



WHO Europe Critical Care Nursing Curriculum

WHO European Strategy for Continuing Education for Nurses and
Midwives

2003

Keywords

EDUCATION, NURSING, CONTINUING
STRATEGIC PLANNING
CRITICAL CARE – education
CURRICULUM
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 2003

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

	<i>Page</i>
Introduction	1
Context	1
The need for a Continuing Education Strategy	1
The aim and purpose of the Continuing Education Strategy	2
Background to the Continuing Education Strategy	2
The Health Care context	4
The Critical Care Nursing Curriculum	6
1. Critical Care Nursing	6
1.1 Definition of the Critical Care Nurse	6
2. The Critical Care Nursing course	6
2.1 Aims	6
2.2 Structure, length and mode of delivery	7
2.3 Entry requirements	7
2.4 Competencies or learning outcomes	7
2.5 Curriculum Content	8
2.6 Teaching/learning and assessment strategies	9
2.7 Supervision of practice	10
2.8 Optimum student intake and teacher/student ratio	10
2.9 Accreditation with ECTS points	10
2.10 Quality control and evaluation	11
3. Teachers and mentors	11
4. Location of the course	12
5. Qualification on successful completion of the course	12
6. Course content – Modules One to Seven	12
MODULE ONE	14
MODULE TWO	16
MODULE THREE	19
MODULE FOUR	21
MODULE FIVE	24
MODULE SIX	26
MODULE SEVEN	28

References	31
Bibliography	32
Glossary	33
Acknowledgements	37

Introduction

This Critical Care Nursing curriculum has been prepared for WHO Europe as one of several post-qualifying curricula, requested by some Member States, to assist them in their progress towards implementation of the WHO European Region Continuing Education Strategy for Nurses and Midwives (WHO 2003). The Critical Care Nursing curriculum document therefore commences with a description of the context for the Continuing Education Strategy.

Context

The WHO European Region Continuing Education Strategy for Nurses and Midwives is set firmly within the context of the Second WHO Ministerial Conference on Nursing and Midwifery in Europe, which addressed the unique roles and contributions of Europe's nurses and midwives in health development and health service delivery (WHO 2001). At that Conference of Ministers of Health of Member States in the European Region, the Munich Declaration "Nurses and Midwives: A Force for Health" (WHO 2000a) was signed, and this key document, together with the WHO European Strategy for Nursing and Midwifery Education (WHO 2000) form the context for the Continuing Education Strategy.

The need for a Continuing Education Strategy

Nurses and midwives together constitute the largest proportion of the health care workforce in all Member States of the WHO European Region, numbering approximately six million at the start of this new century. The service they provide covers 24 hours of every day of the year. It is imperative that they are competent to provide the highest quality of nursing and/or of midwifery care. In order to do this, their initial nursing and midwifery education must be such that the people of their nation can be assured of their competence to practise on entry to their professions of nursing and midwifery, and that the foundation has been laid for them to continue to learn throughout their professional lives. Maintenance and further development of competence is essential to the ongoing provision of high quality nursing and midwifery care. In the rapidly changing health care services of today, with the knowledge explosion and the impact of technology upon health care, many nurses and midwives are increasingly called upon to work in expanded, specialist and/or advanced practice roles. The WHO European Strategy for Continuing Education for nurses and midwives has been developed in order to assist Member States to ensure the continuing competence of their nursing and midwifery workforce. In some cases this will be by developing new knowledge for specialist fields of clinical nursing and midwifery practice, in others by deepening their knowledge of an existing field of practice, and in yet others by gaining new competencies in the field of nursing and/or midwifery education, management or research.

The Continuing Education Strategy does not stand alone. Firstly, it builds upon the firm foundation provided by the WHO European Strategy for Nursing and Midwifery Education (WHO 2000), in which the link between initial and continuing education is clearly stated:

The initial programme of education must prepare nurses and midwives who are not only competent to practise in today's health services, but who value and are committed to maintaining that competence. This they will achieve through continuing to update their knowledge, skills and

attitudes, in order that they can continue to meet the changing health priorities and needs of the people of the Member States (WHO 2000).

Secondly, its principles are in harmony with continuing education developments in nursing more generally in Europe and worldwide and with the growth of specialization in nursing. The International Council of Nurses (ICN) considered specialization as implying a deeper level of knowledge and skill in a specific aspect of nursing than would be acquired in initial nursing education (International Council of Nurses 1987 and 1992). The European Commission's Advisory Committee on Nursing (Commission of the European Communities 1994) recommended that specialist educational preparation was necessary in order to prepare qualified nurses to continue to meet the changing and increasingly complex needs of patients for whom advanced technology was enabling new treatment regimes, with resulting advanced practice roles for nurses. ENNO, the European Network of Nursing Organizations (2000) advocates a European Framework for Specialist Nursing Education, in recognition of the reality that the field of nursing knowledge and skills has become too vast and complex for any one individual to master in full. If quality of care is to be ensured, then specialization within nursing is essential, and they cite European Directives 89/48/CEE and 92/51/EEC, as amended in 1997, as the directives which are appropriate for specialist nurses (European Network of Nursing Organizations 2000).

The aim and purpose of the Continuing Education Strategy

The key aim of the strategy is to ensure fitness for purpose of each Member State's nursing and midwifery workforce. Ongoing competence to practise can only be achieved by a commitment to lifelong learning on the part of all nurses and midwives. However, that personal and professional commitment can only be realized if each Member State accepts its obligation to ensure, or set in place plans to ensure that opportunities for continuing education are provided, and that the requirement for nurses and midwives to maintain their competence is regulated under legislation, in order to support safe, up-to-date and evidence-based practice.

The purpose of the Continuing Education Strategy is therefore twofold; it is both visionary and pragmatic. It provides the vision that will help shape the philosophy of continuing education in nursing and in midwifery, often termed continuing professional development, and it outlines and/or confirms some fundamental guiding principles. If followed, these principles should enable Member States to set up, or further develop existing systems of continuing education. In turn, this will enable nurses and midwives to maintain their competence and so feel confident that their knowledge, skills and attitudes are "fit for purpose" in the multiprofessional team in the health care services of which they are an essential part.

Background to the Continuing Education Strategy

Of crucial importance to the implementation of the Continuing Education Strategy is the implementation by Member States of the WHO Education Strategy for initial nursing and midwifery education. Of equal importance is the belief, which underpins both Strategies, that education and practice are very closely related. Education and practice must move ahead together, in mutual respect and partnership, with shared values and goals. This is essential to the provision of an appropriate quality of cost-effective and efficient nursing and midwifery care and of health promotion for all the people of the Member States of the WHO European Region. This progress and partnership must be achieved within the changing structures of health care priorities

and provision in the different Member States, many of which are undergoing major political, economic, social and demographic change and are in the midst of health care reforms. Although some of these differences can be significant, the shared values were clearly demonstrated at the Second WHO Ministerial Conference on Nursing and Midwifery in Europe (WHO 2001) when, in The Munich Declaration (WHO 2000a), Ministers of Health stated their belief that:

Nurses and midwives have **key and increasingly important roles** to play in society's efforts to tackle the public health challenges of our time, as well as in ensuring the provision of high quality, accessible, equitable, efficient and sensitive health services which ensure continuity of care and address people's rights and changing needs (WHO 2000a).

