

**Nursing Education in the
Eastern Mediterranean Region
Guidelines on
Future Directions**



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**Nursing Education in the
Eastern Mediterranean Region**

**Guidelines on
Future Directions**



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Foreword

Achieving quality in health services depends as much on people as it does on systems and techniques. The development of competent, skilled health personnel is a priority in all countries of the Region. During the past few decades, the emphasis of WHO collaborative programmes in the area of human resources development has been on providing the required number of health personnel, including nurses and midwives. In the process of meeting the quantitative demands for nursing personnel, numerous types and levels of nursing education programmes have been developed. The diversity and lack of educational standards has had an impact on the quality of nursing services and on the ability of some graduates to meet the changing health needs of society and the complexity inherent in the health care delivery system.

Reform of nursing education in the Eastern Mediterranean Region is very much needed. However, such reform is the joint responsibility of policy-makers in ministries of health and education, and of health professionals, nurse educators and nurse leaders involved in the delivery of nursing care. To assist in the process of nursing education reform, I asked the Regional Advisory Panel on Nursing and Midwifery in the Eastern Mediterranean Region to consider the development of regional standards for basic and post-basic nursing education programmes, and to provide broad guidelines on what might constitute minimum educational requirements for future nurse practitioners. The deliberations of this group of professionals constitute the core of this publication package.

Guided by resolutions of the World Health Assembly and the Regional Committee for the Eastern Mediterranean, the recommendations of the Regional Advisory Panel on Nursing and Midwifery, international trends in nursing education and that of other health personnel, changing health situations and the sociocultural characteristics of this Region, this publication package identifies minimum educational standards for basic and post-basic nursing education. It also identifies future directions for preparing nurses in the Eastern Mediterranean Region and priority areas for nursing specialization and provides two prototype nursing curricula, one for preparing professional nurses and the second for the preparation of technical nurses.

I hope that this publication package will serve as a useful resource for all those interested in reforming nursing education, in order to graduate competent nurses who will be skilled practitioners and can meet the current health care needs of people and the health challenges of the 21st century.



Hussein A. Gezairy, MD, FRCS
Regional Director for the Eastern Mediterranean

Preface

As the demands for nursing services have continued to grow, Member States in the Eastern Mediterranean Region have taken a variety of initiatives to ensure an adequate supply of appropriately qualified nursing personnel. The time has come for Member States to address the quality of nurses produced by various educational programmes.

At the Third Meeting of the Eastern Mediterranean Regional Advisory Panel on Nursing held in Tunisia, 25–28 September 1995, members came to an agreement that the range and types of basic nursing education should be consolidated into one standard 4-year post-secondary programme to prepare professional nurses at the BSc level. However, they also agreed on “a transitional period of 15 years during which there may be two levels of nurses—professional nurses prepared in a 4-year baccalaureate programme and technical nurses prepared in a 2½ year programme”.

This publication package on *Nursing Education in the Eastern Mediterranean Region* comprises three books: *Guidelines on Future Directions*, a *Prototype Technical Nursing Curriculum* and a *Prototype Baccalaureate Nursing Curriculum*. The books are available individually and as a set. Together, they focus on two essential elements: the development of sound basic nursing education founded on a set of regional standards, and the orderly development of post-basic specialization in priority areas for the Region. The package provides a guide to Member States in their efforts to strengthen nursing and midwifery and includes suggested prototype curricula for basic nursing education, technical and professional. These prototypes will assist countries in the Region in the establishment of nursing programmes or the revision of established nursing programmes.

The publication draws heavily on the work of the Regional Advisory Panel on Nursing in the Eastern Mediterranean Region which drew up the standards and priorities for specialization presented here at its third meeting in September 1995. I would like to thank members of the Eastern Mediterranean Regional Advisory Panel on Nursing for their diligent work and response to the demands of the Member States. Thanks are also due to Dr Layla Kamel, Professor of Nursing, University of Alexandria, and Professor Chehrazad Ghazi, WHO ex-Field Staff Member in Djibouti, for their input to the prototype curricula; Ms Elizabeth Tornquist, Lecturer, School of Nursing, University of North Carolina, for her editorial work; and Mrs Lily Suliman, Mrs Iman Shaaban and Ms Safaa Nofal for their assistance in typing the manuscript.

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The context

In the Eastern Mediterranean Region, life expectancy has risen dramatically in the last few decades: the weighted average crude death rate decreased from 12.5 per 1000 population in 1985 to 9.2 per 1000 in 1996. The average infant mortality rate dropped from 97 per 1000 live births in 1985 to 75 per 1000 in 1996. The under 5 mortality rate also dropped. Progress in the control of many communicable diseases was in part responsible for the rapid drop in mortality. Deaths from malaria, target diseases of the Expanded Programme on Immunization (EPI) (except tuberculosis) and other infectious diseases are decreasing [1]. Activities for promoting primary health care are ongoing in all countries and most countries have initiated reform of their health systems [2]. However, despite notable improvements in health throughout the Region, a large burden of premature mortality and disability remains. In some countries of the Region infant and maternal mortality remain high, and while the incidence of infectious and parasitic diseases is decreasing, acute respiratory infections and diarrhoeal diseases are still prominent causes of mortality. In some countries civil strife and wars in recent years have caused great loss of human life, injuries, displacement of populations and disruption of health delivery systems [1]. At the same time, economic growth and development, demographic changes, and social and cultural changes are producing a shift in the disease pattern away from infectious and deficiency diseases towards cardiovascular disease, cancer, diabetes mellitus and other chronic noncommunicable diseases. Accidents and mental illnesses are also on the increase, and the threat of AIDS is growing. In some countries, tuberculosis has become a major health problem.

