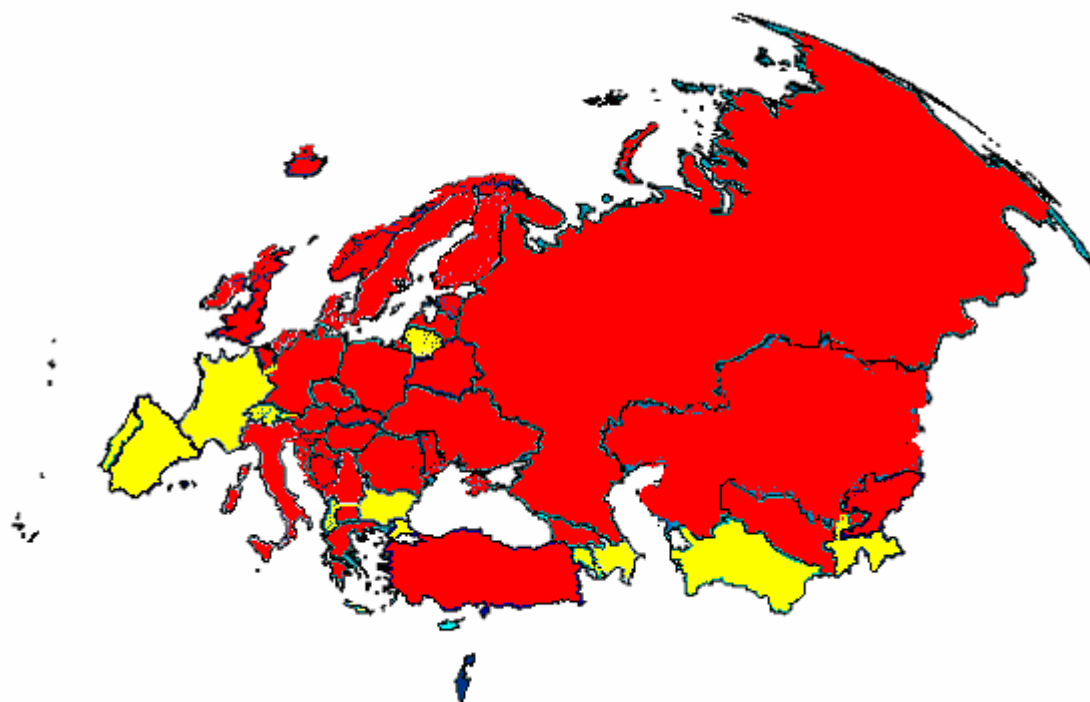
The next chapter introduces the data in its European context.

4 Introduction to data

4.1 Sample

As reported in chapter three, the Prospective Analysis for Nursing and Midwifery Education (PAM) questionnaires were sent out to the Chief Nursing Officers or Ministers of Health of the 52 countries in the World Health Organization European Region. Of these 36 (69%) gave at least one response to the nursing and 35 (67%) to the midwifery questionnaire, responded on at least one occasion. Figure 4.1 provides a visual overview of these responses. All responses received were legible and all data able to be utilized for analysis. Some countries which marked negative responses to section one did not however always complete the accompanying section three. Other countries simply ticked all actions in part three as requiring years and months to achieve. One country completed part three for all questions even those to which it had responded positively in section one.

Figure 4.1: A visual overview of responses



Red = countries which returned the questionnaire.
Yellow = countries which did not return the questionnaire.

Although by standards of postal questionnaires, the above represents a reasonable return rate (Parahoo, 1997), it is important to acknowledge that following the first request for completion of the questionnaire in 2001, only 11 countries returned nursing questionnaires and 10 midwifery the same year. In 2002 4 countries filed first returns for both nursing and midwifery and in 2003 15 returned both nursing and midwifery. Finally in 2004 6 returned both nursing and midwifery questionnaires for the first time. The research team made the decision to make comparisons between first responses therefore regardless of whether these were received in 2001 or 2004 as this was the only possible way of drawing comparisons between countries.

The nursing questionnaire for two different years was completed by 10 countries, and 7 completed the midwifery questionnaire for two different years. This enabled comparisons to be made between their answers from their first and second returns. In some cases where no responses had been received by the WHO Regional Office for Europe, nurse and midwives were approached directly by a WHO Collaborating Centre, and responses were given by them. In total 32 countries returned at least one nursing and 31 one midwifery questionnaire to the WHO Regional Office for Europe, and 4 countries responded to the requests from Collaborating Centres with both questionnaires completed. Table 4.1 shows the breakdown of countries which responded on at least one occasion.

Table 4.1 Response of Member States to the questionnaire

Country Name	Eastern or western Europe	EU member prior or post-2004	Questionnaire returned		Returned to WHO or Collaborating Centre (CC)	Year returned
			Nursing	Midwifery		
Austria	Western	Prior	Y	Y	WHO	2003
Belarus	Eastern	No	Y	Y	WHO	2004
Belgium	Western	Prior	Y	Y	WHO	2003
Bosnia and Herzegovina	Eastern	No	Y	Y	WHO	2003
Croatia	Eastern	No	Y	Y	WHO	2002, 2003 (Nursing only)
Czech Republic	Eastern	Post	Y	Y	WHO	2001
Denmark	Western	Prior	Y	Y	WHO	2003
Estonia	Eastern	Post	Y	Y	WHO	2003
Finland	Western	Prior	Y	Y	CC	2004
Georgia	Eastern	No	Y	Y	WHO	2002, 2003 (Nursing only)
Germany	Western/Eastern	Prior	Y	Y	WHO	2002
Greece	Western	Prior	Y	Y	WHO	2001, 2003
Hungary	Eastern	Post	Y	Y	WHO	2001, 2004
Iceland	Western	No	Y	Y	WHO	2003
Ireland	Western	Prior	Y	Y	WHO	2003
Italy	Western	Prior	Y	Y	CC	2004
Kazakhstan	Eastern	No	Y	Y	WHO	2003
Kyrgyzstan	Eastern	No	Y		WHO	2001
Latvia	Eastern	Post	Y	Y	WHO	2001, 2003
Malta	Western	Post	Y	Y	WHO	2003
Netherlands	Western	Prior	Y	Y	WHO	2001, 2003
Norway	Western	No	Y	Y	WHO	2001
Poland	Eastern	Post	Y	Y	WHO	2001, 2003
Republic of Moldova	Eastern	No	Y	Y	WHO	2002
Romania	Eastern	No	Y	Y	WHO	2002 (Nursing only), 2003
Russian Federation	Eastern	No	Y	Y	CC	2004
Serbia and Montenegro	Eastern	No	Y	Y	WHO	2003
Slovakia	Eastern	Post	Y	Y	WHO	2001, 2003
Slovenia	Eastern	Post	Y	Y	WHO	2001, 2003
Sweden	Western	Prior	Y	Y	WHO	2003
Switzerland	Western	No	Y	Y	WHO	2003
The former Yugoslav Republic of Macedonia	Eastern	No	Y	Y	WHO	2003
Turkey	Western	No	Y	Y	WHO	2003
Ukraine	Eastern	No	Y	Y	WHO	2004
United Kingdom	Western	Prior	Y	Y	CC	2004
Uzbekistan	Eastern	No	Y	Y	WHO	2003

As stated in chapter one, one aim was for each country to respond to the questionnaire annually in order to review the progress of that country over the three years of the study. However because only 10 countries returned two nursing questionnaires and 7 two midwifery questionnaires, this has only been analyzed in a limited way.

In reviewing the returned questionnaires the percentages returned reflected a fairly even split between eastern and western Europe. It is noteworthy that the three smallest countries in the region, Andorra, Monaco and San Marino, did not return questionnaires. There are no Chief Nursing Officers in any of these countries. The United Kingdom did not return the questionnaires to the WHO Regional Office for Europe. This may have been due to the fact that while the United Kingdom as a whole is one member of the United Nations, the political responsibility for health is devolved to each of its four member countries. Each of these have their own Chief Nursing Officers, and there is no post of Chief Nursing Officer for the United Kingdom. Their return was therefore achieved through a WHO Collaborating Centre, as was Finland's, Russia's and Italy's.

The spread of responses reflect a willingness to share successes as well as to ask for help where this is perceived as needed. However in none of the completed returns is it clear exactly who had completed the questionnaires, although it is suggested in the Strategy (WHO, 2001a p. 13) that, "the possibility of patient input should be included in the analysis team".

The next chapter presents and discusses the nursing data and the subsequent chapter does the same for midwifery. In each of these a general description of responses has been carried out before a more detailed analysis is presented of each of the main areas of the questionnaire outlined in chapter three: legislation, consumer input, curriculum, entry to and exit from the programmes, quality of institutional processes and qualifications of teaching staff.

5 Nursing findings

This chapter considers both the qualitative and quantitative data received for all nursing returns. It first offers a general description of all responses and then includes a commentary on specific relevant points and links these to the literature. Tables were produced to display the data obtained and graphs were formed from this data. These are inserted into each relevant section in this and the following chapter to provide readers with an instant reference to key results.

5.1 General description of responses

As shown in table 5.1 below, 36 countries answered the nursing questionnaire; this meant that in total 1440 questions were asked in section one, of which 1412 were answered and 28 omitted. The mean number (\bar{x}) of questions answered per country was 39.11. Nine hundred and twenty-nine questions were answered “yes” (65.8%, $\bar{x} = 25.8$ per country), 244 answered “no” (17.3%, $\bar{x} = 6.7$), 25 answered “yes and no” (1.8%, $\bar{x} = 0.69$) and 210 answered “not applicable” (14.91%, $\bar{x} = 5.83$). This shows that the majority of answers were “yes” and the principles had already been achieved by the majority of countries. For the purposes of the study, the responses were first of all considered as a whole. The countries were then separated into two differing sets for the purpose of analysis:

1. Western Europe (n = 16, 44.4% of total returns, 67% of population) and eastern Europe (n = 21, 58%, 75% of population). One country embraced both east and west.
2. EU member states prior to 2004 (n= 11, 30.5% of total returns, 73% of population), post-2004 (n = 8, 22%, 80%) or non-EU members (n = 17, 47.5%, 63%).

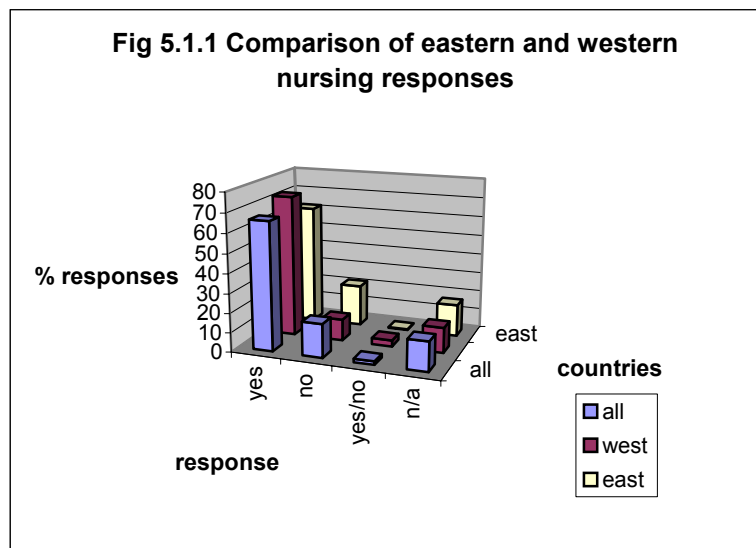
Table 5.1 shows for nursing the total number of questions asked, the number of countries responding and the breakdown of the total number of “yes”, “no”, “yes and no”, “not applicable” and “missing” responses for each question. It therefore can be seen at a glance that the majority of questions were answered “yes”. It is also worthy of note that only 32 questions out of the 1440 asked were not answered.

Table 5.1 Frequencies of Nursing Answers for all Countries

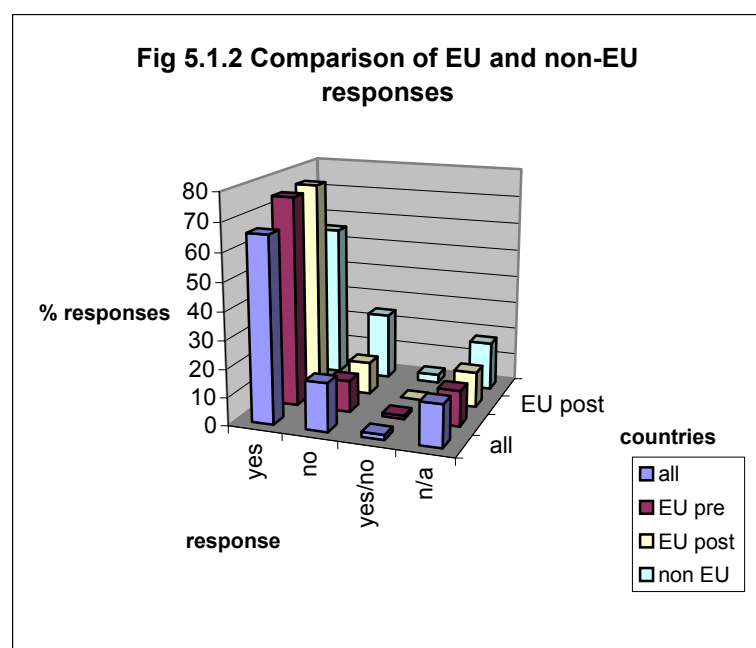
Question Number	Yes	No	Yes and No	Not applicable	Missing
1	31	5	0	0	0
2	31	5	0	0	0
3	24	12	0	0	0
4	30	6	0	0	0
5	25	11	0	0	0
6	24	10	2	0	0
7	32	3	1	0	0
8	33	2	1	0	0
9	35	1	0	0	0
10	0	0	0	36	0
11	21	13	1	0	1
12	21	14	1	0	0
13a	25	11	0	0	0
13b	28	6	1	0	1
14	32	3	1	0	0
15	31	3	1	0	1
16	31	4	1	0	0
17	25	10	0	0	1
18	26	7	2	0	1
19	25	8	2	0	1
20	17	17	1	0	1
21	24	10	2	0	0
22a	22	7	2	4	1
22b	24	7	1	4	0
22c	28	1	1	4	2
22d	25	5	1	4	1
22e	26	5	1	4	0
22f	19	13	0	4	0
22g	25	7	0	4	0
22h	27	4	0	4	1
22i	1	2	0	32	1
22j	3	1	0	32	0
23a	24	4	0	6	2
23b	20	6	0	6	4
23c	23	1	0	6	6
23d	2	2	0	30	2
23e	4	1	0	30	1
24	28	6	0	0	2
25	31	3	1	0	1
26	26	8	1	0	1
TOTAL	929	244	25	210	32

Number of countries = 36
1408 questions out of 1440 (therefore 32 not answered)

When subdivided into western and eastern Europe, 15 countries in western Europe submitted returns. Out of 600 questions, 587 ($\bar{x} = 39$) were answered, of which 427 (72.74%, $\bar{x} = 28.3$) were “yes”, 65 (11.07%, $\bar{x} = 4.3$) “no”, 19 (3.24%, $\bar{x} = 1.3$) “yes and no” and 76 (12.95%, $\bar{x} = 5.1$) “not applicable”. In eastern Europe 20 responses were received with 780 ($\bar{x} = 39$) question out of a possible 800 being answered. Four hundred and eighty-one (61.67%, $\bar{x} = 24.05$) gave a “yes” response, 167 (21.41%, $\bar{x} = 8.35$) a “no” response, 3 (0.38%, $\bar{x} = 0.15$) a “yes/no” response and 129 (16.54%, $\bar{x} = 6.45$) a “not applicable” response.