In the "Munich Declaration" which was issued by Ministers at the Conference all relevant authorities were urged to 'step up their action' in order to strengthen nursing and midwifery by:

- ensuring a nursing and midwifery contribution to decision-making at all levels of **policy** development and implementation;
- addressing the **obstacles**, in particular recruitment policies, gender and status issues, and medical dominance;
- providing financial incentives and opportunities for **career advancement**;
- improving initial and continuing **education** and access to higher nursing and midwifery education;
- creating **opportunities for nurses, midwives and physicians to learn together** at undergraduate and postgraduate levels, to ensure more cooperative and interdisciplinary working in the interests of better patient care;
- supporting research and dissemination of information to develop the **knowledge and evidence base** for practice in nursing and midwifery;
- seeking opportunities to establish and support **family-focused community nursing and midwifery** programmes and services, including, where appropriate, the Family Health Nurse;
- enhancing the roles of nurses and midwives in **public health, health promotion and community development** (WHO 2000a).

Of the above actions, those of direct relevance to the Continuing Education Strategy are the need to improve continuing education and access to higher nursing and midwifery education; to create opportunities for nurses, midwives and physicians to learn together at both undergraduate and postgraduate levels in order to ensure more cooperative and interdisciplinary working in the interests of better patient care; to support research and dissemination of information in order to develop the knowledge and evidence base for practice; to provide financial incentives and opportunities for career advancement; and to ensure nurses and midwives contribute to decision-making at all levels of policy development and implementation.

On a worldwide basis, at the Fifty-fourth World Health Assembly in May 2001, delegates from the 191 countries present stressed the crucial and cost-effective role of nurses and midwives in reducing mortality, morbidity and disability in populations, in caring for those who are ill and in promoting healthier lifestyles (WHO 2001a).

If nurses and midwives are to fulfil these key roles to their maximum potential, if they are to work effectively in partnership with others in the health care team, then it is imperative that they build systematically upon their initial nursing and midwifery education, continuing their professional education in ways which ensure they maintain competence to meet the needs of the people of their nations for health care.

The Health Care context

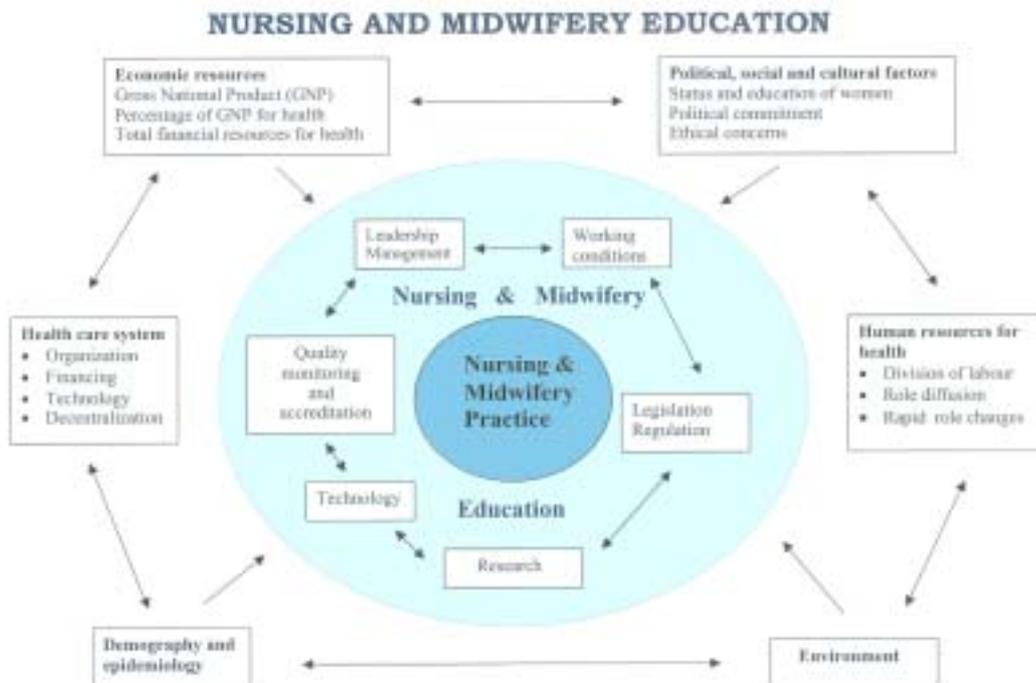
As the Continuing Education Strategy was being prepared, all governments across Europe continued to face a wide range of complex health problems. Although in each Member State the existence and the severity of these problems varies, they include environmental pollution; the increasing gap between the rich and the poor; unacceptable levels of maternal and child morbidity and mortality; and a resurgence of diseases thought to have been conquered such as, for example, tuberculosis, cholera, typhoid fever and malaria. There are increases in the level of chronic illness, including cancer, cardiovascular diseases and mental health disorders; in lifestyle-related problems such as unhealthy diet, lack of exercise, smoking, alcohol and substance misuse and in sexually transmitted diseases. In some parts of the Region, wars and ethnic conflict continue to cause intense suffering, increasing numbers of refugees and homeless people and disruption to society's essential infrastructures. There are also the major challenges for health care systems which are inherent in the changing demography, i.e. the steady increase in the proportion of elderly people in the population which, in some Member States, is compounded by a gradual decrease in the proportion of those who normally contribute to the gross domestic product through working.

The future is likely to see continuing reforms of the health sector. These include a greater involvement of citizens and the community in decision-making about care; more people cared for at home and therefore a growing demand for community-based health services; a steady increase in the availability of new treatments and therapies; increasing costs of providing care; and more and more ethical challenges. However, whatever the reforms and changes, care which is centred upon the individual will remain the starting point of the health care organization and of the work of all nurses and midwives.

Continuing advances in practice, in the evidence-base and in the quality of care required make it imperative that the capabilities of the nursing and midwifery workforce are regularly updated, and that there is a commitment by Member States to ensure provision of appropriate continuing education. Effective implementation of the role of the nurse and of the midwife as outlined in the Strategy for Nursing and Midwifery Education is the essential first step. Effective implementation, or setting in place of plans to achieve implementation of the Strategy for Continuing Education is also essential if the workforce is to be prepared for the necessary specialist and advanced practice roles which the developments outlined above demand. Member States will be required to regularly evaluate and if necessary update their existing continuing education provision, to keep pace with the priority of maintaining a nursing and midwifery workforce which is fit for purpose, and which remains fit for purpose.

Just as "health care does not take place in isolation from political, economic and cultural realities" (WHO 1996), so nursing and midwifery education and practice do not take place in isolation from the political, social, economic, environmental and cultural realities of the Member States; neither must they be seen in isolation from the various stages of health care reform and the dynamic nature, or otherwise, of progress. Figure 1 depicts that complexity.

Figure 1. The dynamic context of nursing and midwifery education
Adapted from WHO 1996



Likewise, nurses and midwives do not practise in isolation from their colleagues in the other health care professions. Although each profession contributes unique knowledge and skills to health promotion, the care of patients and to the health care system as a whole, there is a need for much more multidisciplinary and interdisciplinary work, in a spirit of recognition and respect for each other's authority, responsibility, ability and unique contribution. Thus, nurses and midwives must continue to build upon their initial professional education so as to continue to take their full part as members of the multiprofessional health care team, sharing both in decision-making and, when appropriate, in taking responsibility for leadership of the team and for the outcomes of the work of the team.