Many of the health problems of the Region, and worldwide, can be drastically reduced or eliminated through the WHO strategy of health for all. The *World development report 1993: investing in health* [3] suggests that public health initiatives including immunizations, school-based health services, information and services for family planning and nutrition, programmes to reduce alcohol and tobacco consumption, vector control and AIDS prevention programmes, along with a package of essential clinical services including tuberculosis treatment, pregnancy and delivery care, family planning services, treatment of sexually transmitted diseases, treatment of childhood illnesses, and treatment of infection and minor trauma, with advice and alleviation of pain for other health problems, would vastly reduce the burden of disease and disability worldwide.

Nurses and midwives have an essential role in achieving health for all. Indeed, the *World development report* [3] suggests that while physicians are needed to supervise essential clinical care and handle complications, most of the services in the minimum package of public health and clinical services can be delivered by nurses and midwives.

However, while nurses and midwives are the largest single group of health providers and the backbone of health services worldwide, in almost all countries there is a shortage of nurses and midwives, which is compounded by maldistribution of the workforce.

Several factors have had direct effects in creating a shortage of suitably qualified nursing staff in the Eastern Mediterranean Region. They include the priority given to investment in developing large and technically complex hospitals, linked to the rapid growth in medical specialization and subspecialization, and imbalance in the training of physicians and nurses [4]. In 1993 the range of nursing/midwifery personnel to physicians in the Region was 13–14 to 10, as compared to 26–42 nurses/midwives to 10 physicians in the Scandinavian countries. Further, it is estimated that 90% of the nursing workforce in Member States is currently employed in hospitals [5].

As a result, the people in greatest need of nursing services—the poor and rural populations—are often underserved, and lesser qualified nursing personnel are assigned to their service. At the same time, an expanding health system infrastructure, increasing population, advances in the use of medical technology, and greater public awareness of the importance of health care are increasing the demands for nursing services. In some countries of the Region, expatriate nurses have been employed to make up for the shortage of national nurses. However, foreign nurses are generally unable to communicate with patients and they lack knowledge of cultural values; thus their care is technical only and often of poor quality [6].

The shortage of nursing and midwifery personnel is not limited to the Eastern Mediterranean Region [7]. In 1992, in order to deal with the continued worldwide shortage of nurses and midwives and the urgent need to recruit, retain, educate and motivate sufficient numbers to meet present and future community health needs, the World Health Assembly passed a resolution (WHA45.5) on strengthening nursing and midwifery in support of strategies for health for all.

Resolution WHA45.5, among other things, urged Member States “to strengthen education in nursing and midwifery, adapt educational programmes to the strategy for health for all, and revise them where appropriate, in order to meet the changing health needs of the population; ... and to ensure the allocation of adequate resources (financial, human and logistic) for nursing and midwifery activities”. In October 1994, recognizing that achieving health for all requires the availability of sufficient numbers of well qualified nursing and midwifery personnel, the Regional Committee for the Eastern Mediterranean passed resolution EM/RC41/R.10 which urged Member States:

- to establish and strengthen nursing units in the Ministries of Health to enable them to undertake a leading role in the development of nursing and midwifery services in the country;
- to give high priority to the development, within the national human resources policy, of plans aimed at improving the quality of nursing and midwifery services and meeting the health needs of the country, including locating nursing schools within the community;
- to provide training at all levels in nursing services management;
- to review and update the existing health legislation relating to nursing and midwifery practice and enact the necessary regulatory mechanisms to support nursing and midwifery practice;
- to improve the public image of the nursing profession through mass media and other social marketing approaches in order to encourage both males and females to join the profession.

Progress and problems in strengthening nursing and midwifery in the Eastern Mediterranean Region

Even before the 1978 Declaration of Alma-Ata on primary health care, the Eastern Mediterranean Region recognized the need for nurses in primary health care, and for community-oriented curricula to prepare them to play a central role in improving the health of populations [8]. However, efforts to strengthen the role of nurses and midwives in primary care suffered from the low status of nursing in the health field and in society, and nurses' lack of power and roles in decision-making in the health system [9]. Since nursing was predominantly a women's profession, the low status of women in many Member States, especially in rural areas, compounded the low status of nursing.

In recent years governments in the Eastern Mediterranean Region have taken a number of initiatives to improve the status and image of nursing, to attract both males and females into the profession and retain nurses in the workforce. The resulting progress in strengthening nursing and midwifery in the Region has been enormous. This progress can best be seen against the backdrop of history. In the Eastern Mediterranean Region the role of health care provider was traditionally part of the role of women, but only for their own families. To take up nursing as a career, girls needed schooling, opportunities for which were limited. Further, nurses were considered little more than glorified maids for patients and handmaidens for doctors. Nursing schools simply trained students to carry out physicians' orders.

In 1950 there were only 40 schools of nursing in the entire Region and no degree programmes. In many countries, only girls were allowed to become nurses. Nursing did not exist as an organized profession, and salaries and working conditions were deplorable. By 1965 the number of nursing schools had increased to 144, and 60 of these accepted males as well as females. Two countries had started degree programmes by 1960, and by 1984 one country also had masters and doctoral programmes [8].

University education for nurses has now been established in many Member States to prepare well qualified nursing personnel with leadership capabilities. A number of countries have developed or are planning advanced degree programmes. Mass media campaigns have been launched to increase public awareness of the nature of nursing and the value of nursing services to the nation. Training and education opportunities have been provided for nurse educators and managers. Several countries have established nursing positions in the Ministry of Health and many countries have taken steps to systematically assess their needs for nursing and midwifery services and develop a structure for meeting these needs. For example, Lebanon initiated a study of nursing workforce and training institutions; Pakistan formed a task force of nursing leaders who analysed issues and problems hindering nursing education and service delivery; in the Syrian Arab Republic, a national conference of policy makers, health officials and nursing

leaders was held to formulate a plan for upgrading nursing in the country [10]. Bahrain, Egypt, Jordan, Kuwait, Sudan and the United Arab Emirates have developed national strategic plans for nursing and midwifery services. At the First Gulf Nursing Conference in 1993, leaders from the six Gulf Cooperation Council countries adopted a strategic plan for nursing development. In 1994 the WHO Regional Office held a consultation in Teheran on improving nursing practice and participants proposed strategies for governments, nursing leaders and professional bodies to use in upgrading clinical practice [11]. Some Member States have established a comprehensive registration system with standards of practice to ensure that only staff with appropriate qualifications and skills practise nursing. The WHO Collaborating Centre for Nursing Development in Bahrain has begun to develop a management information system on the registration and deployment of nursing and midwifery personnel. Moreover, the Faculty of Nursing, Jordan University of Science and Technology, the second WHO Collaborating Centre for Excellence in Nursing, has taken initiatives to improve nursing education in neighbouring countries.