Taking into consideration membership of the European Union, 11 countries which were members prior to 2004 submitted returns. Out of 440 questions, 435 ($\bar{x} = 39.5$) were answered, of which 325 (74.7%, $\bar{x} = 29.5$) were answered “yes”, 50 (11.4%, $\bar{x} = 4.5$) answered “no”, 5 (1.2%, $\bar{x} = 0.45$) answered “yes and no” and 55 (12.7%, $\bar{x} = 5$) answered “not applicable”. Eight countries which became members in 2004 submitted returns. Out of 320 questions, 316 ($\bar{x} = 39.5$) were answered, of which 239 (75.6%, $\bar{x} = 29.87$) were answered “yes”, 37 (11.7%, $\bar{x} = 4.63$) were answered “no”, 0 (0%, $\bar{x} = 0$) were answered “yes and no” and 40 (12.7%, $\bar{x} = 5$) were answered “not applicable”. Of non-EU members 17 countries responded. Out of 680 questions, 659 ($\bar{x} = 38.76$) were answered, of which 365 (55.4%, $\bar{x} = 21.47$) responses were “yes”, 159 (24.12%, $\bar{x} = 9.35$) responses were “no”, 20 (3.03%, $\bar{x} = 1.176$) responses were “yes and no” and 115 (17.45%, $\bar{x} = 6.76$) responses were “not applicable”.



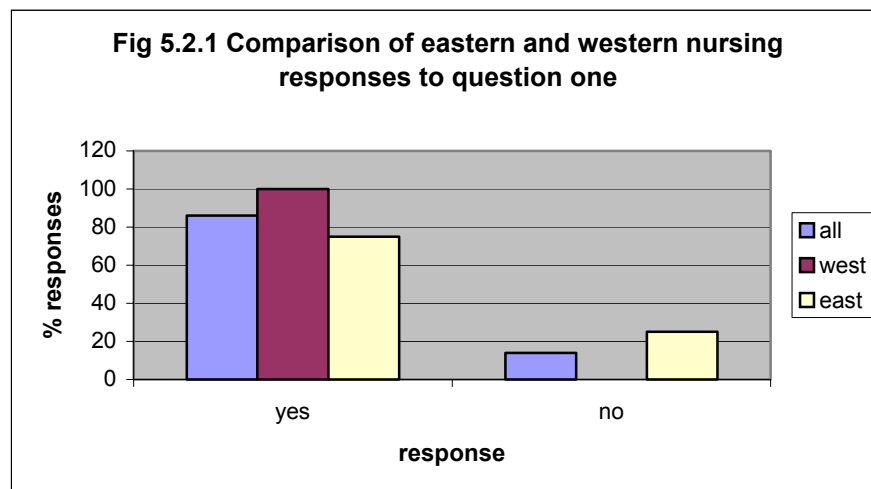
Ten countries (19.2% of total population) produced two returns of the questionnaire (Table 4.1). Due to this small return the overall results were unable to be compared. However, comparisons could be made between results for some of the individual questions although this was unable to

be statistically analysed. These comparisons are included in the discussion in the next sections of this chapter. The non-parametric statistical test of Pearson's Chi-square has been used in all cases with the significance level being set at 0.05.

5.2 Integration of qualitative and quantitative data for selected questions

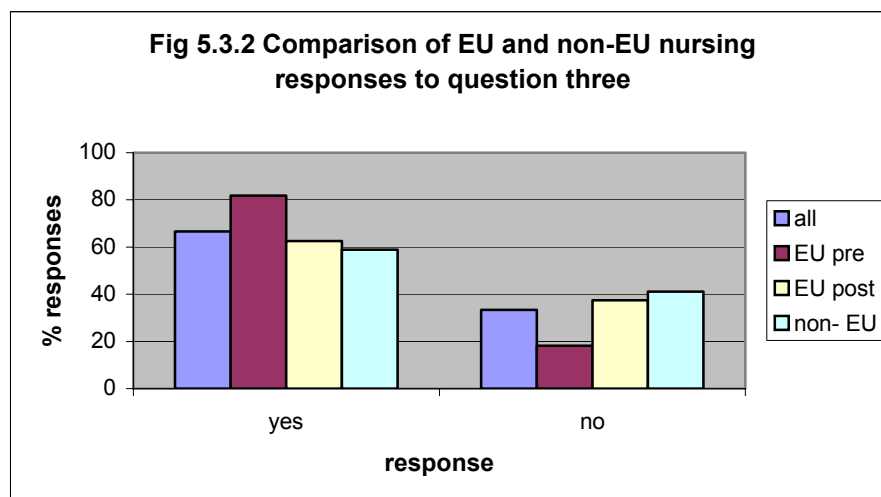
5.2.1 Legislation

Questions 1⁷ and 12⁸ (annex 2) refer to legislation within the countries. The topic of free movement between member states of the European Union has brought this to the forefront of literature on the topic (Keighley, 2003 a & b, Scottish Office, 1995). However there is a scarcity of academic literature concerning countries that remain outside of the European Union. Instead such publications as those from Salvage & Heijen (1997) and the WHO (2002) give some valuable insights. Specific responses to this question indicated that from all responses 31 (86.11%) responded in the affirmative with 5 (13.89%) replying in the negative. When broken down into western and eastern Europe, western Europe had 15 (100%) positive responses and eastern Europe had 5 (20%) negative responses. In the EU 11 (100%) countries that were members prior to 2004 and 8 (100%) of countries which joined in 2004 also had positive responses. Of non-member states 5 returns (29.41%) responded negatively. In view of the paucity of literature it is very encouraging that, as demonstrated by response to question 1⁷, nursing is enshrined in the legislation of all but five of the respondent countries, all of which are in eastern Europe and currently non-members of the European Union.



⁷ Nursing is an integral part of the essential legislative and regulatory framework for the health care professions in our country.

⁸ There is only one level of qualified nurse in our country (i.e. one level of basic nursing).



Of the countries which returned a negative response to this question, country eleven stated that to enshrine nursing within their legislation would take up to three years to achieve. This situation had not appeared to change when they filed a second return in 2002. In contrast country twenty-five suggested in 2001 all aspects of this principle could be achieved within months. By the time of this country's second return in 2003 the principle was being achieved. Other countries which said they were not achieving this principle did not propose an action plan.

The high level of positive responses suggests that for most respondents nursing is regulated by the central government and its practitioners are subject to a code of practice. However there may be some ambiguity within the question as certain countries which responded in the affirmative do not have a central body which records qualifications and protects the title of nurse. For example although 100% of countries in western Europe responded positively, nurses in Germany are currently fighting to establish a central nursing council.

One third of respondents indicated that they had more than one level of qualified nurse in their countries. Not all however described this as problematic, country five specifically commenting that there was no need to change the current situation. Likewise several countries in eastern Europe which had made changes to nursing education by introducing higher education as a preparation for nursing practice still also retained the secondary school system (section 1.1). It is perhaps of note that not one of the eastern European countries responding negatively to this question suggested an action plan.

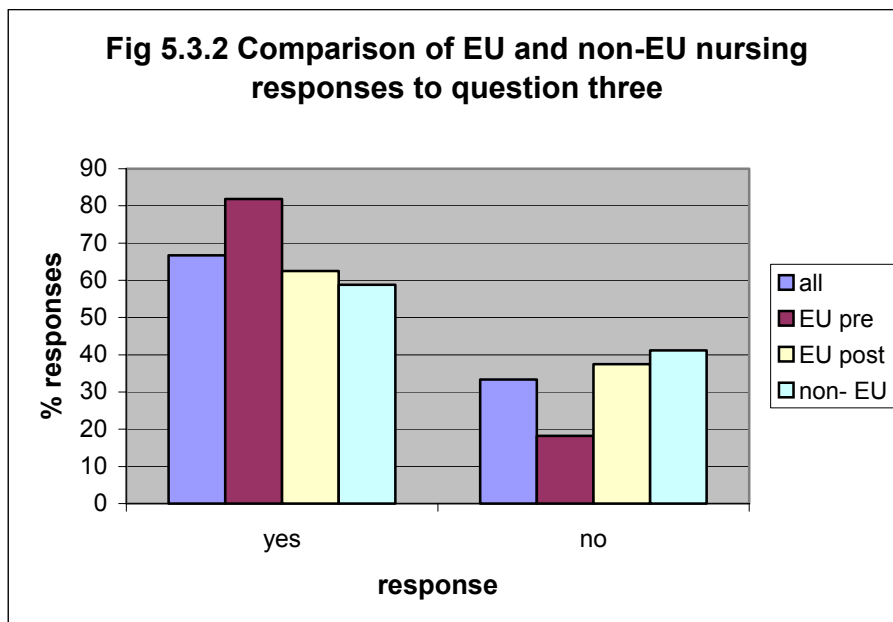
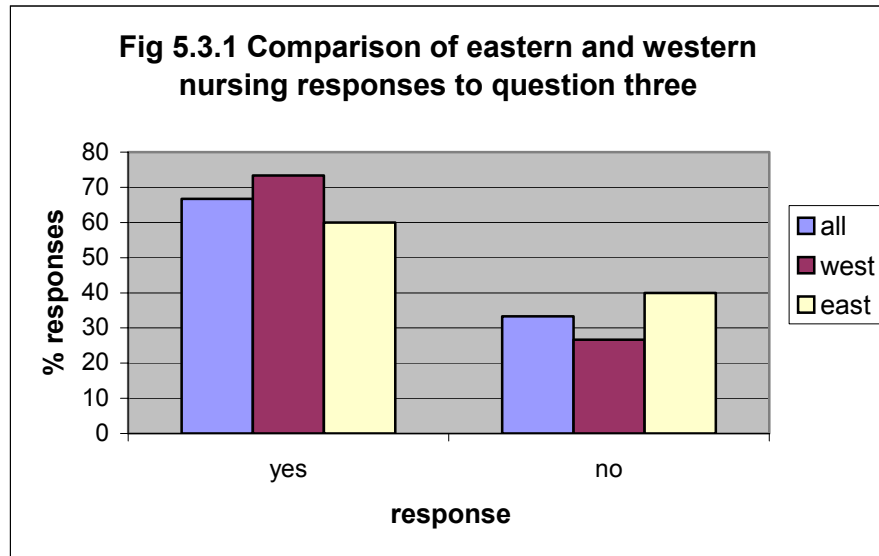
5.2.2 Consumer

Questions 2⁹ and 4¹⁰ (annex 3) focused on the centrality of the consumer to nursing education. While the nursing literature concerning the role of the consumer does not emphasize a partnership to the degree of the midwifery literature, the role of the consumer has been gaining prominence since the publication of the first nursing theories (Peplau, 1952). Smith and Thomas (2000) liken the increasing role of the consumer in health care to the banking industry of 30 years previously where, due to the inclusion of consumer representatives, various groups began

⁹ Nursing education and practice are underpinned by values focusing on the promotion and maintenance of health in individuals, families and communities and on individual and holistic care of those who are ill. It promotes non-judgemental care that is sensitive to the social, cultural, economic and political context of our country.

¹⁰ Nursing education has the individual, be it the patient or the healthy person, as its main focus, and takes into account the significance of contexts within which those individuals live and work, including their families, partners, social groups and communities.

to change ideas. The inclusion of consumers in the expert group, which initially drafted the principles, reflects their importance. The high proportion of affirmative responses to questions 2⁸ and 4⁹ indicated that the consumer was central, but responses to question 3¹¹ were much more evenly split between “yes” and “no” with 24 (67%) responding “yes” and 12 (33%) responding “no”. When broken down into western and eastern Europe 4 (26.7%) western countries gave a negative response, while 8 (40%) of those in the east responded negatively (p = 0.549). Within the EU 2 (18.2%) pre-2004 members and 3 (37.5%) of the new members responded negatively, while of those still remaining outside of the EU this rises to seven (41.2%) (p = 0.632).



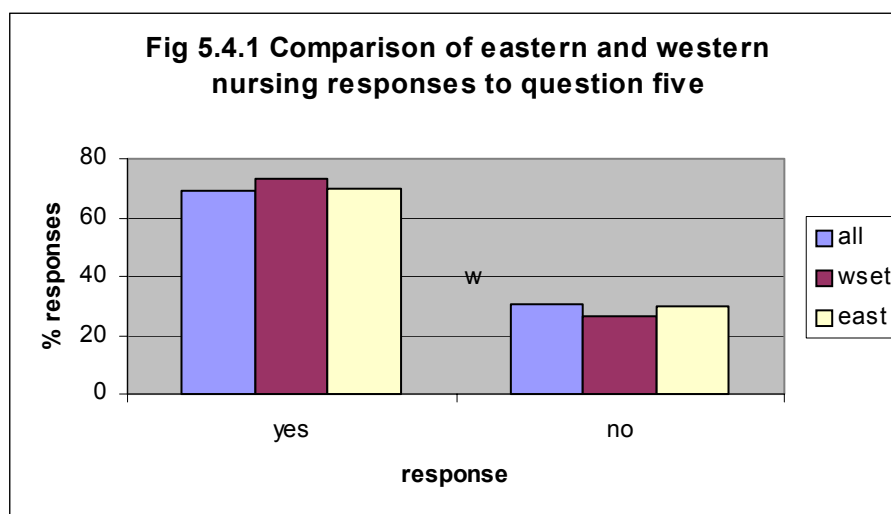
It was encouraging to note that four countries which filed two returns, countries thirty, twelve, twenty-five and thirty-one changed from a “no” to a “yes” response in the second return. In the case of country thirty-one a lot of work must have been done to achieve this as in the first return a time scale of three years had originally been suggested as being required. In looking at section

¹¹ Nursing education takes into account the health care needs of the population of our country and is conducted to agreed standards for quality of care.

three for those countries the action plans that they outline suggests that the negative responses reflect the standards of care element of the question rather than the consumer focus as option (b) “use existing national quality standards of nursing care or if necessary obtain examples of quality standards” and (c) “take steps to incorporate these into the curriculum” were the most commonly ticked actions. The time scales suggested for achieving this principle varied from a few months to three years with most of the negative responses suggesting that two years would be required. Only one country (number seventeen) made an additional comment stating that more liaison would be required between the Departments of Health and Education for this principle to be achieved.

5.2.3 Curriculum

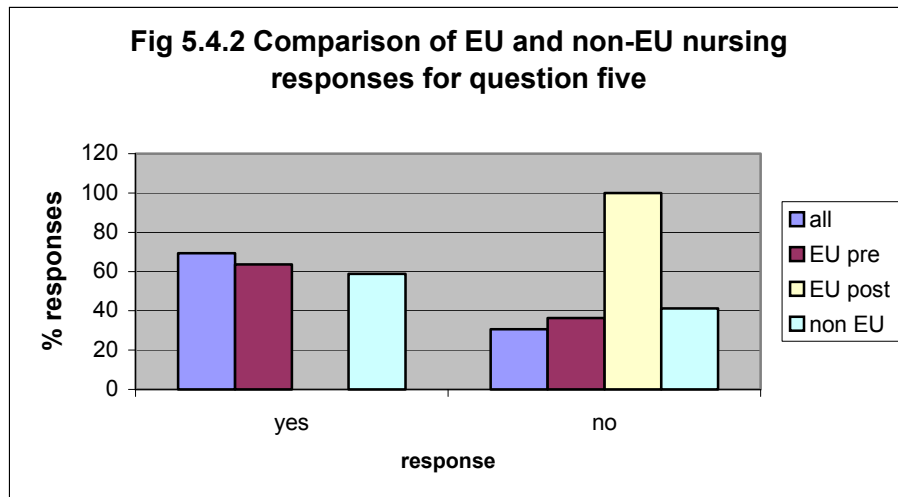
The issue of competency and research based curriculum was the focus of the literature review of this study where it was pointed out by Watson et al (2002) that competence is a nebulous concept which is defined in different ways by different people. It was also pointed out by While (1994) that there is an important distinction between the concepts of “competence” and “performance” which need to be taken into consideration when designing curricula. Questions 5¹², 13¹³ and 14¹⁴ (annex 4) had a large proportion of negative responses in the first returns. In both questions 5¹² and 13a¹³ this was 11 (30.6%). When subdivided into eastern and western Europe, for question 5 4 (26.7%) had negative responses in the west, 6 (30%) in the east (p = 0.304), EU members prior to 2004 4 (36.4%), post-2004 0 (0%), and for non-EU members this rose to 7 (41.2%) (p = 0.133).