The Member States of the WHO European Region need well prepared, up-to-date, competent nurses and midwives, who participate in lifelong learning and who are able to work confidently, maintaining professional standards of care as the sound basis for multiprofessional collaboration and partnership with patients, healthy individuals, families and communities.

The Critical Care Nursing Curriculum

All Member States are reminded that this is a sample curriculum. It should be used as guidance and be adapted as necessary to meet the Member State's specific priorities and needs for Critical Care nursing.

1. Critical Care Nursing

Advances in technology and medicine mean that increasing numbers of severely ill patients are surviving with a corresponding need for intensive nursing care. Such critically ill patients are often nursed in an intensive care unit within a hospital where sophisticated equipment is available to enable frequent monitoring of vital signs, assisted ventilation and, when life-threatening crises occur, rapid resuscitation measures. However, it is recognized that not all critically ill patients are nursed in intensive care units, but may be hospitalized within specialized high dependency units. It is envisaged therefore that this course will be relevant to nurses working in a variety of critical care settings and that the knowledge and skills gained during the course will be transferable to any critical care area.

1.1 Definition of the Critical Care Nurse

The critical care nurse will have successfully completed specialist post-qualification education in critical care (or intensive care) nursing, which builds upon initial generalist nursing education. In meeting the complex needs of critically ill patients, such nurses require a well-developed knowledge base, along with specialist skills in both the technological and the caring dimensions of critical care nursing. They must be equipped with the expertise to make sound and rapid clinical judgements within the critical care environment and to recognize and deal with the ethical issues inherent in such an environment. This course aims to produce nurses able to meet such demands.

2. The Critical Care Nursing course

2.1 Aims

The aims of the course and of the curriculum are to:

- provide an advanced educational experience which will develop the student's intellectual and imaginative abilities in order to facilitate the development of independent judgement and problem-solving skills;
- provide an educational framework that will encourage the student to develop her/his skills of analysis and critical awareness in order to stimulate an enquiring and creative approach to both the theory and practice of critical care nursing;
- develop the student's ability to respond to changing needs in critical care in an analytical way;
- develop the student's awareness of relevant research findings and facilitate integration of these findings into critical care nursing practice.

2.2 Structure, length and mode of delivery

The curriculum is structured in modules or units of study, several of which combine both theory and practice elements. The length of the course must be sufficient to enable the student, on successful completion, to achieve the specified competencies or learning outcomes, the academic award and the specialist nurse qualification relevant to the course, and is normally of 40 weeks. Each week of the course is calculated as comprising 30 hours, which gives a total of 1200 hours. The preferred mode of delivery is full-time. Flexibility to deliver the course in a part-time mode or by distance/on-line learning should be open to negotiation, depending upon each Member State's resources.

The course is based on the philosophy of the critical care nurse as a reflective, lifelong learner (Figure 2, Section 2.6). It emphasizes the importance of the integration of theory and practice, which should be evidence-based.

2.3 Entry requirements

Course participants will be nurses who have successfully completed an initial nursing education programme, as described in the WHO European Strategy for Nursing and Midwifery Education entitled "Nurses and midwives for health: A WHO European strategy for nursing and midwifery education" (WHO 2000) or its equivalent. They should have a minimum of two years post-qualifying experience.

2.4 Competencies or learning outcomes

The competencies or learning outcomes of the course have been developed to demonstrate achievement of both theoretical and clinical learning in the following areas:

- Specialist clinical practice
- Care and programme management
- Clinical practice leadership
- Clinical practice development.

These are detailed in the Continuing Education Strategy (WHO 2003) and are based upon the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (UKCC 1998) standards for specialist education and practice. Underpinning knowledge will be delivered in the theoretical component of the course and the students will be expected to integrate and apply this knowledge in critical care nursing practice.

On successful completion of the course, the student will be competent to:

- critically analyse theories relating to therapeutic communication suitable for use with an individual in crisis;
- evaluate their own personal skills to identify their learning needs by reflecting upon the management of therapeutic communication with an individual in crisis;
- appraise the physical, psychological, social and environmental issues that contribute to critical illness utilizing appropriate epidemiological evidence;

- examine current health promotion policies and their implications for critical care;
- illustrate understanding of the physical, cognitive, emotional, behavioural and spiritual signs of burnout in a critical care setting;
- assess the needs of patient and family regarding coping mechanisms in times of crisis;
- complete nursing documentation accurately and in a timely fashion;
- recognize signs of stress in self and others and promote the use of appropriate coping strategies;
- apply the relevant communication skills to help the patient/family/multidisciplinary team mobilize effective coping strategies;
- explore the potential consequences of the disease/condition with the patient and/or others with whom the patient wishes this to be discussed;
- assess the health promotion needs of the critically ill patient and her/his family and/or carers;
- appraise the diagnostic and monitoring requirements and management necessary to maintain homeostasis in the critically ill patient;
- discuss the pharmacokinetics and pharmacodynamics of drugs used in the management of the critically ill patient utilizing appropriate research based evidence;
- explain the potential requirements and preparation of drug therapy for a critically ill patient;
- assess the impact of multisystem disorders on the physiological condition of the critically ill patient;
- interpret diagnostic/monitoring results and communicate their significance and possible consequences to relevant members of the multidisciplinary team;
- illustrate safe and effective practice in the administration and disposal of drugs used in the care of the critically ill patient;
- assess the effects of drug therapy and initiate action according to clinical unit protocol;
- analyse management and leadership theories and demonstrate their application in professional practice;
- analyse the concept of holism applied to critical care nursing;
- reflect and critically evaluate their own practice in the application of an appropriate model of nursing;
- analyse professional and legal issues in critical care and apply these to clinical practice;
- apply knowledge of patient's rights in professional clinical practice;
- apply knowledge of ethical theories and principles in the consideration of ethical dilemmas and their legal implications in clinical practice.

2.5 Curriculum Content

The curriculum will be delivered in a series of seven modules. In order to complete the course, the student must successfully complete all modules. While all of the modules offer the knowledge needed to develop a reflective and competent critical care nurse, modules one, three,

five and six specifically focus on generic transferable knowledge and skills which are applicable for all nurses working in a specialist role. These modules form the “core curriculum” and feature as part of all the other WHO European Specialist Nursing curricula.