A number of countries have included in their target activities for the next 5 years activities to strengthen nursing and midwifery, such as the education of appropriate nursing personnel for primary health care, curriculum development in nursing, expansion of nursing and midwifery education, support for the development of nursing management and quality assurance in nursing services, implementation of the national nursing plan, development of continuing education for nursing personnel and expansion of the capacities of nursing and midwifery schools.

While this progress is impressive, the current and projected changes in health needs and health delivery systems make it imperative to continue strengthening nursing and midwifery.

As noted earlier, currently 90% of the nursing workforce in the Region are in hospitals. In the coming decades most health care will be delivered in the community. Because of the increasing costs of health care, many countries may consider the World Bank-recommended package of public health initiatives and essential clinical services as the most cost-effective approach to improving the health of the population. All of these services are community-based and can be provided by appropriately educated nurses. The shift in health care delivery, however, will require enlarging the scope of practice of nurses to include health assessment, case finding, health education and counselling, immunizations, management of minor illnesses and injuries, health screening, family planning, management of hypertension, diabetes education and monitoring, school health, community organization and development, and promotion of healthy environments. Further, in the future, hospital care will be primarily for those who are acutely or critically ill, and this care will require specialist nurses who have in-depth understanding of complex patient needs and can function as case managers and coordinators of the inputs to care from a variety of health professionals.

It is crucial that nursing education programmes in the Region respond to these changing health care needs and delivery systems and prepare the nurses needed for the future.

Country and regional situation in regard to basic and post-basic nursing education

Basic nursing education

All countries in the Eastern Mediterranean Region have basic nursing schools, affiliated mainly with Ministries of Health, Ministries of Education, Universities, military services or private organizations. In recent years all Member States in the Region have established more nursing schools and launched campaigns to attract young males and females to the professions of nursing and midwifery. However, many Member States still suffer from a shortage of qualified nursing personnel and from a confusing multiplicity of nursing categories and types of basic nursing education programmes.

Education programmes vary among Member States, and sometimes three, four or more types exist in the same country. Several countries have three different basic nursing programmes: a 3-year programme for students who have completed 9 years of general education; a 2-year or 3-year associate degree programme following completion of secondary school; and a 4-year Bachelor of Science in Nursing at university level. One country requires a year of internship after the BSc nursing degree. Another country has two categories of registered nurses, one prepared in a 4-year baccalaureate programme and one prepared in a 3-year diploma programme, in addition to associate nurses prepared in a 2-year programme and two categories of practical nurses, one prepared after 10 years of general education and one after 12 years. In one country, basic nursing education has developed at two levels: the diploma nurse and the BSc nurse, although entrance requirements for the diploma programme vary in different parts of the country. Some countries have only a 4-year university-level baccalaureate programme following 12 years of general education, or only a 3 or 3½ year diploma programme following 12 years of general education. One country requires only 6 years of general education for admission to a nursing programme.

These multiple types of programme lead to multiple standards, with negative effects on the delivery of nursing services. In addition, in many countries the largest number of nursing students are attending programmes that require only 9 years of schooling for admission. This is inadequate for preparing the nurses of the future. Nine years of preparatory education do not provide sufficient knowledge of basic sciences or general education to study modern nursing and many students drop out. Furthermore, when students graduate they are only 17 years old, emotionally too young to cope with the responsibilities of caring for the sick in hospitals or for families in the community. This leads to a high attrition rate, adding to the nursing shortage. Yet some countries place upper limits on students' age, preventing more mature candidates from enrolling [12].

Nursing curricula in most countries of the Region were founded on the medical model and they stress individual and curative hospital care. Thus graduates of many nursing programmes are not prepared to participate in the strategy of health for all through primary care. In recent years a number of countries have adopted programmes more relevant to the community, with emphasis on primary health care.

However, in many countries efforts to implement more community-focused curricula have encountered problems arising from the affiliation of nursing schools with hospitals and the needs of hospitals for the services of students to make up for the shortage of nursing personnel. Also, teaching staff are not fully prepared to undertake training in the community, and in some programmes physicians remain a dominant force.

Educational resources vary widely. Few institutions have adequate numbers of qualified teachers. Clinical training is a particular problem in some countries because of the shortage of preceptors in clinical practice agencies to supervise students, the absence of role models and clear standards of nursing care, and the unavailability of equipment and resources. Field practice in community settings is lacking.

The majority of nursing schools also have inadequate teaching-learning materials that are in national languages and culturally relevant. Some countries report a shortage of journals related to nursing in the college libraries. In an effort to tackle the problem of lack of materials in national languages, following the recommendations of the Regional Advisory Panel on Nursing, a series of textbooks in Arabic has been initiated, but only the midwifery text has been completed to date. This lack of resources compromises the quality of the education.

The quality of basic education is also compromised by lack of a systematic approach to the accreditation of nursing education programmes in almost all countries. While periodic curriculum reviews are carried out in some programmes, there is no system for assessing the implementation of nursing education against identified standards.