¹² A proportion of nursing education is interdisciplinary and multiprofessional

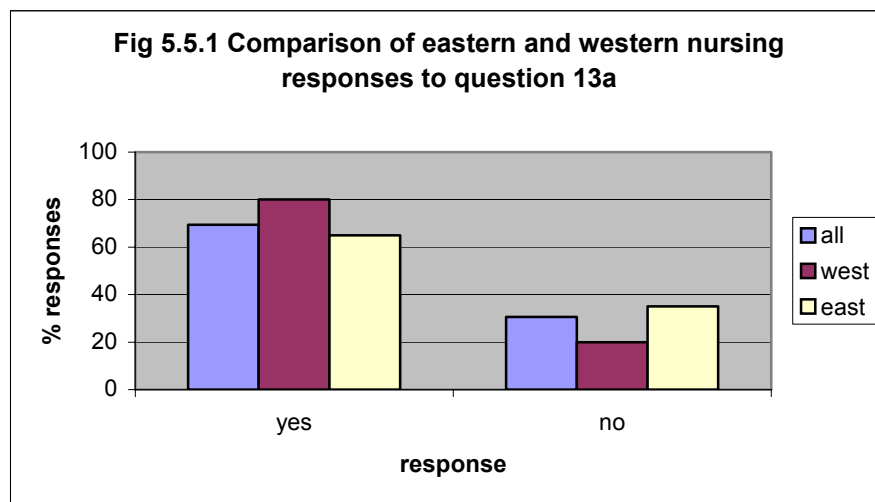
¹³ The curriculum is research-based/evidence-based. The curriculum is competency-based.

¹⁴ The specified competencies include the ability to practice in hospital and community settings and as a member of the multiprofessional health care team.

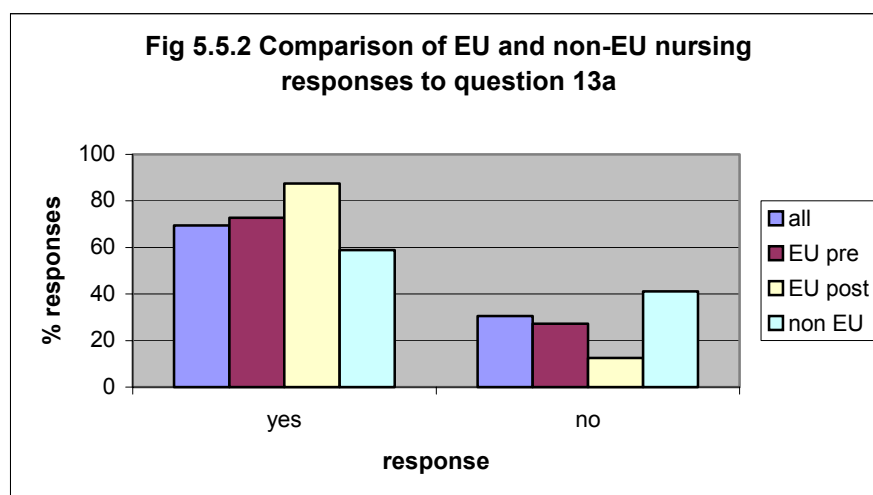


The action plans suggest an even distribution between the choices “a” and “c” although only country two and country eleven stated it was necessary to consult with interested professional groups. The response of country fourteen suggests that as a first step their nursing education laws would require amendment to bring general and children’s nursing together, while country twenty-four categorically stated that interdisciplinary education was not possible. Country three on the contrary suggested that collaboration and continuing support of the Ministries of Health and Education were necessary to achieve this principle.

In question 13a¹⁵ there were 3 (20%) negative responses¹⁵ in western Europe, 7 (35%) in eastern Europe (p = 0.197), EU members prior to 2004 3 (27.3%) post-2004 1 (12.5%) and for non-EU members this also rose to 7 (41.2%) (p = 0.377). Most countries which gave negative responses to this question required reviews to be made to the curriculum, with two respondents, countries twenty-seven and thirty-five indicating that this process would be expected to take up to five years.



¹⁵ The curriculum is research-based/evidence-based.



Countries twenty-five, thirty and thirty-one, all of which indicated lengthy periods of time to implement this principle in their first responses had achieved it by the time of their second responses. However, country twelve's first response in 2001 indicated that this principle had already been achieved but by the time of its second return in 2003 it was also indicating that five years would be required to meet this principle. This apparent change of policy may be a worrying trend in new curriculum development or it may simply relate to a different interpretation of the question on the second return. Country fourteen's return emphasizes the need for a competency-based curriculum and the recognition of nursing science by other professions. The respondent also draws clear links between this question and number five. The latter point is echoed by country seven.

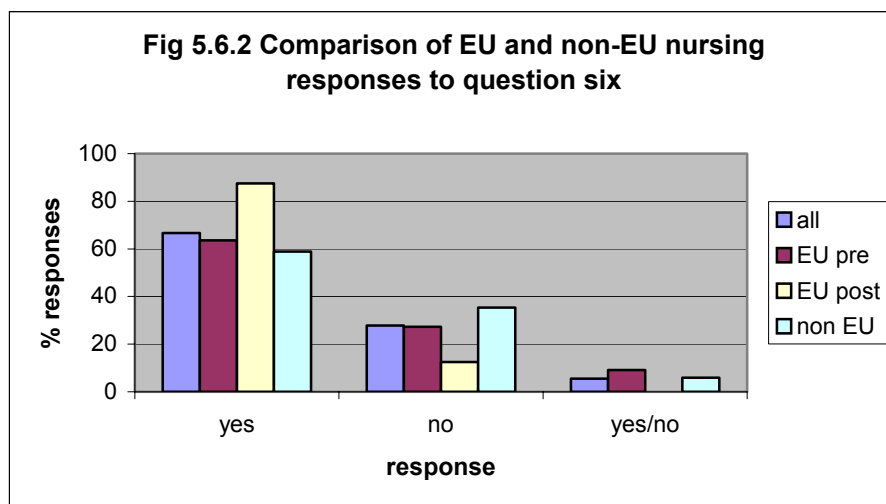
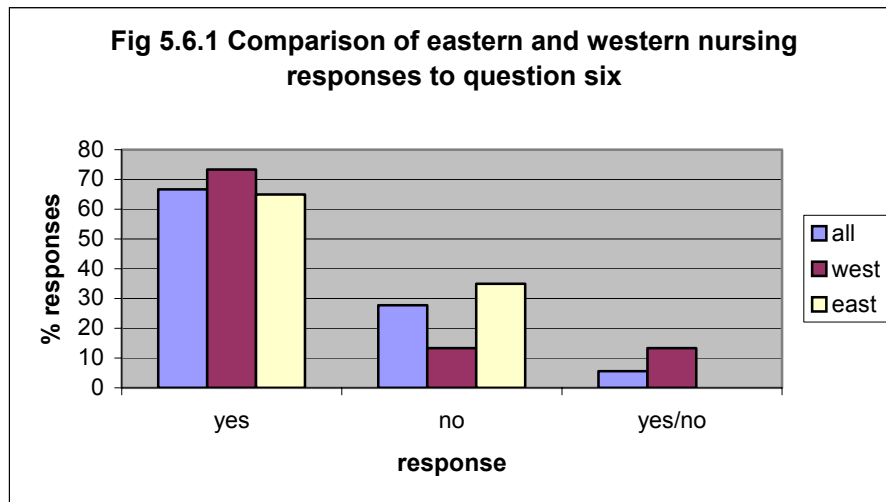
5.2.4 Entry to and exit from programmes

Questions 6 to 11 and 15 (annex 5) referred to admission to or completion of nursing education programmes, with questions 6¹⁶ and 11¹⁷ showing the most negative responses. There is little in the academic literature that has addressed this issue but Keighley, (2003 a & b) in his review of the new member states of the European Union makes reference to a minimum age of entry to nursing programmes. Draper and Watson (2002) carried out a study in which cadets undertaking an initial training joined a nursing programme in a higher education institute some with advanced standing. All reported difficulties in the transition to higher education, a finding which may resonate with nurses in eastern Europe.

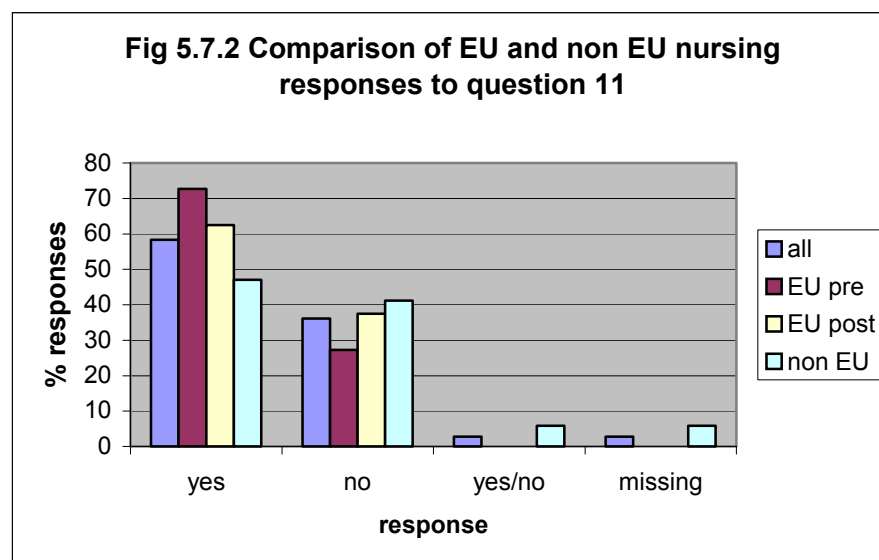
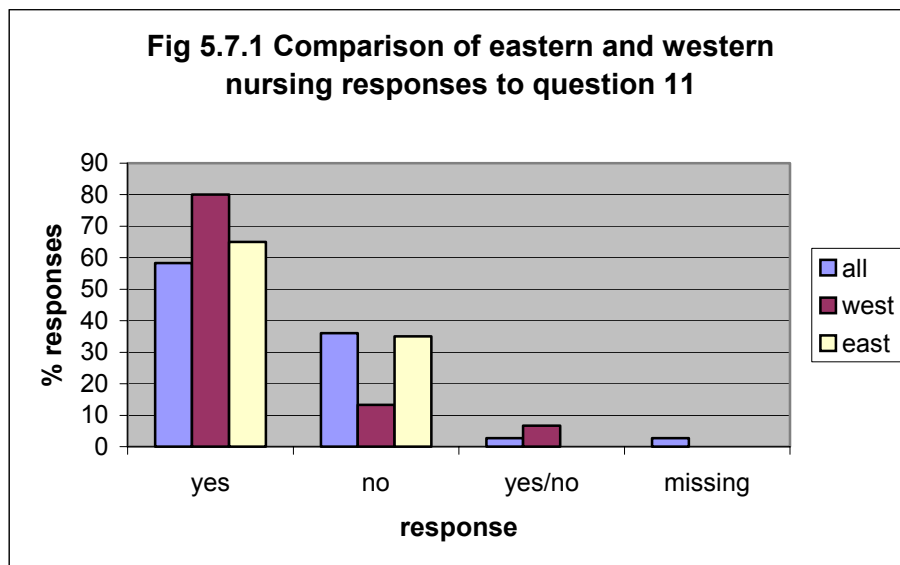
To question 6¹⁵, 10 countries overall (27.8%) gave negative responses. In western Europe 2 (13.3%) and in eastern Europe 7 (35%) responded negatively ($p = 0.138$) while from EU members prior to 2004 3 (27.3%), post-2004 1 (12.5%) and non-EU members 6 (35.3%) negative responses were received ($p = 0.748$).

¹⁶ Admission to nursing education follows successful completion of secondary school education, with qualifications equivalent to those required by our countries for university (or equivalent higher education institution) entrance. Alternatively, entry is based on formal accreditation of prior learning and/or experience, which is a normal route of entry to the university (or equivalent higher education institution) concerned, and is acceptable to the nursing statutory body – where such exists.

¹⁷ The academic level of the professional qualification as a nurse is that of a university (or equivalent higher education institution) degree in nursing.



In question 11¹⁶, 13 countries overall (36.1%) gave negative responses. In western Europe 2 (13.3%) and in eastern Europe 10 (50%) responded negatively ($p = 0.091$) while from EU members prior to 2004 3 (27.3%), post 2004 3 (37.5%) and non-EU members 7 (41.2%) negative responses were received ($p = 0.620$).



Most of the negative respondents to both of these questions indicated that all five action points required work for this principle to be attained, country thirty three requiring five years for this to happen. It is noteworthy that option “c” “arrange for modification of the statutory regulations governing nursing education” was not linked by any respondents to principle number one. Country fourteen’s respondent comments that the whole school system would have to be changed if this principle were to be implemented.

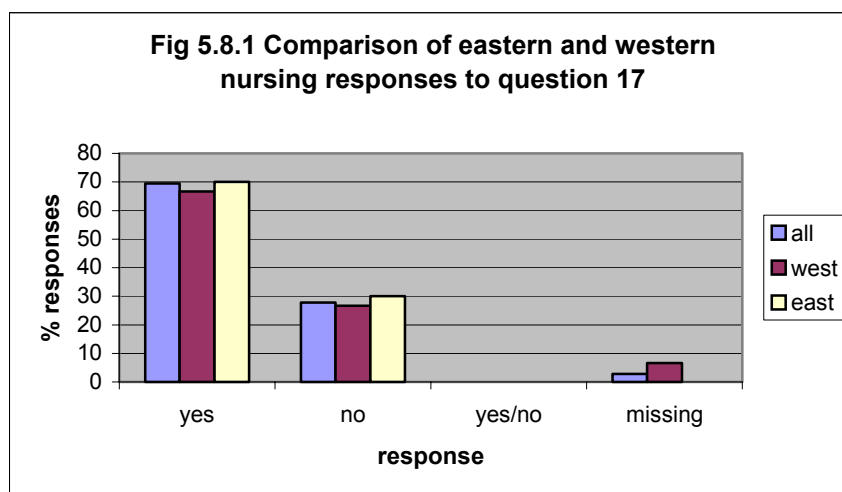
Of the countries that completed more than one return, country thirty, eleven and twenty five changed from “no” to “yes” responses in question six¹⁵. In the case of country thirty this fit with their time scale though for the other two countries this cannot be determined due to the way in which the questionnaire was completed. For question 11¹⁶ countries thirty and thirty-one moved from a “no” to a “yes” response. Again country thirty’s change fit their timescale but country thirty-one’s progress appeared a little more rapid than indicated by the timescales marked in the first return.

Country sixteen's first return indicated a "yes" response to question 6¹⁵ but by the time of its second return two years later this had been changed to "no" with all subsections highlighted as necessary and indicating a period of years would be required for full implementation. In question 11¹⁶ country five also indicated a change from "yes" to "no". Again it cannot be determined if a policy change had caused this change. In the case of the country five, section three was not completed.

5.2.5 Quality of institutional processes

Questions 17¹⁸, 18¹⁹ and 26²⁰ (annex 6) considered the quality aspects of the institutions in which programmes were delivered. Quality processes in higher education institutions have underpinned nursing education programmes that are delivered by such institutions but these are rarely reported in the academic literature. Instead various organizations such as the media use their own criteria for assessing the performance of higher education institutions for the purposes of making comparisons. The EU (1997) specifies some minimum requirements that nursing programmes in its member states must meet.

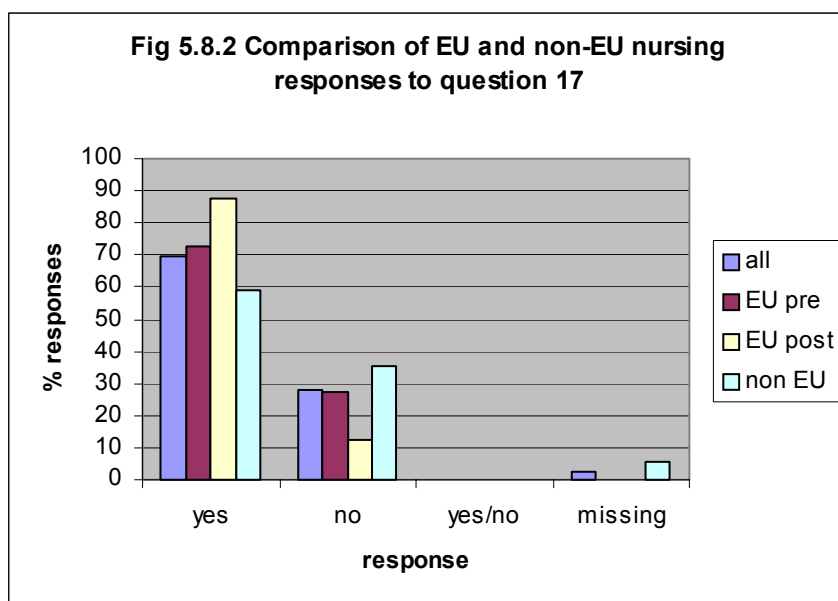
Question 17¹⁸ showed the most negative responses with 10 countries overall (27.8%) giving negative responses. In western Europe 4 (26.5%) and in eastern Europe 6 (30%) responded negatively ($p = 0.811$) while from EU members prior to 2004 3 (27.3%), post-2004 1 (12.5%) and non-EU members 6 (35.3%) negative responses were received (0.497).