2.6 Teaching/learning and assessment strategies

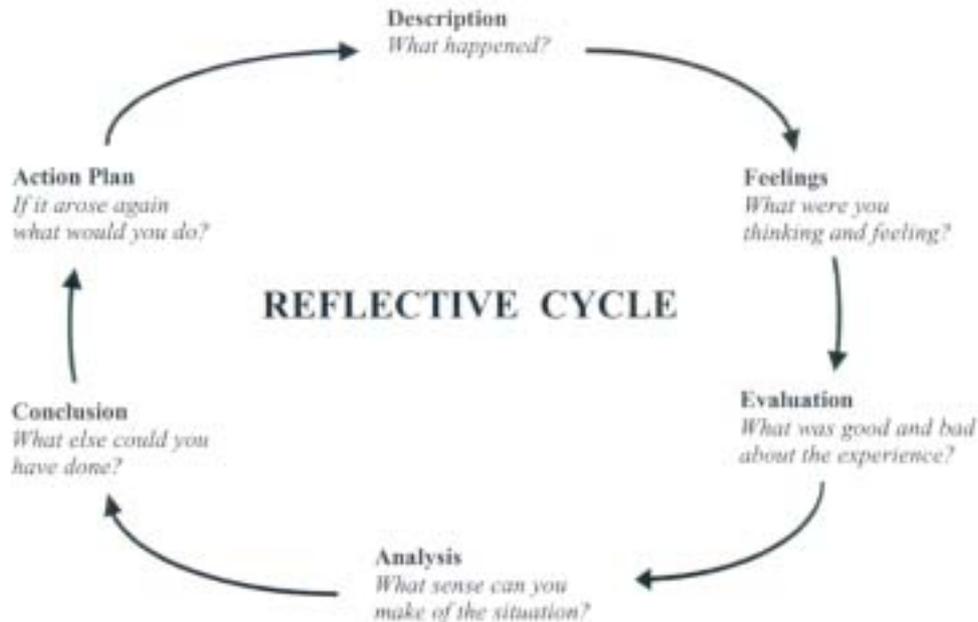
These strategies will stimulate learning at all six levels of cognitive skills, as described by Bloom (1956) in his seminal text. The teaching/learning and assessment strategies employed in the course should be congruent with the principles of andragogy, the rationale for which is that teachers and students will bring to the course existing competencies – relevant knowledge, skills and attitudes – to contribute to a mutually educative process. Overall, emphasis will be placed on interactive approaches. Active student participation, facilitated by nurse teachers (who have a role both in the university setting and in clinical practice) and by mentors (in practice/clinical areas) is considered to be the optimum way of achieving learning outcomes. There will continue to be a place for the didactic lecture, but it is envisaged that this will constitute a relatively minor proportion of the curriculum. The latest educational technology available in the particular Member State, including where feasible on-line or E-learning and video-conferencing, should be used to enhance teaching and learning.

A key objective will be the use of “reflection” as a means of learning from and developing expert practice (Figure 2). This will require the student to maintain a reflective diary/journal for the duration of the course. Case studies, critical incidents and care scenarios will form the focus for a reflective, problem-solving approach to learning.

Assessment methods should be supportive of the adult learning approach, should promote the integration of theory and practice, be research/evidence based and include a variety of methods. Assessment will enable the measurement of the student’s progress and achievement in relation to the prescribed competencies/learning outcomes of the critical care course.

The success of the teaching/learning and assessment strategies will depend on the availability and deployment of appropriately qualified and prepared nurse educators who are committed to the philosophy of adult learning approaches. In addition, such interactive and problem-solving approaches must be supported by an environment which is conducive to learning. This must include attention to the provision of adequate space, library facilities and other technological resources, all of which should be borne in mind at the planning stage.

Figure 2. The Reflective Cycle
Gibbs 1988



2.7 Supervision of practice

Clinical practice should be undertaken under the auspices of a suitably experienced critical care nurse, who will ensure that the students gain the relevant experience during the period of clinical practice. The clinical practice assessment should be designed to demonstrate achievement of the clinical learning outcomes.

Supervisors are responsible for guiding students through clinical practice periods as well as making an assessment of the student's competence to practise by the end of the clinical experience. The course leader should retain responsibility for the student throughout this period and should liaise with the student and supervisor as appropriate.

2.8 Optimum student intake and teacher/student ratio

As interactive adult teaching/learning and assessment strategies will be used throughout the course, which will include the requirement for clinical supervision, the optimum intake per course is likely to be 30 students. The ideal teacher-student ratio should not exceed 1:10, i.e. one teacher per ten students.

2.9 Accreditation with ECTS points

Each module is assigned credit points using the European Credit Transfer System (ECTS). The ECTS system has been chosen because the European Community Directives guide nursing and midwifery education for all European Union (EU) countries and those accession countries which become members of EU (European Commission 1989). Credits are "a numerical value allocated

to course units (modules) to describe the student workload required to complete them” (European Commission 1995). In other words the number of points does not reflect only the direct contact hours, e.g. while the student is attending a lecture, seminar, practical skills demonstration or tutorial and is in direct contact with the teacher, but also includes the number of hours which the student is expected to devote to independent study or practising of skills. Credit points take into account the learning in both the university, i.e. the theory component of a module, and in practice placements. The total number of ECTS credits for an academic year is 60. Their apportionment per module reflects the length of that module, calculated in weeks and number of hours. A week is taken as comprising 30 hours, and 20 hours equates to one ECTS credit point. Thus, a two-week, 60-hour module earns three credit points and a 16-week, 480-hour module earns 24 credit points. The overall length of the course is 40 weeks or 1200 hours which equate to 60 ECTS credit points. Further information on this system and its application to nursing education can be found in Section 8 of the Guidelines prepared to assist Member States with implementation of the initial Education Strategy (WHO 2001b).

2.10 Quality control and evaluation

External audit will be essential to evaluate the quality and standards of the course, as evidenced by the curriculum design, the teaching/learning strategies, the marking of student assessments and the results in both academic work and in practice learning outcomes. Curriculum evaluation should be carried out by teachers, students and also by those providing the service, i.e. critical care nurse managers and existing critical care nurses.

3. Teachers and mentors

The types of teaching/learning and assessment strategies considered essential for this curriculum are challenging for teachers, mentors and students. It is therefore important, if they are to be effectively delivered, that only qualified nurse teachers and mentors are involved. The setting up of structures to ensure peer group support and close liaison between teachers and mentors will be particularly important in the early years, as there may be no role models either in education or in practice.

Teachers of the critical care course must:

- hold a degree at an academic level equivalent to the requirements for university or equivalent institute teachers in the country;
- hold a teaching qualification in order to apply appropriately the full range of research-based teaching, learning and assessment strategies within the theory and clinical components of the curriculum;
- hold the qualification to which the programme leads, or be able to provide evidence of updating of knowledge, skills and attitudes relevant to critical care nursing;
- teach and/or work within critical care nursing;
- take responsibility for the clinical supervision of the nurse on practice placement, and share this responsibility with their clinical mentor.

The critical care nurse who is acting as mentor must be experienced in critical care nursing and must hold the appropriate academic qualification.

4. Location of the course

The theoretical component of the course should be delivered in a university or equivalent institute. Practice elements will take place in critical care settings.

5. Qualification on successful completion of the course

On successful completion of the curriculum the nurse will receive the specialist qualification and postgraduate academic award of “Critical Care Nurse”. The specialist qualification will be formally recorded in accordance with the country’s legislative and regulatory system for nursing and nurses.

6. Course content – Modules One to Seven

An overview of the curriculum, and descriptions of the modules which comprise the curriculum are given in the following pages. It should be noted that a number of concepts and subjects introduced in one module are revisited and further developed in another. As knowledge and experience are gained, students will be able to view these concepts and subjects from different aspects and build upon their earlier learning and experience.