In summary, nursing education in the Region is compromised by a lack of power and control by nurses over nursing education, a lack of standards, variation in entrance requirements from 6 years of general education to 12 years, failure to attract or, in some cases, even allow males into the profession, upper age limits excluding adult learners, variation in curriculum length from 12 months to 5 years, curriculum content that is oriented towards hospital care with little involvement in activities related to health promotion and prevention of disease, inadequate teacher preparation, and isolation of nursing education from practice. Clearly, basic nursing education in the Region needs a set of standards to ensure the graduation of competent nurses who will deliver comprehensive care and contribute effectively to the health services of countries in the Region.

Post-basic education

Because of the increasing complexity of health services at all levels and the need for nurses with advanced knowledge and skills, some countries in the Eastern Mediterranean Region are now developing post-basic training in specialized areas. However, like basic programmes, these programmes vary greatly in length and scope as well as entrance requirements. One year post-basic courses are offered in some countries in a variety of specialized fields such as ward administration, teaching, cardiology, ophthalmology, community health, midwifery, anaesthesiology, urology and psychiatric nursing. One country offers 4-week certificate courses

in medical/surgical nursing and continuing education in mid-level management, ward management and clinical teaching. Another offers a master's in nursing education and programmes ranging from 9 to 12 months in length for specialization in a variety of areas, as well as short programmes in narrow areas such as kidney dialysis, burns, etc. Still another offers a 2-year programme for nurses to become medical assistants and in another, students who have completed the baccalaureate may be trained in 3-year programmes as specialists in obstetrics, anaesthesia, radiology, therapy or biology. These graduates, however, are not considered nurse specialists, but high technicians of public health [13].

In some countries, weak undergraduate programmes have been upgraded into specialty programmes as a short-term solution to acute needs for particular health services. In other countries nurses have been used as the pool for training paramedics. Both of these developments raise questions about what constitutes specialist training and what constitutes a specialist nurse.

To avoid the chaotic proliferation of programmes in specialized areas, the challenge to the Eastern Mediterranean Region is to systematically plan, develop, implement and monitor nursing specialization in a way that responds to the demands of the Region and at the same time assures the development of the profession [14].

This publication focuses on the development of sound basic nursing education based on approved standards; in addition, it addresses the development of post-basic specialization in priority areas.

Standards for basic nursing education

Introduction

The purpose of educational standards is to establish the quality of nursing education in order to protect society by ensuring competent practitioners. The design of standards should include features necessary to ensure that students attain values, knowledge, skills and attitudes in accord with current health needs and the current art and science of nursing.

Standards require clear definition of professional scope and accountability, with clear and descriptive titles to convey who is a nurse, who is an auxiliary and who is a nurse specialist, and to indicate the structure of accountability.

Since the function of a profession is by definition to serve society, standards should encourage nurses to reach their fullest capacity to serve. Education should encourage the development of nurses' potential, and standards should therefore be flexible—neither too general nor too specific. Educational standards are designed to provide broad guidance to schools through outlining required subject areas, teaching, staff qualifications and resource requirements, but they should not detail procedures and curricula. Further, since divergence in standards leads to inequalities in the delivery of care, standards should promote the uniform development of the profession. Finally, standards for nursing education should be relevant, rational, consistent and clear to ensure the welfare of the public, the profession and the practitioner [15].

Levels of practice

Deciding on the levels of nursing practice is prerequisite to setting standards for the education of practitioners. There are currently 22 levels of nurses and midwives in the Eastern Mediterranean Region. The range is from 1 to 5 per country and the mean is 3 per country.

One level of nursing practitioners—the professional nurse—is the goal for the Region.

The rationale for setting one level is based on the vision statement set forth in the first strategic plan for nursing and midwifery development in the Region [4]:

In a changing world, nursing professionals will offer efficient and effective practice of the highest possible standard and safety, founded on up-to-date research and knowledge. They will meet the present and future health needs of the people as members of the health team in a cost-effective manner in a variety of settings, with the ultimate goal of contributing to the maintenance and/or improvement of quality of life.

The specific reasons for having one level of nurse prepared in a baccalaureate programme include:

- the increasing complexity and costs of health care;
- continuing advances in science and technology;
- the rising expectations of health care consumers;
- the need for practitioners who can use health services research and nursing research to improve practice;
- the need for practitioners who can function as teachers and as leaders in nursing;
- the need to improve the image of nursing and attract more qualified students to the profession;
- the need to prepare nurses for continuing self-development;
- the importance of working in health care teams and collaborating with other disciplines;
- the importance of interregional and international collaboration;
- the need to prepare nurses who are better client advocates; and
- the need to provide a solid foundation for cost-effective specialization.

Given the resource constraints and consequent difficulties in revising existing educational programmes and developing new programmes to produce this level of practitioner, a *transitional period of 15 years may be needed, during which there are two levels of nurses—professional nurses prepared in a 4-year baccalaureate programme and technical nurses prepared in a 2½ year programme, with the requirement of 12 years of general education for admission to either programme.*

By the end of the transitional period technical nurse educational programmes should be phased out. During this period countries need to develop or expand bridging programmes that enable technical nurses to move into baccalaureate programmes without overlap and repetition, provide incentives, and support nurses as they complete their education as professional nurses.

Rationale for regional standards for basic nursing education

Standards provide a means of measuring the degree of excellence of an educational programme and of comparing the degree of excellence of one programme to that of others. Many countries around the world have developed national standards for nursing education, and the current trend is towards setting regional standards for groups or subgroups of countries.

Regional standards for nursing education in the Eastern Mediterranean Region are crucial to [15]:

- ensure that existing programmes of nursing education and those now being developed follow current trends in nursing education, respond to health needs in the Member States, stay in line with technological advances and produce graduates who are competent and accountable for their practice;
- guide institutions in Member States to improve existing educational programmes and provide a basis for developing new programmes;
- consolidate the multiple programmes now existing in Member States;

- promote a regional level of nursing education and performance and thus advance the uniform development of nursing;
- allow free mobility of students and graduates among Member States;
- guide the activities of students and teachers in nursing education programmes;
- demonstrate the uniqueness of the professional preparation of nurses;
- attract capable candidates to the profession;
- monitor regional progress in developing nursing education.