¹⁸ The university, its school or department of nursing and the practice placement areas in the hospitals and community settings are formally accredited and have in place systems of quality improvement/control.

¹⁹ The nursing programme is formally accredited is regularly reviewed and has valid systems of evaluation and quality improvement/control in place at local and national levels.

²⁰ University schools and departments of nursing have, or have adequate shared access to, appropriate human and physical resources including equipment, clinical skills laboratories and libraries.



Again the three action points listed were completed by most of the negative respondents, but for this question the time scales given are vaguer with most respondents simply stating that “years” were required. Country thirty-four however stated they would require five years to implement this principle. This is in contrast to country nineteen which also responded negatively but needed to obtain examples and make consultations before achieving this principle. Several respondents offered additional points with country eighteen saying it was necessary to study models from other countries. Countries twenty and sixteen both offer positive comments saying that actions are in place to achieve this principle such as accrediting existing practice placement areas.

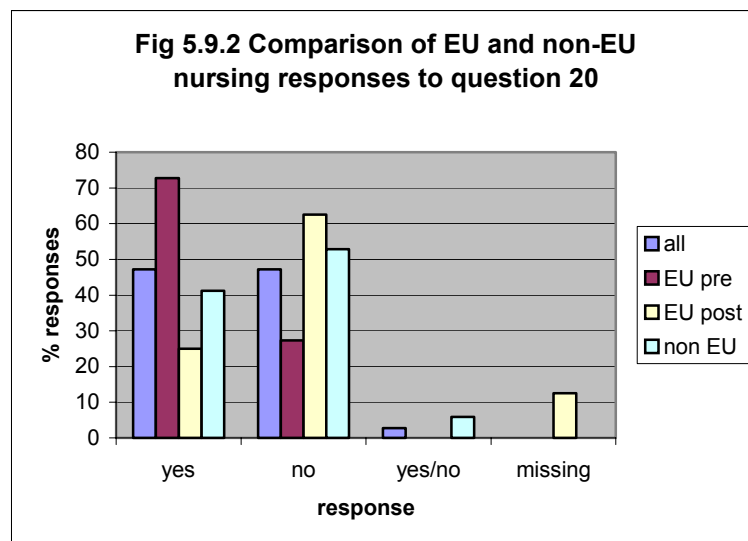
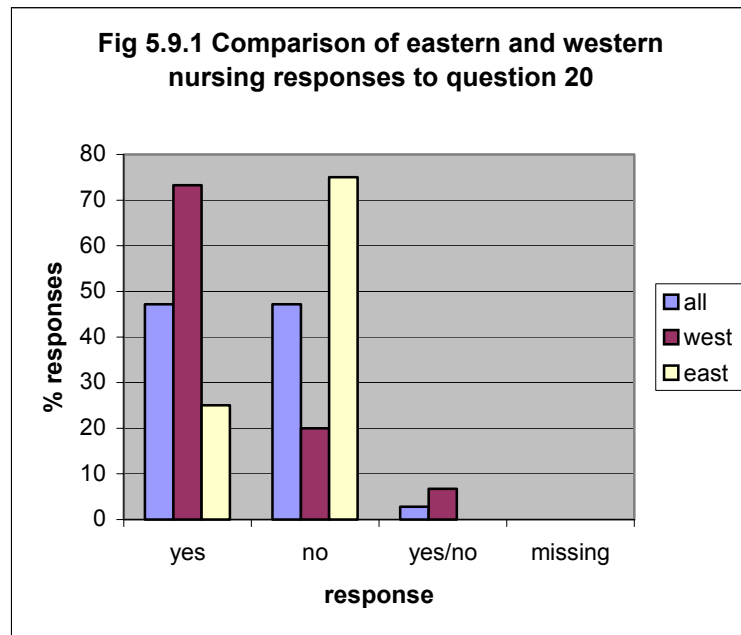
Country twenty-five’s response changed from negative to positive on its second return. This was in accordance with its timescale. Again country twelve’s response changed from positive to negative between responses. Part three was not completed so no reason can be given to explain this change.

5.2.6 Qualifications of teaching staff

The last section comprising questions 20–24 and 25 (annex 7) asked about the academic and clinical teaching staff. Both the WHO Regional Office for Europe (2000a) and the EU (1997) specify their expectations in respect to teachers in the clinical and academic settings. Answers to these questions were much more evenly divided than many others. Questions 20²¹ and 22²² showed the most negative responses. In question 20²¹, 17 countries overall (47.2%) gave negative responses. In western Europe 3 (20%) and in eastern Europe 14 (70%) responded negatively ($p = 0.025^*$), while from EU members prior to 2004 3 (27.3%), post-2004 5 (62.5%) and non-EU members 9 (52.9%) negative responses were received ($p = 0.127$).

²¹ The director or head of the nursing school or department is a qualified nurse.

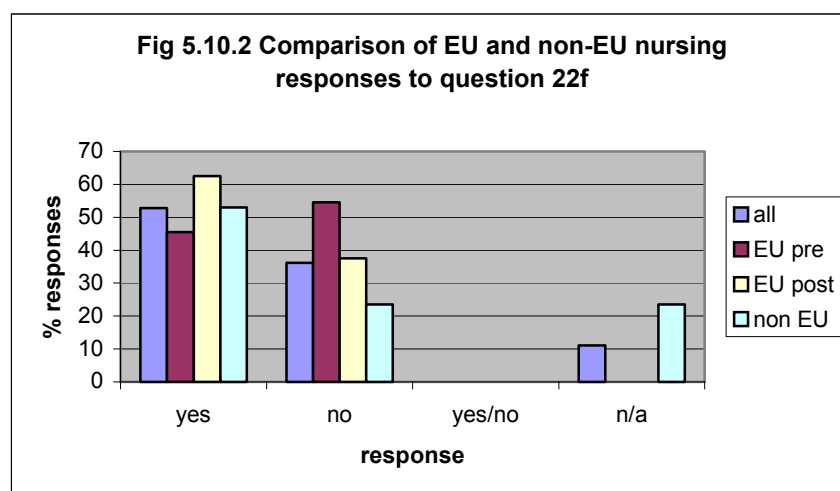
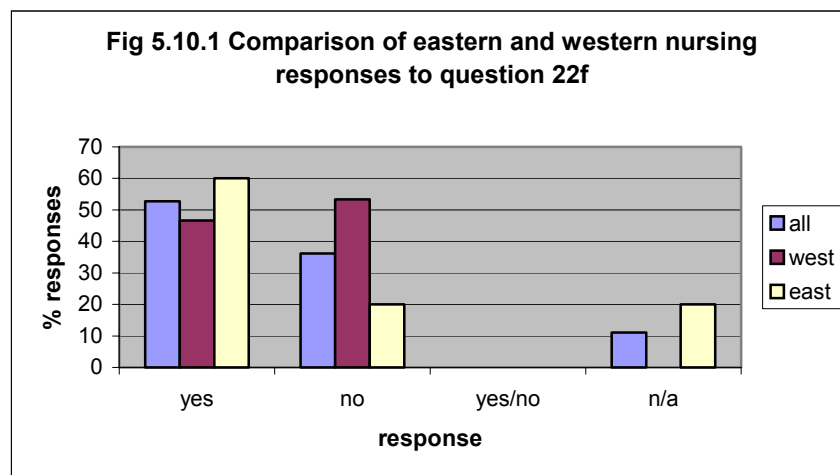
²² Teachers of nursing maintain their clinical competence.



It is noteworthy that the response rate was so different between western and eastern Europe. This possibly reflects the secondary medical school education system that was in place throughout this area until recently and which still continues in a few countries today. Of the action plans proposed by those who responded negatively, only country eleven stated that this principle could be operational in months. This is in stark contrast to country thirty-three whose respondent suggests that it will be ten years before this principle would be achieved. However it must also be pointed out that of those countries who were members of the EU prior to 2004, 27.3 % also did not have a nurse as the head of the school. It is also cautioned however, that the word “school” in the questionnaire may have been misleading as nursing education may be delivered in a college or university in which, for example, nursing is only one part of a health faculty. Country sixteen’s return reflects this model, contrasting the word “school” with “department” where it is stated that heads of department are more likely to be nurses.

Country thirty again changed from a negative to a positive response in the given time frame, and as with question 11²³, country five changed from a positive to a negative response but did not complete part three.

In question 22f²², 13 countries overall (36.1%) gave negative responses. In western Europe 8 (53%) and in eastern Europe 4 (20%) responded negatively ($p = 0.098$), while from EU members prior to 2004 6 (54.5%), post-2004 3 (37.5%) and non-EU members 4 (23.5%) negative responses were received ($p = 0.103$).



Unfortunately it is not possible to comment on the action plans as they are not specific to question 22f but applicable to all of question 22. Only one country, number twenty-eight, changed from a negative to a positive response between returns and this was in keeping with its timescale.

²³ The academic level of the professional qualification as a nurse is that of a university (or equivalent higher education institution) degree in nursing.

5.3 Chapter conclusion

This chapter has analysed the data for nursing responses. It has shown where progress has been made and where there is still work to be done. The next chapter presents the midwifery data in a similar format.

6 Midwifery findings

6.1 General description of responses

Thirty-five different countries answered the midwifery questionnaire; this meant that in total 1400 questions were asked in section 1, of which 1360 were answered and 40 omitted. The mean number (\bar{x}) of questions answered per country was 38.85. Nine hundred and twenty-seven of these questions were answered “yes” (68.15%, $\bar{x} = 26.49$), 245 answered “no” (18%, $\bar{x} = 7$), 19 “yes and no” (1.43%, $\bar{x} = 0.54$), and 169 “not applicable” (12.43%, $\bar{x} = 4.82$). This shows that the majority of answers were again “yes” and the principles already achieved.

As with the nursing responses, those for midwifery were first of all considered as a whole. The countries were then separated into two differing groups:

1. Western ($n = 15$, 42.85% of total returns, 62.5% of population) and eastern Europe ($n = 19$, 54.28%, 67.85% of population). One country embraced both east and west.
2. EU member states prior to 2004 ($n = 11$, 31.42% of total returns, 73.3% of population), post-2004 ($n = 8$, 22%, 80%) or non-EU members ($n = 16$, 45.7%, 59.25%).

6.1.1 General description of responses

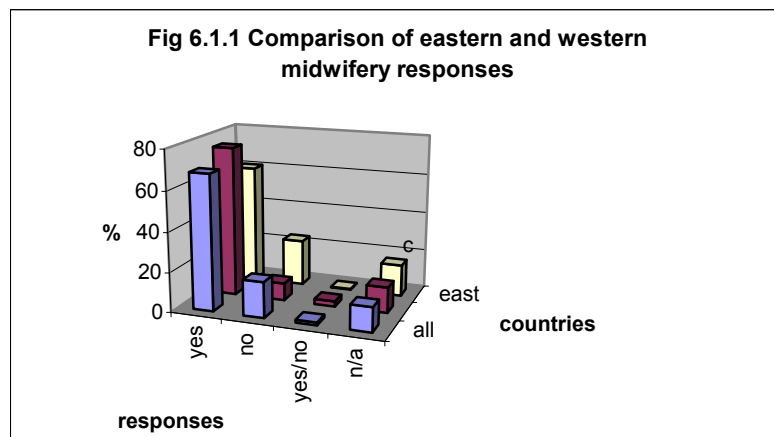
Table 6.1 below shows for midwifery the total number of questions asked and the breakdown of the total number of “yes”, “no”, “yes and no”, and “not applicable” responses for each question.

Table 6.1 Frequencies of midwifery answers for all countries

Question Number	Yes	No	Yes and No	Not applicable	Missing
1	29	6	0	0	0
2	28	6	1	0	0
3	26	8	1	0	0
4	30	5	0	0	0
5	27	8	0	0	0
6	25	8	1	0	1
7	30	4	1	0	0
8	30	3	2	0	0
9	33	2	0	0	0
10	28	7	0	0	0
11	19	13	2	0	1
12	29	5	0	0	1
13a	21	14	0	0	0
13b	28	5	0	0	2
14	31	3	1	0	0
15	28	6	1	0	0
16	32	3	0	0	0
17	23	11	0	0	1
18	25	8	1	0	1
19	25	8	2	0	0
20	14	20	1	0	0
21	21	10	2	1	1
22a	21	6	0	7	1
22b	22	6	0	7	0
22c	26	2	0	7	0
22d	25	3	0	7	0
22e	24	3	0	8	0
22f	16	12	0	7	0
22g	23	5	0	7	0
22h	22	6	0	7	0
22i	1	5	0	28	1
22j	5	1	0	28	1
23a	24	1	0	10	0
23b	17	8	0	10	0
23c	23	2	0	10	0
23d	3	5	0	25	2
23e	5	3	0	25	2
24	30	4	1	0	0
25	31	3	1	0	0
26	27	7	1	0	0
TOTAL	927	245	19	194	15

Number of countries = 35 1385 questions out of 1400, (therefore 15 not answered)

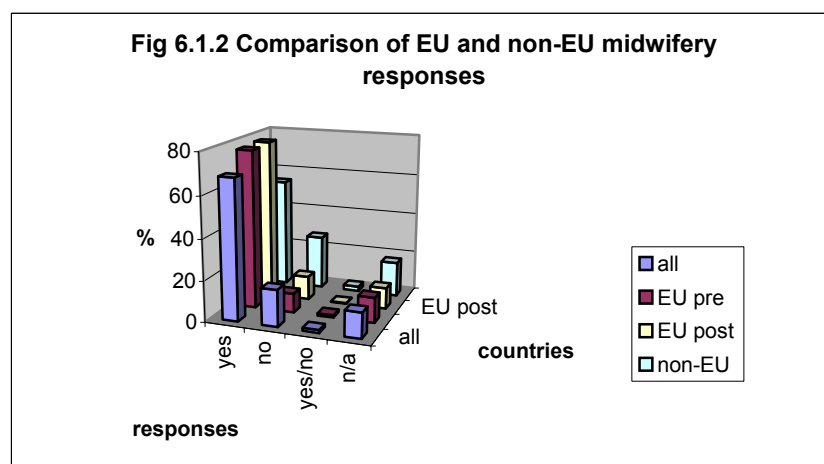
When subdivided into western and eastern Europe, 15 countries in western Europe submitted returns. Out of 600 questions, 592 ($\bar{x} = 39.46$) were answered, of which 447 (75.65%, $\bar{x} = 29.8$) were “yes”, 52 (8.79%, $\bar{x} = 3.46$) were “no”, 15 (2.58%, $\bar{x} = 1$) “yes and no” and 78 (12.98%, $\bar{x} = 5.2$) “not applicable”. In eastern Europe 19 responses were received with 760 questions asked and 751 answered ($\bar{x} = 39.53$), of which 453 were “yes” (60.31%, $\bar{x} = 23.84$), 176 “no” (23.43%, $\bar{x} = 9.26$), 2 “yes and no” (0.27%, $\bar{x} = 0.105$) and 120 “not applicable” (15.98%, $\bar{x} = 6.32$).



Taking into consideration membership of the European Union, 11 countries which were members prior to 2004 submitted returns: out of 440 questions, 438 ($\bar{x} = 39.82$) were answered, of which 338 (77.17%, $\bar{x} = 30.73$) were “yes”, 41 “no” (9.36%, $\bar{x} = 3.73$), 5 “yes and no” (1.14%, $\bar{x} = .045$) and 54 “not applicable” (12.33%, $\bar{x} = 4.91$).