CRITICAL CARE NURSING CURRICULUM

OVERVIEW

Module One

INTRODUCTORY
MODULE:
Concepts, Practice and Theory

2 weeks – 60 hours
ECTS credits – 3

Module Two

CRITICAL CARE NURSING I
Theory and Practice

8 weeks – 240 hours
ECTS credits – 12

Module Three

INFORMATION
MANAGEMENT AND
RESEARCH

2 weeks – 60 hours
ECTS credits – 3

Module Four

CRITICAL CARE NURSING II
Theory and Practice

10 weeks – 300 hours
ECTS credits – 15

Module Five

DECISION-MAKING

2 weeks – 60 hours
ECTS points – 3

Module Six

LEADERSHIP AND
MANAGING
RESOURCES

2 weeks – 60 hours
ECTS points – 3

Module Seven

CRITICAL CARE
NURSING III

14 weeks – 420 hours
ECTS points – 21

**WHO Regional Office for Europe
Critical Care Nursing Curriculum**

MODULE ONE

Title: Introductory Module
 Concepts, Practice and Theory

Duration: 2 weeks – 60 hours

ECTS Credit points: 3

Module Content Summary

This module introduces the student to the key concepts which have shaped the critical care nursing curriculum. The approach will encourage the student to build upon, integrate and expand their existing knowledge, skills and experience using the new knowledge and experiences which will be gained as a result of studying the curriculum. The close relationship between the practice of nursing and the theoretical and research knowledge related to nursing will be explored using examples from critical care nursing. The teaching and learning strategies will encourage the nurse to get to know her fellow students and to share professional knowledge and experiences. The value of debate about the relevance of the theoretical content to critical care nursing practice will be explored.

This module will take place in the university setting.

Syllabus

The Critical Care Nurse
Typical care scenarios
The competency-based and research-based curriculum
Concept of competence
Androgogy – appropriate teaching and learning strategies for students and for adult patients
Facilitation of learning
Problem-solving
Teamwork
Debating as a form of constructive challenge
Analytical and critical thinking and its relationship to the practice of critical care nursing
Continuing professional development/lifelong learning

Competencies or Learning Outcomes

On completion of this module, the student will be able to demonstrate:

- understanding of how previous learning and experience can inform and enrich the new knowledge and skills necessary for the practice of critical care nursing;
 - knowledge of a variety of teaching and learning strategies which may be appropriate to the education of nurses and of patients and their carers;
 - an understanding of competence and its relevance in nursing practice and in the team approach to care;
 - an analytic and critical approach to discussion and constructive debate about nursing issues;
 - a commitment to lifelong learning and continuing professional development.
-

Reading List

WHO publications
National and international literature covering the syllabus
Where accessible – on-line and distance learning materials

Teaching/learning Strategies

Lecture (key concepts)	Case studies
Reflective exercises	Seminars
Group work	Debate and discussion

Assessment Methods

Dates on which assignments are due:

Format of assignment:

Examination – multiple choice and short answer questions – 50% of whole

Short essay – approximately 600 words – 50% of whole

The student will choose a concept from those listed in the syllabus and discuss the relevance of the chosen concept to her personal understanding, at this early stage of the course, of what will be expected of her as a qualified Critical Care Nurse.

Examination: Mark awarded	%
Essay: Mark awarded	%
Aggregate mark for module (out of 100%)	%

**WHO Regional Office for Europe
Critical Care Nursing Curriculum**

MODULE TWO

Title: Critical Care Nursing I – Theory and Practice

Duration: 8 weeks – 240 hours

ECTS Credit Points: 12

Module Content Summary

This module aims to provide the student with the opportunity to develop their knowledge and understanding of therapeutic communication, epidemiology and health promotion in critical care nursing, and to integrate that knowledge in the care of individuals and their families in the critical care setting.

50% of this module will be based in the university or equivalent institute setting.

50% will be practice-based, i.e. will take place within a critical care ward or unit in a hospital.

Syllabus

Effective communication

Crisis intervention strategies

Coping strategies

Therapeutic communication

Assertiveness

Epidemiological studies

Political, consumer and professional influences on health promotion

Assessment of health promotion needs of patient/family in critical care

Health promotion in critical care – opportunities and barriers

Signs of “burnout” in staff

Stress management strategies

Research and the evidence base for critical care nursing

Clinical practice incorporating:

Development and application of therapeutic skills in the care of patients and their families

Application of epidemiological evidence

Utilization of knowledge to identify health promotion needs of patients, families and staff

Recognition and mobilization of effective coping strategies

Reflection on practice

Competencies or Learning Outcomes

On completion of this module, the student will be able to:

- critically analyse theories relating to therapeutic communication suitable for use with an individual in crisis;
 - evaluate their own personal skills in identifying their learning needs by reflecting upon the management of therapeutic communication with an individual in crisis;
 - appraise the physical, psychological, social and environmental issues that contribute to critical illness utilising appropriate epidemiological evidence;
 - examine current health promotion policies and their implications for critical care;
 - illustrate understanding of the physical, cognitive, emotional, behavioural and spiritual signs of burnout in a critical care setting;
 - assess the needs of patient and family regarding coping mechanisms in times of crisis.
-

Reading List

WHO publications
National and international literature covering the syllabus
Where accessible – On-line and distance learning materials

Teaching/learning Strategies

Lectures	Case studies
Tutorials	Discussion
Reflective exercises	Critical incident analysis
Observation and supervised practice	Mentor support

Assessment Methods

Dates on which assignments are due:

Format of assignments:

One essay of 2000 to 2500 words – 30% of whole

The student will choose one subject from the syllabus and, using available literature, will demonstrate understanding of that subject in relation to critical care nursing.

Preparation of a clinical learning portfolio demonstrating achievement of each of the clinical practice learning outcomes for the module – 30% of whole.

Clinical Assessment demonstrating achievement of learning outcomes of the module – 40% of whole.

Essay: Mark awarded%

Clinical Portfolio: Mark awarded%

Clinical Assessment: Mark awarded.....%

Aggregate mark for module (out of 100%):%

**WHO Regional Office for Europe
Critical Care Nursing Curriculum**

MODULE THREE

Title: Information Management and Research

Duration: 2 weeks – 60 hours

ECTS Credit Points: 3

Module Content Summary

This module will enable students to extend their knowledge in relation to applied aspects of information management and research. It will develop their understanding of approaches to information management and the research process, ethical issues in relation to obtaining informed consent from participants in research, confidentiality and security of data and the communication of results of relevance to practice. The research component will have a particular focus on studies and evidence which contribute to knowledge within the field of critical care nursing.

80% of this module will be based in the university or equivalent institute setting.

20% of this module will be practice-based.

Syllabus

Sources/types of information, knowledge and evidence

Analytical and critical thinking, critical appraisal and constructive questioning of practice

The research process, research design and methods

Basic statistics – interpreting demographic and statistical data, summarizing data and drawing conclusions

Identifying and measuring outcomes

Information management and information technology

Documentation – structure and standardization

National and local information systems

Report writing

Core/minimum data sets

Ethical issues, confidentiality and security of data/records

Competencies or Learning outcomes

On completion of this module, the student will be able to demonstrate the ability effectively to:

- analyse different sources of information and apply as appropriate to practice;
 - seek out and interpret relevant statistical data and research of relevance to critical care nursing;
 - set measurable outcomes for nursing practice;
 - appraise and appropriately utilize developments in information technology;
 - maintain accurate, clear and timely records;
 - maintain confidentiality of data;
 - utilize knowledge and information gained through the practice of nursing in an ethical manner;
 - promote evidence-based practice.
-

Reading List

WHO publications
National and international literature covering the syllabus
Where accessible – On-line and distance learning materials

Teaching/learning Strategies

Lectures	Discussions
Group work	Case study presentations
Student-led seminars	Mentor support

Assessment methods

Date on which assignment is due:

Format of assignment:

Essay – *either* a critical review of a research study relevant to critical care nursing *or* an analysis and critique of epidemiological data related to the incidence of national critical care priorities (100% of whole).