Standards for nursing education must be based on the aims and objectives of educational programmes. In the Eastern Mediterranean Region the first aim of basic programmes is to produce nurses in sufficient numbers and with sufficient skills to provide quality care in all types of settings—hospitals, primary care clinics, homes, schools, industry, etc.—for all age groups “from the womb to the tomb”. Further, the aim is to produce nurses who are not only practitioners but also are active as citizens and members of their community, sensitive to political and social developments and able to play a role in policy and politics. The objective of preparing these nurses is to have an impact in improving the health of the people, developing nursing as a profession, and promoting sustainable development in countries.

A second aim is to develop the capacity of nursing educational institutions, through linkages with institutions of higher education and educational authorities, through integration with hospitals and health services, through collaboration with health-related and governmental bodies, and through collaboration with international organizations, developed through appropriate channels. The objective of this capacity building is to provide broad learning programmes as a basis for meeting the lifelong learning needs of the nursing workforce.

As noted earlier, success in achieving these aims requires a comprehensive approach that includes a legal framework for nursing education and practice, a regulatory system, standards for educational programmes, accreditation (validation) of programmes and a registration system for graduates. Success also requires high calibre students, adequate resources and a clear educational process that includes educational philosophy, curriculum, extracurricular activities that are a part of preparing citizens, teaching–learning strategies, clinical/field work and continuing education.

Standards for basic nursing education are of three types: structure, process and outcome. These may be further subdivided into educational institutions, teaching staff, administrative support, physical facilities, entrance requirements, curriculum and evaluation.

Standards for both technical (2½-year) nursing programmes and professional (4-year) nursing programmes follow. Technical nurses will be educated in nursing institutes and professional nurses in colleges or universities.

Regional standards for technical nursing education

Introduction

Technical nurses will practise in a variety of settings at all levels of care, in hospitals, clinics, health centres, maternal and child health centres, schools, homes, etc. They are task-oriented and are expected to function as part of the health care team and to provide skilled nursing care to individuals and families, supervised by a professional nurse. In primary care settings they may be expected to assess health care needs and risk factors, and to refer individuals and families to the appropriate professional. They are expected to provide health education and health promotion counselling in all settings. In order to achieve graduation of technical nurses with these capabilities policy-makers and educators need to consider the *regional* standards set out below as a *minimum* in establishing their *national* standards

Educational institutions

- Technical nursing education is carried out in nursing institutes established in either the governmental or nongovernmental sector (e.g. by the Ministry of Education, Ministry of Health, armed forces, nongovernmental organizations).
- The nursing institute is linked with a nursing body, an educational authority, health care agencies, and community and professional associations.
- The institute is governed by a council or board that includes representatives from the community, health care agencies, other concerned governmental agencies and the nursing body. The board forms committees, including committees on teaching staff, students, curriculum, examinations and programme evaluation, in order to conduct its work and support its educational goals.
- The institute is administered by a qualified nurse educator.
- The administrative structure of the institute assures a clearly delineated system of authority, responsibility and communication.
- Administrative functions support the development of teaching staff self-direction and leadership and provide an atmosphere conducive to collegial relationships.
- The administrative structure assures the involvement of teaching staff in institutional governance.

- The administrative structure assures student participation on committees involved with student welfare and interests.

Teaching staff

- Teaching staff hold a minimum of the BScN degree (or its equivalent), have appropriate clinical experience, and are trained in teaching.
- Nurse educators teach nursing subjects while other teaching staff (medical and non-medical) may teach other subjects.
- Nurse educators attend continuing education programmes and are encouraged to enrol in higher degree programmes, with support from the institute for attendance.
- Nurse educators participate in professional activities and in community activities which affect health care.
- Teaching staff and clinical staff in affiliated clinical agencies are offered dual appointments in the institute and agency.
- The overall ratio of students to teaching staff is at least 15:1.

Administrative and educational support

- Administrative staff (registrar, budget officer, clerical staff, etc.) are adequate to support the institute's functions and ensure efficient use of teaching staff's talents and time.
- The institute has a well equipped library containing current books and journals in nursing and related fields in the language of instruction and in other languages, and the library is headed by a professional librarian, with adequate staff to help teaching staff and students make efficient use of library materials.
- Laboratories (nursing skills, computer, and basic science) are available to students and to teaching and administrative staff as required.
- Media resources, supplies and the full range of teaching–learning materials are available.
- The institute staff includes trained technicians to handle/maintain computers and audiovisual equipment.

Physical facilities

- There are sufficient numbers of classrooms to accommodate the institute's class schedules, and the classrooms are appropriate in size and equipment to support the teaching–learning process being used (e.g. lecture, group discussion, seminar, workshop).
- Conveniently located offices are available for teaching staff, administrators and support staff.
- Learning laboratories are well equipped, large enough to meet student learning needs without crowding and run by qualified staff.

- The facilities for clinical training include hospitals, community clinics and other agencies, schools, industries, homes, etc., and provide clinical practice in all three levels of health services: primary, secondary and tertiary.
- Transportation to clinical agencies is available.
- Residential accommodation for students is similar to that provided for other students in institutions of higher education.

Entrance requirements

- Students must be a minimum of 17 years old at entrance into the programme; there is no maximum age for admission.
- Both males and females are accepted, without consideration of marital status.
- Candidates for admission must have completed 12 years of general education, preferably in the science stream, and passed the national secondary school examination with a minimum score of 65% and/or an entrance examination for the institute, or its equivalent.
- Candidates must pass a medical exam to ensure that they are physically and mentally able to follow the curriculum and practise nursing.
- Candidates may be required to have a personal interview.
- Admission requirements may include proficiency in the language in which instruction is offered.