Eight countries which became members in 2004 submitted returns. Out of 320 questions, 320 ($\bar{x} = 40$) were answered, of which 249 were “yes” (77.81%, $\bar{x} = 31.12$), 37 “no” (11.56%, $\bar{x} = 4.63$), 1 “yes and no” (0.31%, $\bar{x} = 0.12$) and 33 “not applicable” (10.32%, $\bar{x} = 4.13$).

Of non-EU members 16 countries responded. Out of 640 questions, 630 ($\bar{x} = 39.37$) were answered, of which 341 were “yes” (54.13%, $\bar{x} = 21.31$), 167 “no” (26.51%, $\bar{x} = 10.44$), 14 “yes and no” (2.21%, $\bar{x} = 0.87$) and 108 “not applicable” (17.15%, $\bar{x} = 6.75$).



Seven countries produced two returns of the questionnaire (Table 4.1) in different years. Due to this small return the overall results were unable to be compared. However, comparisons could be made between results for some of the individual questions although this was unable to be statistically analysed. These comparisons are included in the discussion in the next sections of this chapter. The non-parametric statistical test of Pearson’s Chi square has been used in all cases with the significance level being set at 0.05.

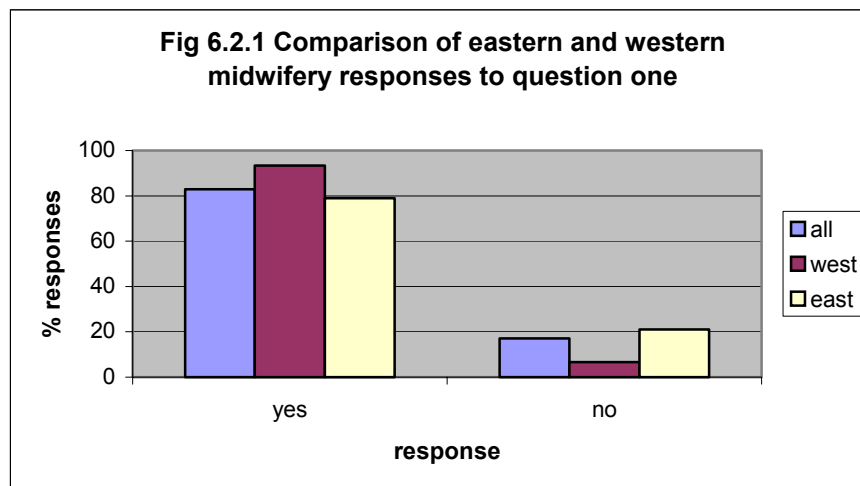
6.2 Integration of qualitative and quantitative data for selected questions

6.2.1 Legislation

Questions 1²⁴ and 12²⁵ (annex 2) refer to legislation within the countries. As with nursing Keighly (2003 a & b) has discussed this in relation to the topic of free movement between member states of the European Union. Mead (2003) addresses this issue more deeply and also analyses a number of relevant sectoral directives concerning the new EU countries.

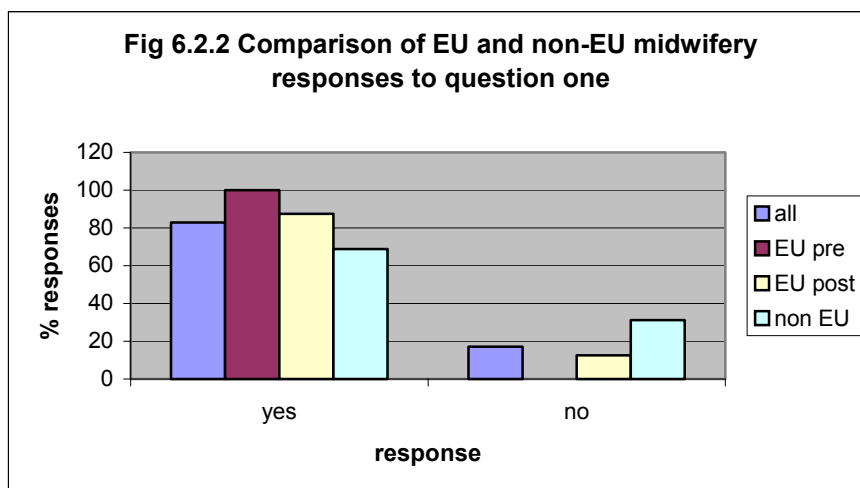
It is very encouraging that as demonstrated by response to question 1²⁴ that, as with nursing, midwifery is enshrined in the legislation of all but 6 (17.14%) of the respondent countries. All of the countries that gave a “no” response are in eastern Europe where there was a 21.05% (n = 6) overall negative response (p = 0.288). Within the EU, of member states prior to 2004, 11 (100%) gave positive responses while from those joining in 2004, 1 (12.5%) responded negatively. Of those countries remaining, non-members 5 (31.25%) responded negatively (p = 0.098). Our results support the findings of the study by Day-Stirk and Palmer (2003) who profile midwifery in 26 eastern European countries. The results of their question as to whether midwifery was regulated yielded a high number of “yes” responses.

One negative respondent in the present study is now a member of the European Union. This country’s response suggested that all listed actions would have to be undertaken and this would take a period of years. However when a second return was completed two years later, the country was achieving this principle. In contrast a different country suggested in 2001 that all aspects of this principle could be achieved within months. However this country did not file a second return so it is not known if this principle is now being achieved. Other countries which said they were not achieving this principle did not propose an action plan.



²⁴ Midwifery is an integral part of the essential legislative and regulatory framework for the health care professions in our country.

²⁵ There is only one level of qualified midwife in our country (i.e. one level of basic midwifery).



The high level of positive responses suggests that for most respondents midwifery is regulated by the central government and its practitioners are subject to a code of practice. However, as with nursing, there may be some ambiguity within the question as certain countries that responded in the affirmative do not have a central body which records qualifications and protects the title of midwife, including several in western Europe.

In contrast to nursing only 14.3% of respondents indicated that they had more than one level of qualified midwife in their countries. In country seven a date for cessation of the second-level programme had not been agreed and the respondent indicated that it would take years to change the situation. Country twenty-seven also indicated that it would take five years to change the present situation. Several countries in eastern Europe which had made changes to midwifery education by introducing higher education as a preparation for midwifery practice still also retained the secondary school system (WHO, 2003). Country twenty-five also indicated in its first return that major changes were required but in its second return although still giving a “no” response did not outline what was required. A recent communication from the country twenty-five’s midwives’ association (2005) has indicated however that many major changes have just been made at governmental level.

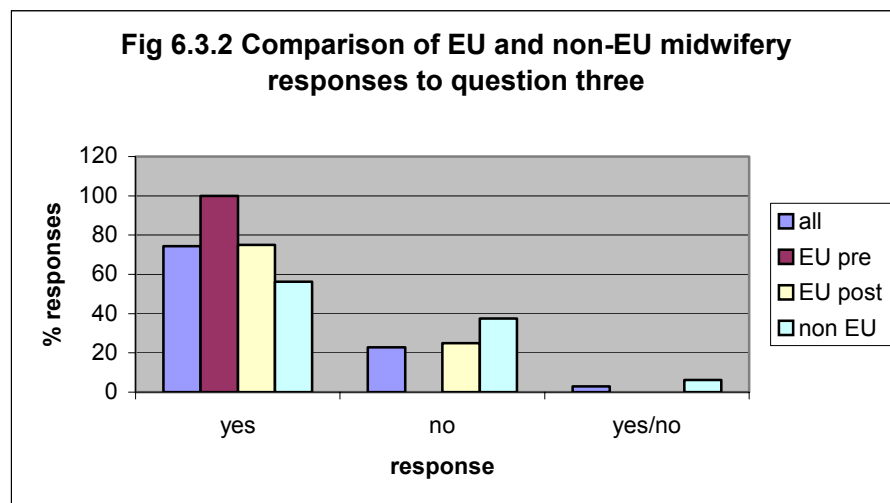
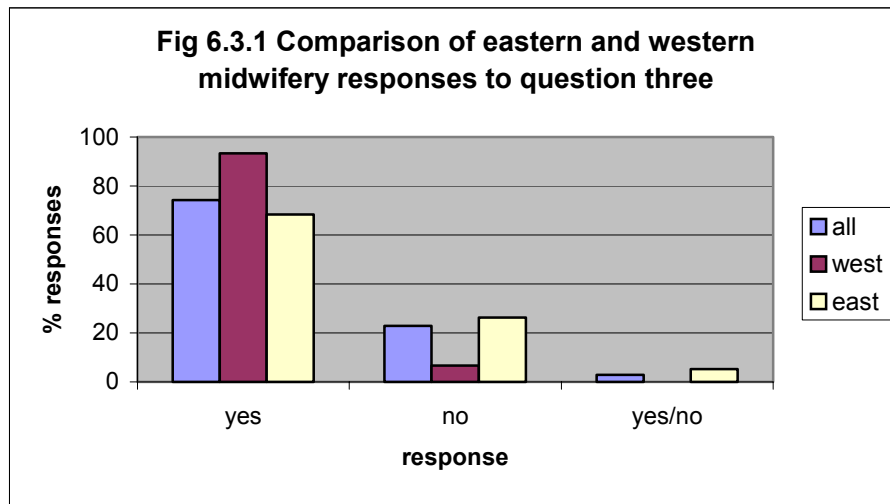
6.2.2 Consumer

Questions 2²⁶, 3²⁷ and 4²⁸ (annex 3) focused on the centrality of the consumer in midwifery education. There is a considerable body of academic literature on the topic (Fleming, 1998) and at the heart of the International Confederation of Midwives’ mission statement are improved outcomes for women. It was therefore disappointing that no consumers of midwifery services were included as members of the expert group that initially drafted the principles.

²⁶ Midwifery education and practice are underpinned by values focusing on the promotion and maintenance of health in individuals, families and communities and on individual and holistic care of those who are ill. It promotes non-judgemental care that is sensitive to the social, cultural, economic and political context of our country.

²⁷ Midwifery education takes into account the health care needs of the population of our country and is conducted to agreed standards for quality of care.

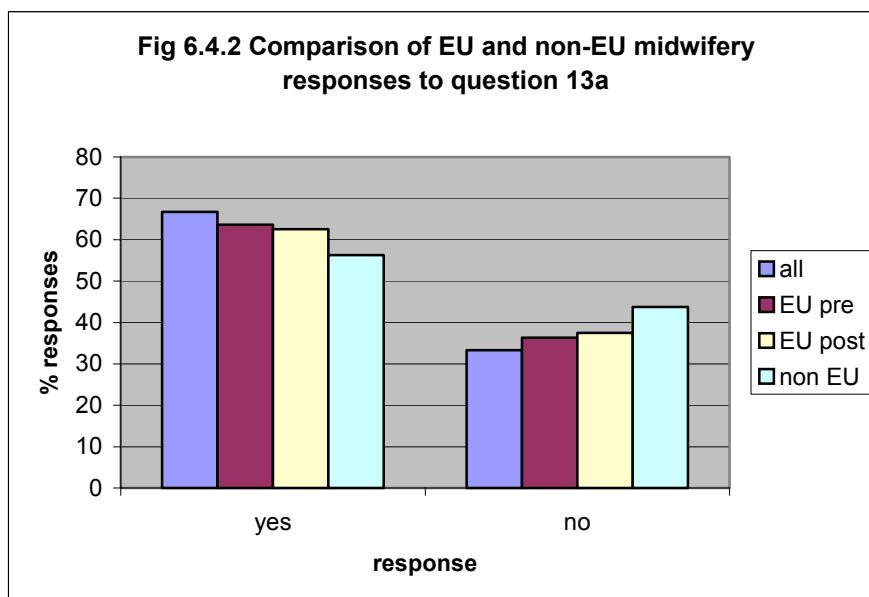
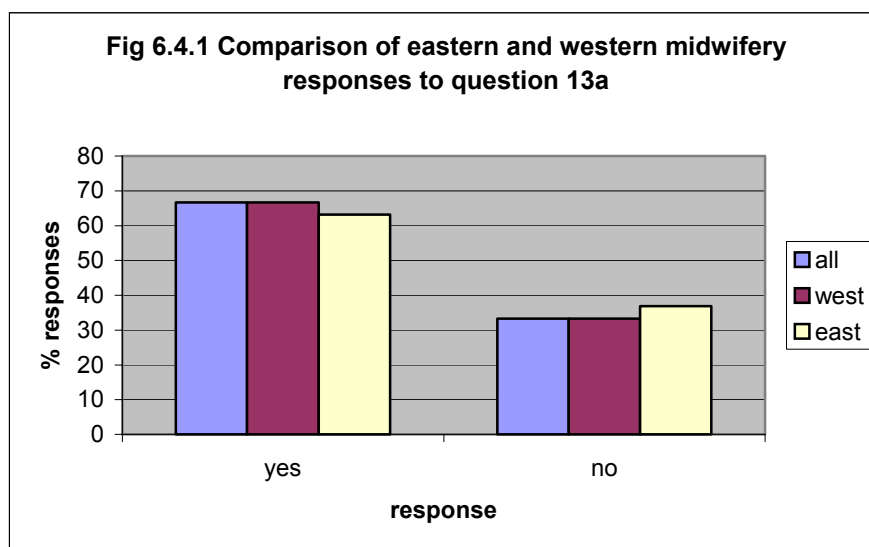
²⁸ Midwifery education has the individual, be it the patient or the healthy person, as its main focus, and takes into account the significance of contexts within which those individuals live and work, including their families, partners, social groups and communities.



In looking at section three for the country that gave both a positive and a negative response together with the other negative respondents, the action plans that they outline suggest that the negative responses reflect the standards of care element of the question rather than the consumer focus, as option (b) “use existing national quality standards of nursing care or if necessary obtain examples of quality standards” and (c) “take steps to incorporate these into the curriculum” were the most commonly ticked actions. The time scales suggested for achieving this principle varied from a few months to three years. It was again most encouraging to note that country twelve changed from a “no” to a “yes” response in the second return. This reflects the huge amount of work that must have been done to achieve this in the intervening two years as a time scale of years had originally been suggested as being required. None of the countries made additional comments.

6.2.3 Curriculum

Questions 5²⁹, 13³⁰, 14³¹, 16³² and 19³³ (annex 4) relate to the curriculum. In her discussion on the enlarged European Union Mead (2003) highlights the need for common criteria for training and education. The Tuning Project (González & Wagenaar, 2003) highlights the essential requirement for a competency-based curriculum, a requirement also made clear by the expert group who designed the Strategy. In addition, 14 (40%) countries gave a “no” response to question 13a³⁰, 5 (33.3%) had negative responses in western Europe, 7 (36.8%) in east Europe (p = 0.404), EU members prior to 2004 4 (36.36%), post-2004 4 (37.5%), and for non-EU members this also rose to 7 (43.75%) (p = 0.916).



²⁹ A proportion of midwifery education is interdisciplinary and multiprofessional.

³⁰ The curriculum is research-based/evidence-based. The curriculum is competency-based.

³¹ The specified competencies include the ability to practice in hospital and community settings and as a member of the multiprofessional health care team.

³² Initial preparation and qualification forms the basis for continuing professional development and education.

³³ The midwifery programme has credits allocated to the learning that takes place in both the educational institution and the practice placement settings.