Mark awarded.....%

**WHO Regional Office for Europe
Critical Care Nursing Curriculum**

MODULE FOUR

Title: Critical Care Nursing II – Theory and Practice

Duration: 10 weeks – 300 hours

ECTS Credit Points: 15

Module Content Summary

This module aims to provide the student with the opportunity to further develop their knowledge and understanding of physiology and pharmacology relevant to the care of the critically ill patient, and to review the monitoring, diagnostic and multidisciplinary management of such patients. The practice component of the module will provide the student with the opportunity to apply this knowledge and practise the related skills in their holistic nursing care of the critically ill patient, working individually and as a member of the multidisciplinary team.

50% of this module will be based in the university or equivalent institute setting.
50% will be practice-based, i.e. will take place within a critical care ward or unit in a hospital.

Syllabus

Anatomy and physiology of core systems
Pathophysiology of conditions affecting core systems
Multisystem disorders
Pharmacokinetics and pharmacodynamics
Drugs commonly used in critical care
Drug therapy
Maintenance of haemostasis
Haemodynamics
Ventilation
Resuscitative requirements
Diagnosis and monitoring of core systems
Multidisciplinary care
Application of the knowledge gained in practice, including:
 Care of the ventilated patient
 Resuscitation
 Haemofiltration
Administration of drugs via oral, intramuscular and intravenous routes
Setting up of diagnostic and monitoring equipment

Interpretation of readings from diagnostic and monitoring equipment
Accurate and timely reporting of such readings to appropriate personnel
Accurate and timely completion of nursing documentation
Participation in multidisciplinary management of the critically ill patient
Safe disposal of equipment
Use and development of protocols
Critical evaluation of competence
Reflection on practice

Competencies or Learning Outcomes

On completion of this module, the student will be able to:

- appraise the diagnostic and monitoring requirements and management necessary to maintain homeostasis in the critically ill patient;
 - discuss the pharmacokinetics and pharmacodynamics of drugs used in the management of the critically ill patient utilizing appropriate research based evidence;
 - explain the potential requirements and preparation of drug therapy for a critically ill patient;
 - assess the impact of multisystem disorders on the physiological condition of the critically ill patient;
 - interpret diagnostic/monitoring results and communicate their significance and possible consequences to relevant members of the multidisciplinary team;
 - assess the effects of drug therapy and initiate action according to ward or unit protocols;
 - demonstrate skilled, safe, effective and sensitive practice in the care of critically ill patients.
-

Reading List

WHO publications
National and international literature covering the syllabus
Where accessible – On-line or distance learning materials

Teaching/Learning Strategies

Lectures	Case studies
Tutorials	Discussion
Reflective exercises	Critical incident analysis
Observation and supervised practice	Mentor support

Assessment Methods

Dates on which assignments are due:

Format of assignments:

Examination – multiple choice and questions requiring short answers – 30% of whole

Nursing Care Study – 30% of whole – 2000–2500 words

The student will base her/his care study on one critically ill patient s/he has nursed and demonstrate application of knowledge gained during this module to the care of that patient.

Clinical Assessment demonstrating achievement of learning outcomes of the module – 40% of whole.

Examination: Mark awarded%

Nursing Care Study: Mark awarded%

Clinical Assessment: Mark awarded.....%

Aggregate mark for module (out of 100%)%

**WHO Regional Office for Europe
Critical Care Nursing Curriculum**

MODULE FIVE

Title: Decision-making
Duration: 2 weeks – 60 hours
ECTS Credit Points: 3

Module Content Summary

This module will enable students to extend their knowledge of decision-making processes, typology and skills in preparation for their future role as critical care nurses.

66% of this module will be based in the university or equivalent institute setting.
34% of this module will be practice-based.

Syllabus

Decision-making – theories, processes, skills
Diagnostic reasoning, therapeutic, clinical
Concepts of accountability, responsibility and autonomy in decision-making
Critical thinking in practice
Ethical issues and involvement of the patient and carer in decision-making
Strategic decision-making
Prioritizing care
Rationing care
Legal aspects in relation to practice

Competencies or Learning outcomes

On completion of this module, the student will be able to:

- demonstrate an understanding of the complexities of clinical decision-making;
- analyse and describe examples of decision-making in relation to her/his care of critically ill patients;
- describe the exercise of accountability and responsibility in relation to her/his care of critically ill patients;

- differentiate between strategic and clinical/ethical decision-making in nursing;
 - discuss the rationale for involving patients and carers in decision-making about their care, ways of doing so and the implications of such involvement;
 - state the key principles which guide the rationing and the prioritization of care in the student's country; and
 - outline the law in relation to nursing in her/his country and the implications for critical care nursing.
-

Reading List

WHO publications

National and international literature covering the syllabus

Where accessible – On-line and distance learning materials

Teaching/learning Strategies

Lectures

Group work

Student-led seminars

Discussions

Case study presentations

Mentor support

Assessment methods

Date on which assignment is due:

Format of assignment:

Examination – multiple choice and short answer questions – 100% of whole

Mark awarded.....%

**WHO Regional Office for Europe
Critical Care Nursing Curriculum**

MODULE SIX

Title: Leadership and Managing Resources

Duration: 2 weeks – 60 hours

ECTS Credit Points: 3

Module Content Summary

This module will enable students to explore aspects of leadership and of management which have relevance in critical care nursing practice. Key principles of effective multidisciplinary team working will be analysed and applied to the critical care setting, and students will gain an understanding of the complex nature of organizational change.

50% of this module will be based in the university or equivalent institute setting.
50% of this module will be practice-based.

Syllabus

The concept of leadership – theories, processes and skills:

Management – theories and processes

Managing human resources

The patient and her/his family as a resource

Care management

Organization and management of critical care nursing services

Delegation of duties and responsibilities

Budgetary control

Time management

Management of change

Working as a multidisciplinary team member

Standard setting and quality assurance systems

Competencies or Learning outcomes

On completion of this module, the student will be able to:

- demonstrate understanding of leadership principles and processes and their application in critical care nursing practice;

- demonstrate an understanding of management principles and processes and their application in the organization and management of critical care nursing services;
 - analyse the relative merits of different methods of workload measurement, in relation to the critical care unit setting;
 - utilize staffing protocols in scheduling adequate staffing cover, reporting when safe levels cannot be achieved;
 - demonstrate knowledge of different methods of care management and of effective delegation;
 - appropriately manage her/his time both when on duty in the critical care unit and when studying;
 - play a full part in maintaining standards and in contributing to quality assurance monitoring;
 - demonstrate in practice the team member role of the critical care nurse.
-

Reading List

WHO publications
National and international literature covering the syllabus
Where accessible – On-line and distance learning materials

Teaching/learning Strategies

Lectures	Discussions
Practice in scheduling work rotation	Mentor support

Assessment methods

Date on which assignment is due:

Format of assignment:

Essay of 1000–1500 words focussing on analysis of one concept from the syllabus and its application to practice in the critical care environment – 100% of whole

Mark awarded.....%

**WHO Regional Office for Europe
Critical Care Nursing Curriculum**

MODULE SEVEN

Title:	Critical Care Nursing III
Duration:	14 weeks – 420 hours
ECTS Points:	21

Module Content Summary

This module enables the student to assume increased responsibility and accountability for the nursing care and management of critically ill patients of all stages of severity. The student will be encouraged to reflect on current critical care nursing practice, to further develop an analytical approach to evidence-based patient care and to assist with supervision and clinical teaching of critical care nurses who are commencing on the course.