Curriculum

- The curriculum is planned by teaching staff in collaboration with community members, the nursing body and health services agencies.
- Implementation and evaluation of the curriculum are the responsibility of the institute administrator and teaching staff, who will work in collaboration with health services agencies and the nursing body.
- The length of the nursing programme is 2 academic years with 6 months of consolidation of practice under supervision, for a total of 2½ years.
- The curriculum is culturally relevant and community-oriented, and it addresses the health needs of the population within the context of the health services system of the country.
- The core curriculum contains the following subjects:
 - Social sciences
 - Sociology
 - National subjects
 - Communication
 - Mental health/psychology
 - Medical sciences
 - Anatomy and physiology
 - Pathophysiology

- Microbiology
- Pharmacology
- Clinical nutrition
- Nursing sciences
 - Primary health nursing
 - Secondary health nursing
 - Tertiary health nursing
 - Health education
 - Nursing ethics and legal issues
 - Introduction to vital statistics and computer science

Included in this publication package is a prototype technical nursing curriculum which follows the set of standards listed here and which is recommended for use in developing national technical curricula.

The teaching–learning process

- The teaching–learning process includes a variety of approaches such as lectures, demonstrations, group work, role play, seminars, workshops, and clinical experience.
- Clinical and field work settings have written educational objectives and guidelines for orientation, teaching and evaluation of students at various levels.

Evaluation

- Objectives and guidelines for student assessment in theoretical and clinical courses are developed.
- Students' progress in developing clinical skills is continually assessed; students' satisfactory completion of courses is evaluated by semester examinations; and student achievement of the objectives of the curriculum is evaluated by a national examination.
- Courses are periodically evaluated and revised as needed.
- The curriculum as a whole is evaluated at least every 5 years and this includes an evaluation by graduates, employers and consumers.
- Programme evaluation is based upon a systematic approach to assessing structure, process and outcomes and includes evaluation of the organizational structure, teaching and support staff, facilities, students, curriculum, clinical practice areas, the teaching–learning process and the evaluation process.

Regional standards for professional nursing education

Introduction

Education for professional nursing is based on the view that nursing is the backbone of the health services and plays a vital role in the promotion of health and quality of life. Nursing input in health care delivery is important to achieve health for all. Nursing influences and is influenced by social and cultural forces and the values of the society in which it is practised.

The professional nurse is a competent, knowledgeable practitioner who can provide nursing care in any health setting at all three levels of health services—primary, secondary and tertiary. Professional nurses have a sound understanding of nursing subjects and they can assess situations, identify priorities and use a problem-solving approach to attend to complex and rapidly changing needs. They are equal members of the health team and manage resources for care, coordinate inputs by other health professionals, teach, supervise and monitor technical nurses and auxiliary and support staff, and are responsible for continuity of care. In primary health care settings they are responsible for case finding, screening and management of minor illnesses and injuries. The professional nurse is responsible for continuing personal and professional growth, uses practice-based research to improve care, and responds to changing influences on health care. Professional nurses assume responsibility for the improvement of the health of the people, the development of nursing as a profession and the sustainable development of their country. In order to achieve graduation of professional nurses with these capabilities policy-makers and educators need to consider the *regional* standards set out below as a *minimum* in establishing their *national* standards

Educational institutions

- Professional nursing education is carried out in autonomous institutions of higher education (universities, institutes, colleges) regulated and accredited by the country they are located in.
- The nursing programme is administered by a qualified nurse educator.
- The administrative organization assures a clearly delineated system of authority, responsibility and communication.
- Administrative functions support the development of self-direction, leadership, and research by teaching staff and provide an atmosphere conducive to collegial relationships.

- The administrative structure assures involvement of teaching staff in institutional governance.
- The administrative structure assures student participation on committees involved with student welfare and interests.

Teaching staff

- Teaching staff hold a minimum of a master's degree in a relevant discipline.
- Nurse educators teach nursing subjects, both theory and clinical, while other teaching staff from the medical and behavioural sciences may teach other subjects.
- Nurse educators have graduate preparation in the nursing specialties in which they have responsibility for teaching theory and clinical practice.
- Nurse educators are engaged in the practice of their respective specialties and in activities which improve their competence and intellectual growth.
- Nurse educators consistently contribute to the professional and scientific literature.
- Nurse educators participate in professional activities and community activities which affect health care.
- Nurse educators collaborate among themselves as well as with faculty in other health disciplines and the institution at large, and with health services personnel.
- The ratio of teaching staff to students is such as to foster the development of students' analytical skills, creative thinking and problem-solving techniques. The recommended ratio is at least 1:15.

Administrative and educational support

- Administrative staff (registrar, budget officer, clerical staff, etc.) are adequate to support the nursing programme's functions and ensure efficient use of the talents and time of teaching staff.
- The institution has a well equipped library containing current books and journals in nursing and related fields, in the language of instruction as well as other languages, and the library is headed by a professional librarian with adequate staff to help teaching staff and students make efficient use of library materials.
- Laboratories (nursing skill, computer and basic science) are available to students and to teaching and administrative staff as required.
- Media resources, supplies and the full range of teaching-learning materials are available.

Physical facilities

- There are sufficient numbers of classrooms to accommodate class schedules, and classrooms are appropriate in size and equipment to support the teaching-learning process being used (e.g. lecture, group discussion, seminar, workshop).

- Conveniently located offices are available for teaching staff, administrators and support staff.
- Learning laboratories are well equipped, large enough to meet student learning needs without crowding and run by qualified staff.
- Residential accommodation for students is similar to that provided for other students in institutions of higher education.

Entrance requirements

Admission requirements are the same as those for entrance to other institutions of higher education in the country and include the following.