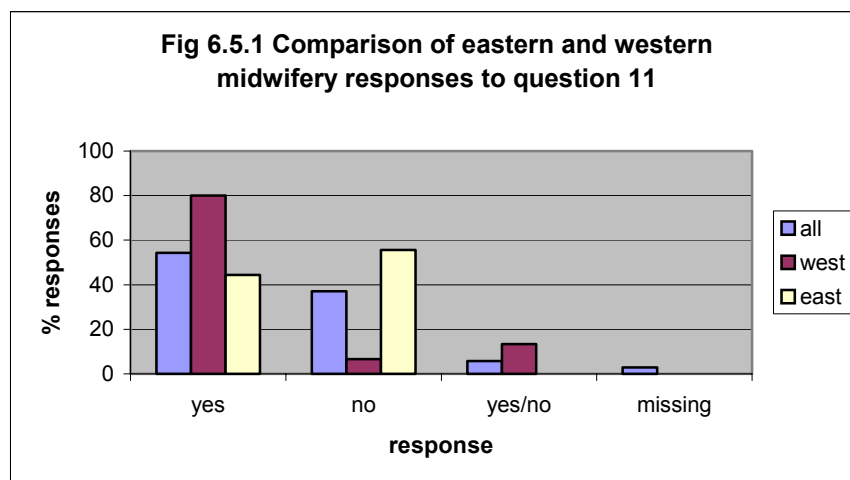
Most countries which gave negative responses to this question required reviews to be made to the curriculum with two respondents, countries twenty-seven and thirty-five, indicating that this process would be expected to take up to five years. This also reflects how these countries responded in relation to nursing (chapter 5). Country seventeen indicated that it had already submitted a revised curriculum to its university senate where it was awaiting approval. However it is not known if this approval was forthcoming. Conversely, country twenty, which appeared to have a new curriculum, was required to train their teachers in order to implement it. Country fourteen's curriculum was reported to lack a scientific basis because midwifery is not taught in the higher education system. If this were to change the content would be subject to rigorous scrutiny. Additionally new curricula would pose the challenge of competency-based education. Concern was also raised by country fourteen's respondent that they were not adhering to EU guidelines with their present curriculum.

Countries three, twenty and thirty-one, all of which indicated lengthy periods of time to implement this principle in their first responses, had achieved it by the time of their second responses. However, country twelve's first response in 2001 indicated that this principle had already been achieved but by the time of its second return in 2003 it was also indicating that one year would be required to meet this principle. While this change from "yes" to "no" was also seen in the nursing returns, the time period is considerably shorter for midwifery.

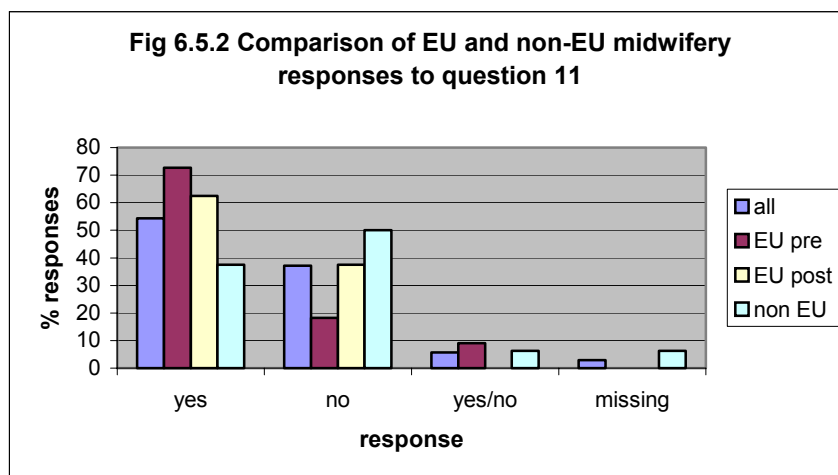
6.2.4 Entry to and exit from programmes

Questions 6 to 11 and 15 (annex 5) referred to admission to or completion of nursing education programmes, with question 11³⁴ showing the most negative responses. This issue is again addressed by Mead (2003) who underlines the importance of the EU guidelines in relation to commencing midwifery education. Day-Stirk and Palmer (2003) further comment that in some eastern European countries there are still people beginning their education at age 14.

In question 11³⁴, 13 countries overall (37.14%) gave negative responses. In western Europe 1 (6.67%) and in eastern Europe 10 (52.6%) responded negatively ($p = 0.011^*$), while from EU members prior to 2004 2 (18.18%), post-2004 3 (37.5%) and non-EU members 8 (50%) negative responses were received ($p = 0.402$).



³⁴ The academic level of the professional qualification as a midwife is that of a university (or equivalent higher education institution) degree in midwifery.



Most of the negative respondents to both of these questions indicated that all five action points required work for this principle to be attained. Unfortunately despite the large number of negative responses, most did not stipulate timescales required for change. This is a possible indication of the complexity of this principle. Countries twenty-six and eighteen however both considered that they would only need to consult with interested parties for the change to take place but both indicated timescales of three years. The respondent for country fourteen commented that those learning to become midwives could not legally be given the title of student as this only applied to students in the higher education system. Country twenty-four, which gave a both “yes and no” response, made the comment that in their country midwifery education was already at the higher education level.

Of the countries that completed more than one return, countries sixteen, twelve and twenty-five filed “no” responses on both occasions. While country twelve had moved from a period of years required on its first return to requiring only one more year on its second, the other two did not give any indications of the timescales required. Country thirty-one moved from a “no” to a “yes” response. As with nursing this progress appeared a little more rapid than indicated by the timescales marked in the first return.

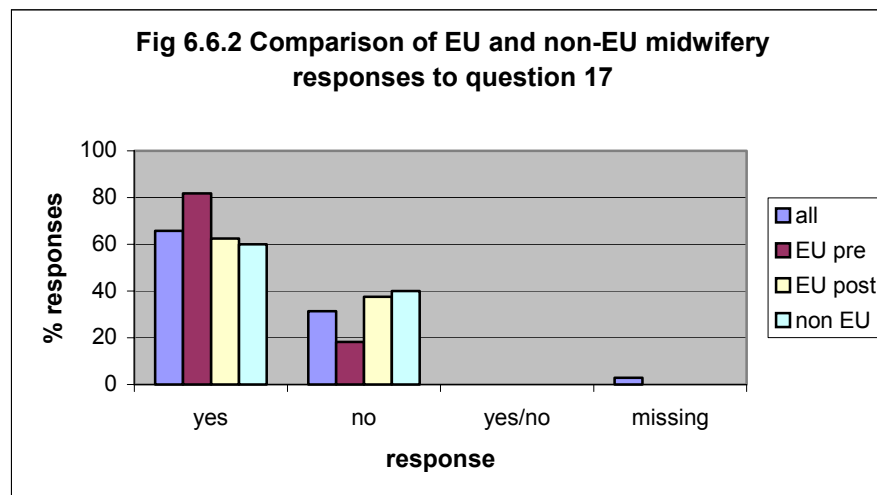
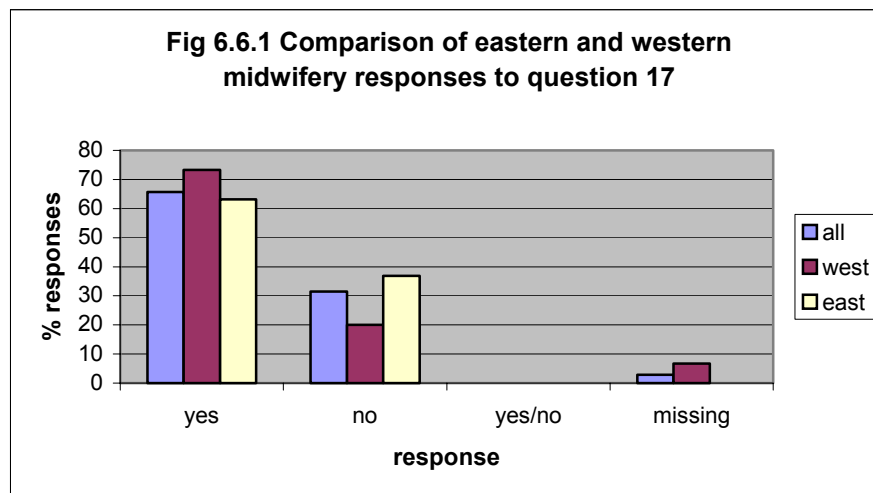
6.2.5 Quality of institutional processes

Questions 17³⁵, 18³⁶ and 26³⁷ (annex 6) considered the quality aspects of the institutions in which programmes were delivered. As mentioned in chapter five, quality processes in higher education institutions have underpinned midwifery education programmes that are delivered by such institutions, but these are rarely reported in the academic literature. The Tuning Project (González. & Wagenaar, 2003) and the Declaration of Bologna (1999) both aim to provide some harmonization in this respect. Question 17³⁵ showed the most negative responses with 11 countries overall (31.42%) giving negative responses. In western Europe 3 (20%) and in eastern Europe 7 (36.8%) responded negatively ($p = 0.356$) while from EU members prior to 2004 2 (18.18%), post-2004 3 (37.5%) and non-EU members 6 (37.5%) negative responses were received ($p = 0.471$).

³⁵ The university, its school or department of midwifery and the practice placement areas in the hospitals and community settings are formally accredited and have in place systems of quality improvement/control.

³⁶ The midwifery programme is formally accredited is regularly reviewed and has valid systems of evaluation and quality improvement/control in place at local and national levels.

³⁷ University schools and departments of midwifery have, or have adequate shared access to, appropriate human and physical resources including equipment, clinical skills laboratories and libraries.



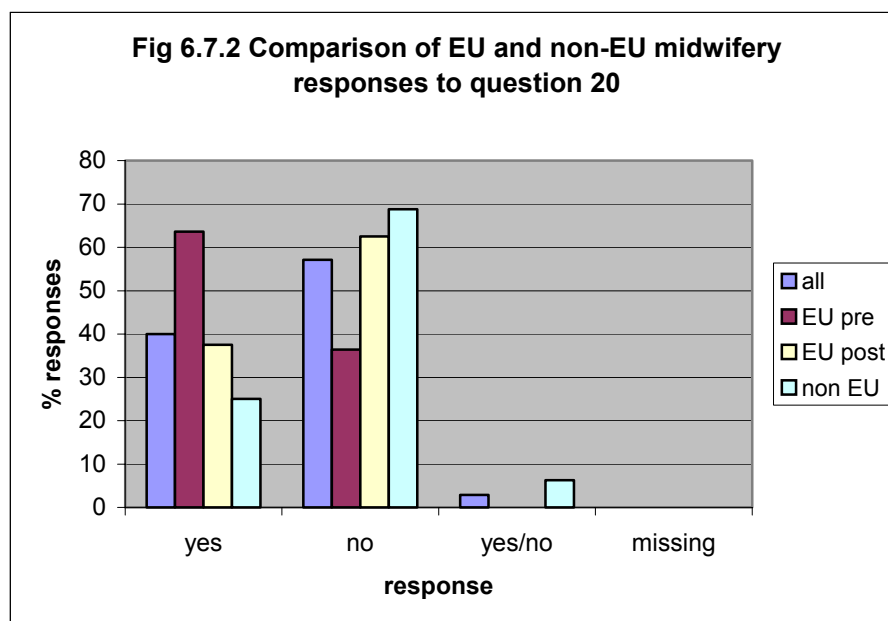
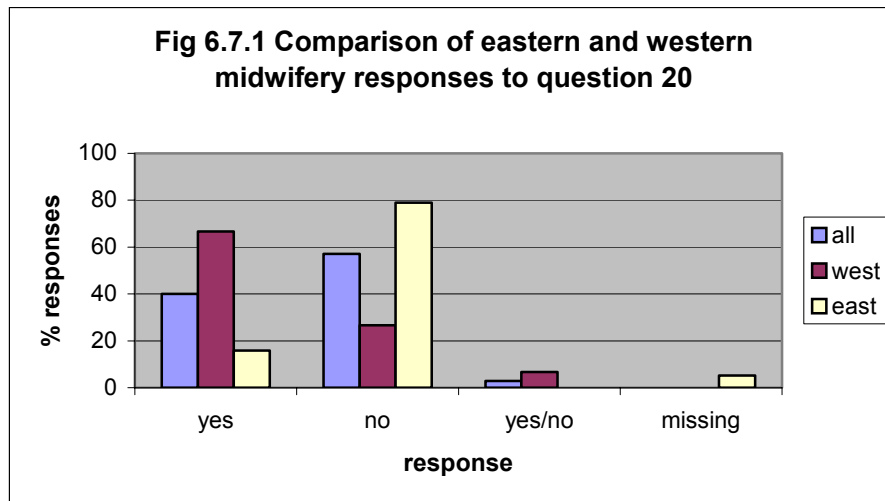
Again the three action points listed were ticked by most of the negative respondents. Country thirty-six stated they would require five years to implement this principle with a new system being required to be implemented. This is in contrast to country nineteen which also responded negatively but needed to obtain examples and make consultations before achieving this principle. In western Europe, country numbers thirty-four, nineteen and seven all required to make major changes lasting for years before this principle could be achieved. Country twenty made the additional point that new regulations had been accepted by their parliament and the accreditation process would start from 2002. Some detailed regulations still required to be developed. A second return, which confirmed these changes, was received two years after the first.

Country three's response changed from positive to negative between responses. In the second return it required one year to implement the principle. Country twelve filed two negative returns with the timescale again being reduced.

6.2.6 Qualifications of teaching staff

The last section comprising questions 20–24 and 25 (annex 7) asked about the academic and clinical teaching staff. Both the WHO Regional Office for Europe (2000a) and the EU (1997) specify their expectations in respect to teachers in the clinical and academic settings. Unfortunately this issue was not addressed by Day-Stirk and Palmer (2003). Answers to these

questions were much more evenly divided than many others. Question 20³⁸ showed the most negative responses with 20 countries overall (57.14%) giving negative responses. In western Europe 4 (26.67%) and in eastern Europe 15 (78.94%) responded negatively ($p = 0.011^*$), while from EU members prior to 2004 4 (36.36%), post-2004 5 (62.5%) and non-EU members 11 (68.75%) negative responses were received ($p = 0.219$).



It is noteworthy that as with nursing, the response rate was very different between western and eastern Europe. This possibly reflects the secondary medical school education system that was in place throughout this area until recently, and still continues in a few countries today. It also may reflect the lack of autonomy of the midwifery profession in these countries in contrast to such countries as Austria and Germany where midwifery has always been totally independent from nursing. Of the action plans proposed by those who responded negatively almost all stated that it would take many years to implement. Country thirty-six for example gave a six year period and country thirty-three suggested that 10 years would be required before this principle would be achieved. However it must also be pointed out that of those countries who were members of the

³⁸ The director or head of the midwifery school or department is a qualified midwife.

EU prior to 2004, 36.36 % also did not have a midwife as the head of the school. It is also cautioned however, that as in the case of the country nine's return, midwifery education may be delivered in a university in which midwifery is only one part of, for example, a health faculty. It was surprising to note that in country five, where midwifery autonomy is at a very high level, a negative return was filed. This may reflect a similar system to that reported by countries nine and sixteen. Country twenty commented that "changes in regulation" and "changes in organization" needed to be implemented and this would take a period of four years. As with nursing country five changed from a positive to a negative response but did not complete part three. Countries sixteen, twenty-five and thirty-one gave negative responses to both returns which was in accordance with their timescales where these had been implemented.

6.3 Chapter conclusion

This chapter has analysed the data for midwifery responses and made some comparisons between responses. The final chapter draws conclusions and makes some recommendations.

7 Conclusions, limitations and recommendations

As stated in chapter one the key aims of this study were:

- to develop a database that records the position of all European countries in relation to the initial preparation of nurses and midwives ratified in Munich (WHO, 2000b);
- to assess the progress of these countries over a four year period towards full implementation of these principles on a regular basis; and
- to utilize the results politically to enhance the status of nursing and midwifery education throughout Europe.

This chapter reports on the first two of these aims, while acknowledging the limitations of the process. It is also acknowledged that it is through the dissemination of this report that the third of the aims may be achieved. It provides some conclusions drawn from the data reported in the previous two chapters and recommendations for further research.

7.1 Development of database

Two databases are now in place, one with data from 37 countries in the WHO European Region with regard to the provision of nursing education and another with data from 36 WHO European Region countries with regard to the provision of basic midwifery education. These two databases contain a wealth of information from the respondent countries.

Since responses were fairly evenly split between eastern Europe (n = 21 (19)) and western Europe (n = 16 (15))³⁹, it was possible to make statistical comparisons to certain key questions. In nursing there was only one significant difference calculated between returns from eastern and western Europe (question 20⁴⁰) and none between EU member states prior to 2004, post-2004 and non-member states. For midwifery, question 20⁴⁰ also showed a statistically significant difference between eastern and western Europe. Additionally, question 11⁴¹ showed a statistically significant difference between western and eastern Europe but not between EU member states prior to 2004, post-2004 and non-member states.