20% of this module will be based in the university or equivalent institute setting.

80% of this module will be practice based, i.e. will take place in a critical care ward or unit in a hospital.

Syllabus

Evidence-based critical care nursing
Developments in critical care nursing
The concept of holism in the technological critical care environment
Sensory deprivation – implications for recovery
Nursing models or frameworks for care – relevance in critical care nursing
Ethical and legal issues in relation to prolongation of life
Professional judgement and problem-solving skills
The expanding role of the critical care nurse within the multidisciplinary team
Issues in contemporary critical care nursing
Codes of professional conduct
Patients' rights
Analysis and development of an area of critical care nursing practice
The clinical supervision and mentoring role
Management of change
Continuing professional development
Clinical practice incorporating:
 Expert care of critically ill patients of all stages of severity
 Sensitive holistic care, which is evidence-based

Gradual assumption of increasing responsibility and accountability
Supervision and mentoring of a junior colleague.

Competencies or Learning outcomes

On completion of this module, the student will be able to demonstrate the competencies expected of a nurse who has successfully completed the critical care nursing course, and will therefore be able to:

- provide competent nursing care for critically ill patients, working independently and/or within the multidisciplinary team;
 - accept accountability and responsibility for her/his own professional judgment and actions;
 - demonstrate management and leadership skills in practice, including the ability effectively to contribute to the management of change;
 - analyse the concept of holism applied to critical care nursing;
 - reflect and critically evaluate her/his own practice;
 - analyse professional and legal issues in critical care and apply these to clinical practice;
 - apply knowledge of patient's rights in professional clinical practice;
 - apply knowledge of ethical theories and principles in the consideration of ethical dilemmas and their legal implications in clinical practice;
 - undertake supervision and mentoring of a junior colleague, applying principles of adult learning theories;
 - give evidence of a commitment to own learning and continuing professional development.
-

Reading List

WHO publications

National and international literature covering the syllabus

Where accessible – On-line and distance learning materials

Teaching/learning Strategies

Lectures

Group work

Tutorials

Problem-based learning

Mentor support

Care study presentations

Discussion

Reflective exercises

Student-led seminars

Tutorials

Assessment Methods

Dates on which assignments are due:

Format of assignments:

A clinical portfolio which will include in-depth analysis of a specific area of evidence-based critical care nursing practice – 50% of whole

Assessment in practice of demonstration of achievement of the competencies of a critical care nurse – 50% of whole

Clinical Portfolio: Mark awarded.....%

Competency assessment: Mark awarded

Aggregate mark for module (out of 100%)

References

Bloom BS (1956). *Taxonomy of educational objectives. Book 1: cognitive domain*. Longman, London.

Commission of the European Communities (1994). *Advisory Committee on Training Nursing: Recommendations in Continuing and Specialist Training* (111/F/5004/4/93), Brussels.

European Commission (1989). *Directives 77/452/EEC (27 June 1977) and 89/595/EEC (10 October 1989) concerning the mutual recognition of diplomas, certificates and other evidence of formal qualifications of nurses responsible for general care, including measures to facilitate the effective exercise of the right of establishment and freedom to provide services, and amending Directive 77/453/EEC concerning the coordination of provisions laid down by law, regulation or administrative action in respect of the activities of nurses responsible for general care*. Official journal of the European Communities, L341:0030-0032.

European Commission (1995). *European Credit Transfer System ECTS – users’ guide*. European Commission, Brussels.

European Network of Nursing Organizations (2000). *A European Framework for Specialist Nursing Education*: within which are cited European Directives 89/48/CEE and 92/51/EEC as amended in 1997. European Network of Nursing Organizations, Paris.

Gibbs G (1988). *Learning by doing: A guide to teaching and learning methods*. Further Education Unit, Oxford Polytechnic, Oxford, United Kingdom.

International Council of Nurses (1987). *Definition of nurse: Working Definition*. ICN Council of National Representatives, New Zealand.

International Council of Nurses (1992). *Guidelines on specialization in nursing*. ICN, Geneva.

International Council of Nurses (2000). *Code of ethics for nurses*. ICN, Geneva.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting (1998). *Standards for specialist education and practice*. UKCC, London.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting (1999). *The UKCC Commission for Nursing and Midwifery Education “Fitness for practice”*. UKCC, London.

World Health Organization (1996). *Nursing practice: report of a WHO Expert Committee*. WHO Technical Report Series No. 860. World Health Organization, Geneva.

World Health Organization (2000). *Nurses and midwives for health: A WHO European strategy for nursing and midwifery education*. World Health Organization, Copenhagen.

World Health Organization (2000a). *Munich Declaration: Nurses and Midwives – a Force for Health*. World Health Organization, Copenhagen.

World Health Organization (2001). *Second WHO Ministerial Conference on Nursing and Midwifery in Europe*. World Health Organization, Copenhagen.

World Health Organization (2001a). *Resolution on Strengthening Nursing and Midwifery* adopted at the Fifty-fourth World Health Assembly, World Health Organization, Geneva.

World Health Organization (2001b). *Nurses and Midwives for Health: WHO European Strategy for Nursing and Midwifery Education. Guidelines for Member States on the implementation of the strategy*. World Health Organization, Copenhagen.

World Health Organization (2003). *Nurses and Midwives: A Force for Health. A WHO European Strategy for Continuing Education for Nurses and Midwives*. World Health Organization, Copenhagen.

Bibliography

Garcia Barbera M, Roca MTA, Mortalia MCM (1998). *How to develop educational programmes for health professionals*. World Health Organization, Copenhagen.

Guilbert JJ (1992). *Educational Handbook for Health Personnel (Revised and updated edition)*. World Health Organization, Geneva.

World Health Organization (1984). *Postbasic and graduate education for nurses*. Report on a WHO meeting. World Health Organization, Copenhagen.

World Health Organization (1996). *The Ljubljana Charter on reforming health care*. World Health Organization, Copenhagen.

World Health Organization (1999). *HEALTH21: the health for all policy framework for the WHO European Region*. World Health Organization, Copenhagen.

Glossary

For more detail on all these terms, please refer to the Guidelines to the WHO European Strategy for initial education for Nurses and Midwives (WHO 2001b)

Academic level

The level of difficulty of a subject. For example level one is commonly used to describe the first year studies in a baccalaureate degree, with levels two, three and four describing second, third and Honours year respectively. Masters level describes postgraduate studies at Masters degree. Doctoral level describes study at Doctor of Philosophy/Doctor of Science level. In general, the higher the level of difficulty, the more requirement there is for demonstration of analytical, critical, evaluative and innovative thinking.

Accreditation (of an institution, programme or curriculum)

A process, based on a system of external peer review, and using written standards, by which the quality of a university's activities and its educational programmes are assessed and, if satisfactory, approved.

Authority

The rightful power to take action. This subsumes the right to make decisions on what action is appropriate.

Clinical Supervision

A clinically focused professional relationship between a practitioner and appropriately prepared clinical supervisor.