- Students must be a minimum of 17 years old at entrance into the programme; there is no maximum age for admission.
- Both males and females are accepted, without consideration of marital status.
- Candidates for admission must have completed 12 years of general education, preferably in the science stream, and passed the national secondary school examination with a minimum score of 65%, and/or passed an entrance examination for the institution or its equivalent.
- Candidates must pass a medical examination to ensure that they are physically and mentally fit to follow the curriculum and practise nursing.
- Candidates may be required to have a personal interview.
- Admission requirements may include proficiency in the language in which instruction is offered.

Curriculum

- The administrator and teaching staff are responsible for planning, implementing and evaluating the curriculum, with collaboration from health services agencies.
- The length of the nursing programme is 4 years.
- The curriculum is culturally relevant and addresses the health needs of the population, within the context of the health services system of the country.
- The curriculum combines theory and practice in an innovative problem-solving approach to nursing care.
- The core curriculum includes the following subjects:
 - Social sciences
 - Sociology
 - Psychology
 - Economics
 - Cultural studies
 - Anthropology
 - Religion

- Language
- National subjects
- Medical and basic sciences
 - Anatomy and physiology
 - Pathophysiology
 - Microbiology
 - Parasitology
 - Genetics
 - Pharmacology
 - Nutrition
- Nursing sciences
 - Adult nursing
 - Maternal child nursing
 - Critical care
 - Community nursing
 - Psychiatric nursing
 - Gerontological nursing
 - Epidemiology
 - Environmental health
 - Health education and health promotion
 - Ethics and professional nursing issues
 - Research and computer sciences
 - Communication skills, human relations, counselling
 - Management, leadership

Included in this publication package is a prototype baccalaureate nursing curriculum which follows the set of standards listed here and which is recommended for use in developing national professional curricula.

Teaching–learning process

- A variety of teaching and learning methods are used in addition to traditional approaches; these include self-learning approaches (modules, role play); participatory approaches (group work, seminars, workshops, panel discussions, journal clubs); and creative thinking approaches (small research projects, brainstorming); in addition, clinical learning occurs in a variety of settings.
- Faculty are responsive to the learning needs of individual students and provide them with appropriate opportunities to attain educational objectives.
- Clinical and field work settings have written educational objectives and guidelines for orientation, teaching and evaluation of students at various levels.

Evaluation

- Objectives and guidelines for student assessment in theoretical and clinical courses are developed.
- Students' progress in developing clinical skills is continually assessed; students' satisfactory completion of courses is evaluated by semester examinations; and students' achievement of the objectives of the curriculum is evaluated by a national examination.
- Courses are periodically evaluated and revised as necessary.
- The curriculum as a whole is evaluated at least every 5 years, and this includes an evaluation by graduates, employers and consumers.
- Programme evaluation is based upon a systematic approach to assessing structure, process and outcomes, and includes evaluation of the organizational structure, teaching and support staff, facilities, students, curriculum, clinical practice areas, the teaching–learning process, and the evaluation process.

Collaboration with WHO's Expanded Programme on Immunization and the integration of the EPI manual on immunization activities into basic education will play an important role in reorienting nursing curricula towards community care. The incorporation of EPI materials into basic nursing programmes throughout the Region will not only strengthen nurses' capabilities to plan and provide immunization services but can also serve as a model for strengthening other components of primary care in the basic curriculum, and for collaboration between nursing educators and focused WHO programmes in primary health.

Nursing specialization in the Eastern Mediterranean Region

Priorities for specialization

Continuing advances in technology, the increasing complexity of health services, structural changes in health care delivery and changing health care needs are bringing an increasing demand for nurses with advanced knowledge and specialized skills in all countries of the Region.

Specialist nurses work in specialized secondary and tertiary care units and in all primary health settings. They have advanced knowledge and skills in a specific area of nursing practice, which includes in-depth understanding of health problems in the context of changing health care delivery. They can identify complex or critical problems and respond immediately to varying patient needs and environmental change. The specialist nurse develops care protocols with other health professionals, coordinates care delivered by other professionals, manages nursing care working with nurses with lesser qualifications, acts as consultant and teacher for other staff, and facilitates practice development through the conduct and use of practice-based research and innovative approaches. Specialists evaluate the quality of care delivered and direct and manage change.

The four top priorities for nursing specialization in the Region are:

- midwifery
- community health nursing
- psychiatric/mental health nursing
- critical care.

Specialization programmes are 1 calendar year or 3 academic semesters in length and should be offered in modules to encourage flexible study and part-time enrolment. All programmes are provided in recognized educational institutions by educators with specialization in the field and with sufficient material and human resources (other lecturers) and sufficient settings for clinical experience, preferably in places of excellence.

Midwifery

The rationale for making midwifery a priority for the Eastern Mediterranean Region includes the facts that fertility rates in the Region are high and still rising; morbidity and mortality rates for women and children remain high; many women live in poverty and suffer from poor living conditions, pollution and illiteracy; the current quality of maternal child care is often poor because qualified midwives are lacking; and good midwifery care is both cost-effective and culturally appropriate. The specialist nurse-midwife is viewed as a person who cares for women throughout the life cycle and for children up to the age of 5 years.

The post-basic course in midwifery specialization is open to professional nurses with 12 years of general education and a 3-year diploma or 4-year BScN. Candidates must have a minimum of 2 years of experience in nursing.

Graduates are expected to have specialist knowledge and skills in maternal and child nursing; to care for women during the maternal cycle, managing pregnancy and delivery as normal physiological and developmental processes; and to provide care for women and for children up to 5 years of age in a variety of settings. The specialist midwife is expected to carry out the following functions:

- provide care for the woman who plans to become pregnant;
- assess and monitor the pregnant woman's health status and that of the fetus and provide appropriate interventions;
- manage common discomforts of pregnancy;
- manage the woman and the fetus during the delivery process;
- identify problems and provide appropriate interventions, including referral;
- manage the woman's care after delivery;
- assess the condition of the neonate, provide care, identify deviations from normal, and make appropriate interventions or referrals;
- provide counselling to the woman seeking family planning;
- provide gynaecological services throughout the woman's life;
- provide counselling on menopause, cancer prevention and other problems of women;
- conduct and use research to improve care.