The differences in response to question 2040 between eastern and western Europe in both nursing and midwifery are perhaps indicative of the secondary medical school system that has not completely been replaced in all of the respondent countries. Where it has been replaced there is a drive for nurses and midwives to gain university degrees at all levels so that they may be the university teachers of the future. This process however cannot be achieved in a short timescale and those countries such as the country thirty three, which suggested 10 years might be required to fulfil this principle appear to be realistic. However, it must be noted that with distance education programmes in place, it may be possible for selected nurses and midwives to undertake the required study at a higher education level via the World Wide Web. For those countries which are signatories to the Declaration of Bologna (1999), recognition of a formal programme of study undertaken in one country will be recognized by the other.

³⁹ The first figure refers to nursing numbers and the second figure (in brackets) refers to midwifery numbers.

⁴⁰ The director or head of the nursing school or department is a qualified nurse.

⁴¹ The academic level of the professional qualification as a midwife is that of a university degree (or equivalent) in midwifery.

It is of interest to note the high level of negative responses to question 11⁴¹ from both nurses and midwives. Although the comparison between east and west did not show any statistical significance for nursing ($p = 0.091$) there was a tendency towards significance, while for midwifery the difference was highly significant ($p = 0.011$). This is indicative that there is still a considerable way to go, especially in eastern Europe, to ensuring that the professional qualifications are recognized as being at the level of university degrees although the documents circulated to WHO European Region Member States (WHO, 2001b) to assist in their implementation of the Strategy included a sample curriculum for education programmes in both nursing or midwifery at the university level.

However caution must be exercised not to rely too heavily on statistical differences between west and east. It is also important to look at the overall pattern of responses, in particular those with the high negative responses. All of the questions were answered in the affirmative by the majority of respondents showing positive progress towards attainment of the principles. It is also cautioned that not one question received 100% yes responses, indicating that work needs to be done in all areas. Only one question, 12⁴², showed a statistically different response between nurses and midwives ($p = 0.008$). The high “no” response to nursing appeared, again, indicative of secondary school education in eastern Europe while for midwifery, the qualification appeared to be more clear. However as shown in chapter five, there was not universal acceptance of this principle, and it perhaps needs to be re-evaluated.

The other areas in which major work still needs to be done are those questions reported on in chapters five and six. Question 21⁴³ asks if nursing or midwifery teaching is carried out by a qualified nurse or midwife. It is clear that in both professions this is not always the case. The response to this question is closely linked to question 5⁴⁴ which asked if the education of nurses or midwives was interdisciplinary and multi professional. While as demonstrated by the responses to part three the respondents appeared to be willing to work towards the attainment of principle 21⁴³, very few action plans were given in response to question 5⁴⁴. In countries where nursing and midwifery are only beginning to gain recognition, it is perhaps too early to expect recognition of the need to work with other professional groups.

Finally from respondents in all sectors, concern was expressed that teachers of nursing or midwifery did not maintain their clinical competence as shown by the high proportion of “no” answers to question 22⁴⁵ for both nurses (53%) and midwives (47%). None of the action plans indicated a solution to this so it is impossible to speculate as to whether this is due to heavy workload or the lack of numbers of suitably qualified staff to allow this to happen. This is a matter of grave concern that needs to be addressed with urgency.

7.2 Assessment of progress

Due to the small number of countries which submitted responses on more than one occasion, no statistical comparisons were made between returns. Qualitative comparisons are shown in chapters five and six where appropriate. Those countries that changed from negative to positive responses have nearly all done so in accordance with the timescales that they set themselves. However there were some questions that gave a “no” response in the second returns as well as

⁴² There is only one level of qualified nurse (midwife) in our country.

⁴³ The teaching of midwifery, in both theory or practice, is carried out by a qualified midwife.

⁴⁴ A proportion of nursing education is interdisciplinary and multiprofessional.

⁴⁵ Teachers of nursing/midwifery maintain their clinical competence.

the first. These were mostly in accordance with their timescales, but country twenty-five gave no time scale on its second returns, while country eleven's timescale did not appear to have changed between returns. Other countries which gave negative responses on their first returns did not submit subsequent returns thereby causing any assessment of progress to be lost.

As outlined in chapters five and six, several countries changed "yes" answers in the first returns to "no" in the second. This was reported by country twelve in response to questions 13a⁴⁶ in nursing and midwifery and 17⁴⁷ in nursing, country sixteen to question 6⁴⁸ in nursing, country five to question 11⁴⁹ in nursing and 20⁵⁰ in nursing and midwifery and country three to 17⁵¹ in midwifery. It cannot however be concluded that this is negative as it may reflect differing views by whoever completed the questionnaire on each occasion. It is, however, something that should be investigated.

7.3 Limitations

As with any study, there are several limitations associated with the present study.

The agreement on the initial PAM to make responses anonymous has meant that countries, unless they share the information with each other voluntarily, cannot make direct contact with others for advice in regard to their progress. Likewise while the authors of this report have highlighted areas where progress has been made, these cannot be acknowledged publicly as examples of good practice.

As stated in chapter three, a self-reporting questionnaire developed by an expert group was the data collection tool. While this was widely circulated for comments and those made incorporated into the final version so establishing face validity, no attempts appear to have been made to ensure other forms of validity. There was no input from a statistician to the development of the questionnaire. Likewise there were no midwifery experts or consumers in this expert group thus possibly limiting the validity of the questionnaire to this group.

Because the sample comprised a census of the entire population it was not possible to pilot the questionnaire on like subjects. Had this been possible some of ambiguities, such as that in question three, might have been eliminated. It may also have been prudent to have subdivided the questionnaire into sections, for example those utilized in chapters five and six of this report, for ease of responding.

With self-reporting questionnaires the accuracy of the results is dependent upon the perspective of the person completing the questionnaire. Demographic information concerning responses was

⁴⁶ The curriculum is research-based/evidence-based.

⁴⁷ The university, its school or department of nursing and the practice placement areas in the hospitals and community settings are formally accredited and have in place systems of quality improvement/control.

⁴⁸ Admission to nursing education follows successful completion of secondary school education, with qualifications equivalent to those required by our countries for university (or equivalent higher education institution) entrance. Alternatively, entry is based on formal accreditation of prior learning and/or experience, which is a normal route of entry to the university (or equivalent higher education institution) concerned, and is acceptable to the nursing statutory body – where such exists.

⁴⁹ The academic level of the professional qualification as a nurse is that of a university (or equivalent higher education institution) degree in nursing.

⁵⁰ The director or head of the nursing/midwifery school or department is a qualified nurse/midwife.

⁵¹ The university, its school or department of midwifery and the practice placement areas in the hospitals and community settings are formally accredited and have in place systems of quality improvement/control.

not sought, although it was recommended in the Strategy that a committee be appointed to, amongst other tasks, complete the questionnaire. In the present case it was noted that in some instances the same person had completed both the nursing and midwifery questionnaires. It was unable to be determined whether these persons had responded on behalf of a committee. In contrast, it could also be seen that when countries had completed more than one return, this was sometimes done by two different people. This may have contributed to the differing perspectives referred to in chapters five and six.

The use of a survey in itself may be another limitation. While the expert group represented a number of the countries in the region, the terminology used in the questions and accompanying instructions may not have been fully understood by all. This appeared to be a major contributing factor in the lack of second responses. Additionally the questionnaire was distributed in English, French, German and Russian. Some of the technical language may have become lost during the translation process.

Another limitation is in the timescale in which the first responses were received and the decision made by the research team to compare first responses. It would have been equally appropriate to have compared responses based upon the year in which these were received. However this would have involved working with smaller numbers and being unable to make any statistical comparisons.

A final limitation is that the responses to the questionnaires were expected to come through consultation with relevant parties, and we cannot be certain that this always happened. In some returns, for example, accompanying letters suggested that it was harder than expected to achieve the consultation necessary, while in others the handwriting was the same for both nursing and midwifery. It was also obvious that some respondents had not understood that this was a longitudinal study, as one accompanying letter said, "I completed this last year and you should have my response to that".

7.4 Chapter conclusions

Despite the limitations of this study there are several conclusions that can be drawn from the data.

- Progress towards full achievement of the principles appears to be good, especially in relation to legislation in the respondent countries.
- Of those countries who responded twice, those which have recently become members of the European Union have made the biggest steps towards achievements of the principles.
- There remains a major difference between countries in eastern and countries in western Europe.
- Although consumers are involved in nursing and midwifery education, nursing education programmes do not always reflect the health needs of the various Member States.
- Nursing and midwifery curricula are not always scientific or competency-based.
- The award made at the end of the nursing or midwifery programme is not always equivalent to a university degree in the discipline.
- Many nurses and midwives working in education do not get the chance to maintain their clinical competence.

- Countries did not have a system for accreditation of their clinical settings.
- Midwifery education was generally at a lower level than nursing.
- Several countries had more than one level of qualified nurse.

7.5 Recommendations

There are clearly issues that need to be followed up with individual countries. In particular, where, as indicated in previous chapters, countries moved from a “yes” to a “no” response, the exact status needs to be ascertained so that if required the WHO Regional Office for Europe can offer assistance.

- Action Plans should be made these agreed between the Chief Nursing Officer and the WHO Regional Adviser. on the basis of individual countries’ submissions to ensure that there is a clear timescale for the introduction of university-based education programmes for entry to the nursing and midwifery professions.
- Where countries have given “no” responses without a timescale, the WHO Regional Office for Europe should follow these up in relation to the action plans.
- Countries which have given timescales for implementation of principles, which they are not yet achieving, should also be asked for a follow up from WHO Regional Office for Europe.
- A follow up study be conducted to assess the current situation in all countries in the region including the non-respondents. It is recommended that this be done using an ethnographic approach. This should combine observation and interviews based on scenarios using the existing principles as a guideline from which to build further questions and develop models for each country and for the region as a whole. Separate studies need to be carried out for nursing and midwifery.
- A further study should be conducted linking nursing and midwifery basic and continuing education with the scope of practice throughout the region

7.6 Concluding statement

This study has shown that nursing and midwifery education in Europe have responded to the changes to health care, politics and consumer demands by being proactive. Many changes are occurring in the education of nurses and midwives, which in the long term may contribute to the health of the region as an educated workforce will perform at a higher level. The document with guidelines for the implementation of the Strategy (WHO, 2001b) is a very important tool which offers detailed advice to Member States in raising education programmes to the necessary level. As shown in chapters four to six of this study, however, in many cases the necessary level of basic education has not yet been achieved. Conversely great progress has been made by some respondents and there is generally signs of progress by all those countries which participated. Notwithstanding the limitations of the study the key recommendation remains the aim of achieving university education level programmes as entry to the two professions.

8 References

- Benner, P. (1984). *From Novice to Expert*. California Addison Wesley.
- Bondy, K.N. (1983). Criterion-referenced definitions for rating scales in clinical evaluation. *Journal of Nursing Education*, 22, 376–382.
- Bowden, J.A. & Marton, F. (1997). *The University of Learning: Beyond Quality and Competence*. London: Kogan.
- Bradshaw, A. (1997). Defining “competency” in nursing (Part I): a policy review. *Journal of Clinical Nursing*, 6, 347–354.
- Bradshaw, A. (1998). Defining “competency” in nursing (Part II): a policy review. *Journal of Clinical Nursing*, 7, 103–111.
- Bramadat, I.J., Chalmers, K. & Andrusyszyn M.A. (1996). Knowledge, skills and experience for community health nursing practice: The perceptions of community nurses, administrators and educators. *Journal of Advanced Nursing*, 24, 1224–1233.
- Casey, K., Fink, R., Krugman, M. & Propst, J. (2004). The graduate nurse experience. *Journal of Nursing Administration*, 34(6), 303–11.
- Chick, N.P. (1987). Nursing Research in New Zealand. *Western Journal of Nursing Research*, 9(3), 317–334.
- Cox, J.M. & Boltens, R.J. (1998). Evaluation of the use of a skills acquisition manual within the common foundation programme for pre-registration nursing. *Nurse Education Today*, 18(8), 616–621.
- Day-Stirk, F. & Palmer, L. (2003). *Profiling Midwifery in Newly Independent States and Countries of Central and Eastern Europe*. Copenhagen: World Health Organization.
- Declaration of Bologna (1999). The European Higher Education Area. *The Bologna Declaration, a joint declaration of the European Ministers of Education convened in Bologna 19 June 1999*.
- Delaney, C. & Piscopo, B. (2004). RN-BSN programs: associate degree and diploma nurses' perceptions of the benefits and barriers to returning to school. *Journal for Nurses in Staff Development*, 20(4), 157–63.
- Del Bueno, D.J. (1983b). Doing the right thing: Nurses ability to make clinical judgements. *Nurse Educator*, 8 (3), 7–11.
- Del Bueno, D.J. (1990). Experience, education and nurses' ability to make clinical decisions. *Nursing and Health Care* 11(6), 290–294.
- Draper, P.R., Watson, R., Procter, S. & Norman, J.I. (2001). Putting portfolios in their place. *Nurse Education Today*, 2, 534–540.

- Dunn, D.M. (1986). Assessing the development of clinical nursing skills. *Nurse Education Today*, 6, 28–35.
- Ellis, A.P. (1997). Processes used by nurses to make decisions in the clinical practice setting. *Nurse Education Today*, 17, 325–332.
- Eraut, M. (1994). *Developing professional knowledge and competence*. London Falmer Press.
- Eraut, M. (1998). Concepts of competence. *Journal of Interprofessional Care*, 12(2), 27–139.
- Eraut, M. & Du Boulay, D. (1999). Developing the Attributes of Medical Professional Judgement and Competence. *Report to the Department of Health*.
- European Economic Community (1997a). Council Directive 27 June concerning the mutual recognition of diplomas, certificates and other evidence of the formal qualifications of nurses responsible for general care. *Directive 77/452/EEC*.
- European Economic Community (1997b). Council Directive 27 June concerning the coordination of provisions laid down by law, regulation of diplomas, certificates and other evidence of the formal qualifications of nurses responsible for general care. *Directive 77/452/EEC*.
- Fitzpatrick, J.M., While, A.E. & Roberts, J.D. (1997). Measuring clinical nurse performance; Development of the Kings Nurse Performance Scale. *International Journal of Nursing Studies*, 34(3), 222–230.
- Fleming, V., Poat, A., Curzio, J., Douglas, V. & Cheyne, H. (2001). Competencies of midwives with single or dual qualifications at then point of registration in Scotland. *Midwifery*, 17, 295–301.
- Fleming, V. (2002). Scoping Study in Nursing in Kosovo. *Final report to European Agency for Reconstruction*.
- Fleming, V.E.M. (1998). Women and midwives in partnership: a problematic relationship? *Journal of Advanced Nursing*, 27, 8–14.
- Fogli, L., Hulin, C.L. & Blood M.R. (1971). Development of first-level job criteria. *Journal of Applied Psychology*, 55(1), 3–8.
- Giroto, E.A. (1993). Assessment of competence in clinical practice; a phenomenological approach, *Journal of Advanced Nursing*, 18,114–119.
- Gonczi, A., Hager, P. & Athanasou, J (1990). *The development of “competency-based” assessment strategies for the professions*, National Office for Overseas Skills Recognition. Research Paper 9, Canberra. Australian Core Publishing Service.
- González, J. Wagenaar, R. (2003). The Tuning Project; Tuning educational structures in Europe. *Phase one final report*.