Competencies

Broad composite statements, derived from nursing and midwifery practice, which describe a framework of skills reflecting knowledge, attitudes and psychomotor elements. The term "Learning Outcomes" is often used synonymously with "Competencies".

Competent

A level of performance demonstrating the effective application of knowledge, skill and judgment.

Continuing education

Education that builds on initial professional or vocational education.

Credit points

See Accreditation of prior learning.

E-learning

E-learning means electronic learning, (just as e-mail means electronic mail). E-learning is a form of distance learning. Course materials are on-line, students communicate with their lecturers via e-mail, lecturers give feedback via e-mail, assignments are sent in via e-mail and comments

returned to students via e-mail. Systems may be set up to enable several students and their lecturers to communicate via “chat rooms”, i.e. where questions and discussions can take place through e-mailing.

Fitness for purpose

Employers are primarily concerned about whether nurses and midwives are able to function competently in clinical practice. The speed of change in the context and content of health care makes it difficult to define fitness for purpose. Its meaning cannot be fixed. Fitness for purpose depends on the commitment of employers and of practising nurses and midwives to constant professional updating (Adapted from UKCC 1999).

Health care reform

Any intended change towards improvement of health care of the acutely and chronically ill, rehabilitation, case-finding, health promotion and maintenance, prevention of disease and disability and health education.

Learning Outcomes

See Competencies

Licence

See Registration

Mentor

An appropriately qualified and experienced person who, through example and facilitation, guides, assists and supports individuals in learning and in acquiring new attitudes. The term is particularly used in relation to supporting learning in practice settings.

Multiprofessional team/Multidisciplinary team

A team of health care professionals from different disciplines, e.g. nurses, midwives, physicians, physiotherapists, who work together towards a common goal which enables them to make the best use of their knowledge, skills and experience in providing patient care.

Network

A grouping of individuals, organizations and/or agencies organized generally on a non-hierarchical basis around some common theme or concern.

On-line learning

See E-learning

Patient

The real person who is the end-user in all our health systems. S/he is the human being who is meant to benefit from our efforts, but who, if reduced to a mere statistic, demonstrates that the heart has gone out of the profession. User(s) of health care services, whether healthy or sick.

Peer review

Scrutiny of the work, activities or output of individuals or a group by other individuals or groups who have qualifications and experience that are directly comparable to those of the people being scrutinized.

Practice placement

The clinical area to which nurses and/or midwives are allocated in order to undertake the practice components of their education. These clinical areas may be in hospital or community settings.

Programme

This term is synonymous with course, i.e. a course of study, and denotes the entire course, in all its elements. It may be a full-time or part-time programme or course, e.g. a degree, or a short course.

Promote health

The process of enabling individuals, families and communities to increase control over the determinants of health and thereby improve their health. An evolving concept that encompasses fostering lifestyles and other social, economic, environmental and personal factors conducive to health.

Prospective Analysis Questionnaire

A questionnaire, based on the Prospective Analysis Methodology (PAM), which is a process that facilitates decision-making, interchange of ideas and opinions, and recognition and development of a need to change.

Resources

Human resources, money, materials, skills, knowledge, techniques and time needed or available for the performance or support of action directed towards specified objectives.

Registration

A method of ensuring a record is maintained of those who are *bona fide* nurses and/or midwives, i.e. they have successfully completed the initial nursing and/or midwifery education programme which is required in their country. In several Member States it is necessary to regularly renew this registration. In order to do so, nurses and midwives must provide evidence of successful completion of continuing education relevant to their area of practice.

Specialist Nurse

A nurse who has successfully completed a post-qualification course of study in a specific clinical field and who applies higher levels of judgement, discretion and decision-making in clinical care in order to improve the quality of patient care, meeting the needs of patients within the specialty and in the specific area of practice.

Standard

Statement of a defined level of quality or competence which is expected in a given set of circumstances. In nursing and midwifery, the statements identify and define the criteria which influence the quality or competence of the nursing/midwifery service, and clarify what is

expected in relation to the structures, processes and outcomes. A means of measuring the degree of excellence of an educational programme and of comparing the degree of excellence of one programme with that of others.

Strategies

Broad lines of action to be taken to achieve goals and objectives incorporating the identification of suitable points of intervention, the ways of ensuring the involvement of other sectors and the range of political, social, economic, managerial and technical factors, as well as constraints and ways of dealing with them.

Video-conference

The use of video to bring groups together for discussions and a sharing of views. Groups in geographically separate areas can be connected via video link and can see and hear each other.

Acknowledgements

This Critical Care Nursing curriculum is based upon the curriculum provided by Critical Care Nurses and Educators, Mrs Maggie Grundy and Mrs Caitrian Guthrie of the School of Nursing and Midwifery at The Robert Gordon University, Aberdeen, United Kingdom. Without their expertise and the generosity of their Head of School, Mrs Jenny Parry, in making their school's curriculum available to WHO, this adapted version could not have been compiled.

The final product of the Critical Care Nursing curriculum is work of:

Professor Margaret F. Alexander, previously of WHO Collaborating Centre, Glasgow
Caledonian University, Scotland, United Kingdom
Mrs Vilborg Ingolfsdottir, Chief Nursing Officer, Directorate of Health, Iceland
Mrs Majda Šljajmer-Japelj, WHO Collaborating Centre, Maribor, Slovenia

Members of the Expert Group which convened in Maribor, Slovenia 2001 and prepared the initial draft of the WHO European Continuing Education Strategy from which the introduction to this curriculum is derived:

Professor Margaret F. Alexander, WHO Consultant (Chairman), Scotland, United Kingdom
Mrs Tatjana Geč, Director, WHO Collaborating Centre, Maribor, Slovenia
Mrs Majda Šljajmer-Japelj, WHO Consultant, WHO Collaborating Centre, Maribor, Slovenia
Dr Valerie Fleming, WHO Collaborating Centre, Glasgow Caledonian University, Scotland, United Kingdom
Mrs Elgin Schartau, WHO Collaborating Centre, Glasgow Caledonian University, Scotland, United Kingdom
Mrs Klara Sovenyi, Chief Nursing Officer, Ministry of Health, Hungary
Mr Laszlo Vizvari, Director, Institute for Continuing Education of Health Workers, Hungary
Professor Arvydas Šeškevičius, Dean, Faculty of Nursing, Kaunas University of Medicine, Lithuania
Mr Karl-Gustav Sodergard, Finnish Patient Union, Finland
Secretariat: Mrs Dragica Gabrijelčič, WHO Collaborating Centre, Maribor, Slovenia

Members of the WHO Consultants' Group which the final version of the Continuing Education Strategy:

Professor Margaret F. Alexander, previously of WHO Collaborating Centre, Glasgow
Caledonian University, Scotland, United Kingdom
Mrs Vilborg Ingolfsdottir, Chief Nursing Officer, Directorate of Health, Iceland
Mrs Majda Šljajmer-Japelj, WHO Collaborating Centre, Maribor, Slovenia
Secretariat: Mrs Dragica Gabrijelčič, WHO Collaborating Centre, Maribor, Slovenia

EUR/03/5043918d
ORIGINAL: ENGLISH
UNEDITED
E81552

This curriculum is a component part of the European Continuing Education Strategy developed by the WHO Nursing and Midwifery Programme, Regional Office for Europe. Please contact the Regional Adviser, Nursing and Midwifery for further details.