- Gorham, W.A. (1963). Methods for measuring staff nurse performance. *Nursing Research*, 12(1), 4–11.
- Juceviciene P. Lepaite D. (2005). *Competence as derived from activity: the problem of their level correspondence*. (<http://www.education.ktu.lt/evaco/competence.html>, accessed 01.03.2005)
- Keighley, T. (2003 a). Nursing: a European perspective. *Nursing Management*, 10(1), 15–20.
- Keighley, T (2003 b). Nursing: a European perspective. *Nursing Management*, 10(2), 15–17.
- Khoza, L.B. & Ehlers, V.J (1998). The competencies of newly qualified nurses as viewed by senior professional nurses. *Curatonia*, Sept, 67–76.
- Limban. V. (2005). *Birth Centre in Bucuresti; Personal communication from President. Romanian Midwives' Association*.
- May, B.A., Edell, V., Butell, S., Doughty, J. & Langford, C. (1999). Critical thinking and clinical competence; a study of their relationship in BSN seniors. *Journal of Nursing Education*, 38(3), 100–110.
- McKenna, H.P. (1996) The Delphi technique; a worthwhile research approach to nursing? *Journal of Advanced Nursing*, 19 (6), 1221–1226
- Mead, M. (2003). Midwifery and the enlarged European Union. *Midwifery*, 19, 82–86.
- Mulrow, C.D. & Oxman A.D. (1997). *Cochrane Collaboration Handbook, In the Cochrane Library, the Cochrane Collaboration*. Update Software. Oxford 1997
- Nagelsmith, L. (1995). Competence: an evolving concept. *Journal of Continuing Education in Nursing*, 26(6), 245–248.
- Norman, I.J., Watson, R., Murrells, T., Calman, L., Redfern, S. (2000). Evaluation of the validity and reliability of methods to assess the competence to practice of pre-registration nursing and midwifery students in Scotland. *Final report to the National Board for Nursing, Midwifery and Health Visiting for Scotland*.
- O'Connor, S.E., Pearce, J., Smith, D., Vogelli, P. & Walton, D. (1999). Monitoring the quality of pre-registration education: Development validation and piloting of competency-based performance indicators for newly qualified nurses. *Nurse Education Today*, 19, 334–341.
- Parahoo, K. (1997). *Nursing research: principles, process and issues*. Basingstoke. Palgrave. Macmillan.
- Peplau. H. E. (1952). *Interpersonal relations in nursing*. New York: G. P. Putnam & Sons.
- Persad, P., Hiscock, C. & Mitchell, T. (1997). Midwives' own perception of competence in obstetric procedures. *British Journal of Midwifery*, 5(11), 706–708
- Robb, Y., Fleming, V. & Dietert, C. (2002). Measurement of clinical performance of nurses: a literature review. *Nurse Education Today*, 22, 1–8.

Salvaje, J. & Heijen, S. (1997). *Nursing in Europe: A resource for better health*. European series 74. Copenhagen: World Health Organization.

Scottish Office (1995). *Report on the Masterclass on Nursing and Europe*. Edinburgh. Scottish Office.

Schwirian, P.M. (1980). Evaluating the performance of nurses; a multi-dimensional approach. *Nursing Research*, 27(6), 347–351.

Slater, D.S. (1967). In: *Slater Nursing Competencies Rating Scale*, College of Nursing, Wayne State University, Detroit.

Smith, C. & Thomas (2000). What Health Care can learn from banking. *Health Forum Journal*, 43(2), 1527–3547.

Smith, P.C. & Kendall L.M. (1963). Retranslation of Expectations: an approach to the construction of unambiguous anchors for rating scales. *Journal of Applied Psychology*, 47(2), 149–155.

The Peach Report. (1999). *Fitness for Practice*. London: United Kingdom Central Council for Nursing, Midwifery and Health Visiting.

Watson, R., Stimpson, A., Topping, A. & Porock, D. (2002). Clinical competence assessment in nursing: a systematized review of the literature. *Journal of Advanced Nursing*, 39(5), 421–431

While, A.E. (1994). Competence versus performance; which is more important? *Journal of Advanced Nursing*, 20, 525–531.

Woolley, G.R., Bryan, M.S. & Davis, J.W. (1998). Educational Innovations: A comprehensive approach to clinical evaluation. *Journal of Nursing Education*, 37(8), 361–366 .

World Health Assembly (1948). *Representation of Nurses*. Resolution no. 1.46.

World Health Assembly (1989). *Strengthening nursing/midwifery in support of the strategy for health for all*. Resolution no. 42.27.

World Health Assembly (1992). *Strengthening nursing and midwifery in support of strategies for health for all*. Resolution no. 45.5.

World Health Assembly (1996). *Strengthening nursing and midwifery*. Resolution no. 49.1.

World Health Assembly (2001). *Strengthening nursing and midwifery*. Resolution no. 54.12.

World Health Organization (Europe) (1989). *European Conference on Nursing: a report on a WHO meeting*. Copenhagen: WHO Regional Office for Europe EUR/ICP/CARE9401/CN01.

World Health Organization (1992). *International Definition of the Midwife*. Geneva: WHO headquarters.

World Health Organization (1998). *European Strategy for Nursing and Midwifery Education for Health for All*. Copenhagen: WHO Regional Office for Europe. EUR/ICR/DLVR 04 05 01.

World Health Organization (2000a). *Nurses and Midwives for Health; A WHO European Strategy for Nursing And Midwifery Education*. Copenhagen: WHO Regional Office for Europe. EUR/00/5019309/15.

World Health Organization (2000b). *Munich Declaration, Nurse and Midwives – a Force for Health*. Munich: WHO. EUR/00/5019309/6.

World Health Organization (2001a). *Nurses and Midwives for Health; WHO European Strategy for Nursing and Midwifery Education, Prospective Analysis Methodology Questionnaire*. Copenhagen: WHO Regional Office for Europe. EUR/01/5019304.

World Health Organization (Euro) (2001b). *European Strategy for Nursing and Midwifery Education; guidelines for member states on the implementation of the Strategy*. Copenhagen:: WHO Regional Office for Europe. EUR/01/5019304.

World Health Organization (2002). *Strategic Directions for Strengthening Nursing and Midwifery Services*. Geneva:WHO headquarters.

World Health Organization (2003). *Nurses and Midwives for Health; WHO European Strategy for Continuing Education for Nurses and Midwives*. Copenhagen: WHO Regional Office for Europe.

Worth-Butler, M.M., Fraser, D.M. & Murphy R.J.L. (1995). Recognizing competence in midwifery. *British Journal of Midwifery*, 3, 259–262.

Worth-Butler, M.M., Fraser, D.M. & Murphy, R.J.L. (1996). Eliciting the views of experienced midwives about the assessment of competence in midwifery. *Midwifery*, 12(4), 182–190.

Xu, Y. Xu, Z. Zhang, J. (2001). A comparison of nursing education curriculum in China and the United States of America. *Journal of Nursing Education*, 41(7), 310–6.

Annex 1

COMPLETE LIST OF QUESTIONS

1. Nursing (midwifery)⁵² is an integral part of the essential legislative and regulatory framework for the health care professions in our country.
2. Nursing (midwifery) education and practice are underpinned by values focusing on the promotion and maintenance of health in individuals, families and communities and on individual and holistic care of those who are ill. It promotes non-judgemental care that is sensitive to the social, cultural, economic and political context of our country.
3. Nursing (midwifery) education takes into account the health care needs of the population of our country and is conducted to agreed standards for quality of care.
4. Nursing (midwifery) education has the individual, be it the patient or the healthy person, as its main focus, and takes into account the significance of the contexts within which those individuals live and work, including their families, partners, social groups and communities.
5. A proportion of nursing (midwifery) education is interdisciplinary and multiprofessional.
6. Admission to nursing (midwifery) education follows successful completion of secondary school education, with qualifications equivalent to those required by our country for university (or equivalent higher education institution) entrance. Alternatively, entry is based on formal accreditation of prior learning and/or relevant experience, which is a normal route of entry to the university (or equivalent higher education institution) concerned, and is acceptable to the nursing (midwifery) statutory body – where such exists.
7. The length of the programme is sufficient to achieve the specified competencies and is not less than three years.
8. Students are not employees during their education, and enjoy a status equivalent to other university (or equivalent higher education institution) students in our country. This applies throughout the theory and practice components of their education.
9. Successful completion of the nursing programme leads to professional qualification as a nurse (midwife).
10. Qualification as a midwife may be achieved either via a programme based on prior qualification as a nurse or via a direct-entry programme.⁵³
11. The academic level of the professional qualification as a nurse (midwife) is that of a university (or equivalent higher education institution) degree in nursing (midwifery).
12. There is only one level of qualified nurse (midwife) in our country (i.e. one level of basic nursing (midwifery)).
13. (a) The curriculum is research-based/evidence-based.
(b) The curriculum is competency-based.

⁵² Readers are reminded that separate questionnaires were designed for nursing and midwifery. For ease only one annotated version is included in this report.

⁵³ This question applies only to midwifery programmes.

14. The specified competencies include the ability to practice in hospital and community settings and as a member of the multiprofessional health care team.
15. The relevant EC Council Directives for nursing (midwifery) serve as the minimum in our country.
16. Initial preparation and qualification forms the basis for continuing professional development and education.
17. The university, its school or department of nursing (midwifery) and the practice placement areas in the hospitals and community settings are formally accredited and have in place systems of quality improvement/control.
18. The nursing (midwifery) programme is formally accredited, is regularly reviewed and has valid systems of evaluation and quality improvement/control in place at local and national levels.
19. The nursing (midwifery) programme has credits allocated to the learning that takes place in both the educational institution and the practice placement settings.
20. The director or head of the nursing (midwifery) school or department is a qualified nurse (midwife).
21. The teaching of nursing (midwifery), in both theory and practice, is carried out by a qualified nurse (midwife).
22. Teachers of nursing (midwifery):
 - Hold a degree at an academic level equivalent to the requirements for university (or equivalent higher education institution) teachers in our country.
 - Hold a teaching qualification (i.e. have passed a specific examination to become a teacher).
 - Hold the qualification to which the programme leads.
 - Have a minimum of two years of relevant practical experience.
 - Teach within the area of specialist nursing (midwifery) practice in which they have expertise.
 - Maintain their clinical competence.
 - Are responsible for the clinical supervision of students on practice placement within their areas of specialisation.
 - This responsibility [at (g) above] is shared with the student's clinical mentor.
 - There are no qualified nurse (midwife) teachers in our country, therefore qualified teachers will be sought from other countries by means of validated networks.
 - There are no qualified nurse (midwife) teachers in our country therefore appropriately qualified nurses (midwives) will be selected to attend teacher preparation courses.
23. Clinical nurses (midwives) who teach, act as mentors and support students in their practice placements:
 - Are experts in their field of practice.
 - Receive appropriate preparation for their roles as teachers, mentors and providers of support.

- Maintain their clinical competence.
 - Our country has no qualified nurse (midwife) mentors, therefore qualified nurse (midwife) mentors will be sought from other countries by means of validated networks.
 - Our country has no qualified nurse (midwife) mentors, therefore appropriately qualified nurses (midwives) will be selected to attend mentor preparation courses.
24. Student nurses (midwives) receive clinical supervision while in clinical placements, whether in hospital or community settings. The level and amount of such supervision corresponds to the stage of their education.
 25. Teachers from disciplines that contribute to nursing (midwifery) education are experts in their own subjects and hold a degree equivalent to the requirements for university (or equivalent higher education institution) teachers in our country.
 26. University schools and departments of nursing (midwifery) have, or have adequate shared access to, appropriate human and physical resources including equipment, clinical skills laboratories and libraries.

Annex 2

QUESTIONS CONCERNING LEGISLATION

1. Nursing (midwifery) is an integral part of the essential legislative and regulatory framework for the health care professions in our country.
2. There is only one level of qualified nurse (midwife) in our country (i.e. one level of basic nursing (midwifery)).

Annex 3

QUESTIONS CONCERNING CONSUMERS

1. Nursing (midwifery) education and practice are underpinned by values focusing on the promotion and maintenance of health in individuals, families and communities and on individual and holistic care of those who are ill. It promotes non-judgemental care that is sensitive to the social, cultural, economic and political context of our country.
2. Nursing (midwifery) education takes into account the health care needs of the population of our country and is conducted to agreed standards for quality of care.
3. Nursing (midwifery) education has the individual, be it the patient or the healthy person, as its main focus, and takes into account the significance of the contexts within which those individuals live and work, including their families, partners, social groups and communities.

Annex 4

QUESTIONS CONCERNING CURRICULUM

1. A proportion of nursing (midwifery) education is interdisciplinary and multiprofessional.
2. The curriculum is research-based/evidence-based.
3. The curriculum is competency-based.
4. The specified competencies include the ability to practice in hospital and community settings and as a member of the multiprofessional health care team.
5. Initial preparation and qualification forms the basis for continuing professional development and education.
6. The nursing (midwifery) programme has credits allocated to the learning that takes place in both the educational institution and the practice placement settings.

Annex 5

QUESTIONS CONCERNING ENTRY TO AND EXIT FROM PROGRAMMES

1. Admission to nursing (midwifery) education follows successful completion of secondary school education, with qualifications equivalent to those required by our country for university (or equivalent higher education institution) entrance. Alternatively, entry is based on formal accreditation of prior learning and/or relevant experience, which is a normal route of entry to the university (or equivalent higher education institution) concerned, and is acceptable to the nursing (midwifery) statutory body – where such exists.
2. The length of the programme is sufficient to achieve the specified competencies and is not less than three years.
3. Students are not employees during their education, and enjoy a status equivalent to other university (or equivalent higher education institution) students in our country. This applies throughout the theory and practice components of their education.
4. Successful completion of the nursing programme leads to professional qualification as a nurse (midwife).
5. Qualification as a midwife may be achieved either via a programme based on prior qualification as a nurse or via a direct-entry programme.
6. The academic level of the professional qualification as a nurse (midwife) is that of a university (or equivalent higher education institution) degree in nursing (midwifery).
7. The relevant EC Council Directives for nursing (midwifery) serve as the minimum in our country.

Annex 6

QUESTIONS CONCERNING QUALITY OF INSTITUTIONAL PROCESSES

1. The university, its school or department of nursing (midwifery) and the practice placement areas in the hospitals and community settings are formally accredited and have in place systems of quality improvement/control.
2. The nursing (midwifery) programme is formally accredited, is regularly reviewed and has valid systems of evaluation and quality improvement/control in place at local and national levels.
3. Student nurses (midwives) receive clinical supervision while in clinical placements, whether in hospital or community settings. The level and amount of such supervision corresponds to the stage of their education.
4. University schools and departments of nursing (midwifery) have, or have adequate shared access to, appropriate human and physical resources including equipment, clinical skills laboratories and libraries.

Annex 7

QUESTIONS CONCERNING QUALIFICATIONS OF TEACHING STAFF

1. The director or head of the nursing (midwifery) school or department is a qualified nurse (midwife).
2. The teaching of nursing (midwifery), in both theory and practice, is carried out by a qualified nurse (midwife).
3. Teachers of nursing (midwifery):
 - Hold a degree at an academic level equivalent to the requirements for university (or equivalent higher education institution) teachers in our country.
 - Hold a teaching qualification (i.e. have passed a specific examination to become a teacher).
 - Hold the qualification to which the programme leads.
 - Have a minimum of two years of relevant practical experience.
 - Teach within the area of specialist nursing (midwifery) practice in which they have expertise.
 - Maintain their clinical competence.
 - Are responsible for the clinical supervision of students on practice placement within their areas of specialisation.
 - This responsibility is shared with the student's clinical mentor.
 - There are no qualified nurse (midwife) teachers in our country, therefore qualified teachers will be sought from other countries by means of validated networks.
 - There are no qualified nurse (midwife) teachers in our country therefore appropriately qualified nurses (midwives) will be selected to attend teacher preparation courses.
4. Clinical nurses (midwives) who teach, act as mentors and support students in their practice placements:
 - Are experts in their field of practice.
 - Receive appropriate preparation for their roles as teachers, mentors and providers of support.
 - Maintain their clinical competence.
5. Our country has no qualified nurse (midwife) mentors, therefore qualified nurse (midwife) mentors will be sought from other countries by means of validated networks.
6. Our country has no qualified nurse (midwife) mentors, therefore appropriately qualified nurses (midwives) will be selected to attend mentor preparation courses.
7. Teachers from disciplines that contribute to nursing (midwifery) education are experts in their own subjects and hold a degree equivalent to the requirements for university (or equivalent higher education institution) teachers in our country.

Glasgow Caledonian University
World Health Organization Collaborating Centre for Nursing and Midwifery
Cowcaddens Road
Glasgow G4 0BA Scotland