Community health nursing

The rationale for giving community health nursing top priority is similar to that for midwifery, since community health nursing includes maternal and child nursing. In addition, changing demographics and health care delivery patterns mean that there are growing numbers of people who need to be cared for in the community—the elderly, AIDS patients, the disabled, those with chronic diseases, and those needing home care after hospital discharge. Also, community health nurses are needed to improve immunization rates, promote child and adolescent health and care for the elderly, as well as to promote and provide health care to all age groups in the community, and to develop occupational health nursing services in the growing industrial sector.

The post-basic specialization programme in community health nursing is open to professional nurses with 12 years of general education and a 4-year degree in nursing or a 3-year diploma, and with a minimum of 2 years of experience in nursing.

The graduate is expected to have specialist knowledge and skills in community health nursing and to be able to function efficiently and effectively as a team member in health centres, homes, schools, industries and other places of work. The graduate should be able to carry out the following functions:

- communicate with individuals, families and groups, providing counselling and health education;
- advocate for communities and groups;
- work with groups and with community leaders;
- assess the health needs of individuals, families and communities;
- manage minor illnesses and injuries;
- participate in community development and outreach projects;
- participate in intersectoral collaboration;
- promote health in the work place;
- refer clients to other services and agencies as needed;
- participate in health campaigns, including immunizations against the six target diseases of the Expanded Programme on Immunization;
- identify problems and needs in communities;
- participate in relevant research;
- manage resources for health;
- participate in policy development.

Psychiatric/mental health nursing

Specialization in psychiatric/mental health nursing is a priority area because changing demographics and health problems are increasing the need for mental health services. Increasing problems come from the growing pressures of life in the Region and, more specifically, from internal and external political conflicts and civil unrest. There is also an increase in substance abuse and in the emotional disorders that accompany development. In the past, patients with emotional problems were isolated and often stigmatized; psychiatric nursing was a neglected specialty and there are therefore few qualified nurses in this area. Basic education is insufficient for effective care.

Psychiatric/Mental Health Nurse Specialist programmes are designed to accept professional nurses with 12 years of general education and either a 4-year degree or a 3-year diploma. Candidates must have a minimum of 2 years of experience in nursing. These specialists will practise in psychiatric wards, outpatient settings, and primary health care settings. They should be able to carry out the following functions:

- promote the mental health of clients in all stages of life, throughout the life cycle;
- provide care to clients with mental health disorders and their families using a range of approaches, in a variety of settings;

- educate families, health professionals and the community on mental health concepts and early signs of mental problems;
- provide care for the chronically mentally ill or handicapped;
- identify crisis and be knowledgeable about prevention and management;
- collaborate with health professionals in other service sectors in relation to rehabilitation and return of those with mental problems to the community;
- improve and develop further skills in psychiatric nursing care, including skills in communication;
- provide public education programmes on mental illness;
- protect the mentally ill from malpractice;
- consider the sociocultural backgrounds of clients in providing care;
- undertake situational analysis and identify problems and needs;
- take a positive, realistic attitude toward the management of care of clients with mental disorders;
- counsel drug addicts.

The critical care nurse specialist

Critical care is a priority area for specialization because of the increasing acuity of hospitalized patients—both adult and paediatric, the rise in the number of trauma victims as accidents continue to increase, changes in disease patterns with economic development, and the growing elderly population. In addition, continuing advances in technology and the increasing numbers of critical care units make it imperative to prepare nurses to care for critically ill patients.

The critical care nurse specialist course is open to professional nurses with 12 years of general education, a 4-year degree in nursing or a 3-year diploma, and 2 years of experience in nursing. Graduates will be able to practise in intensive care units, coronary care units, accident and emergency departments, recovery areas, acute trauma units, cardiac units, neurosurgical units and other specialized units.

The graduate should be able to carry out the following functions:

- use advanced technology with expertise;
- counsel individuals and families and other nurses;
- provide nursing interventions in situations of crisis;
- manage stress;
- communicate with patients, families and staff including teaching and counselling;
- conduct and use research to improve care;
- coordinate care in triage areas;
- manage care of the critically ill, terminally ill and bereaved;
- ensure infection control.

Conclusions

The standards suggested here for basic nursing education provide a regional framework within which countries can move to consolidate their multiple categories of nursing personnel into one clearly defined category of nurse—the professional nurse—with auxiliary and support staff who are *not* given the title nurse. The professional nurse is prepared in a 4-year baccalaureate programme in an institution of higher education with entrance requirements similar to those for other students entering higher education, and with a curriculum that combines foundations in social sciences, cultural studies and basic and medical sciences with in-depth study of nursing subjects.

The professional nurse is the nurse of the future in the Eastern Mediterranean Region. However, during a transition period (of no more than 15 years), some countries in the Region may need to continue or modify current 2-year or 3-year programmes to prepare nurses designated here as “technical nurses”. Admission requirements are the same as those for professional nursing education, to ensure an orderly transition to professional nursing. Further, countries that do not currently have bridging programmes to enable technical (diploma) nurses to complete the BSc will need to develop such programmes. Technical nurse education should be phased out by the year 2015.

No other programmes currently in existence or planned can be considered to prepare nurses. Such programmes should be terminated or transformed into training programmes for auxiliary and support staff.

Professional nurses practise in a variety of settings, in hospitals and in the community, providing nursing care, teaching patients/clients and support staff, acting as the leader of the nursing team, collaborating with other professionals and clients, and developing nursing practice [16]. Enactment of legislation to regulate the practice of nursing is crucial to ensure that nursing positions are held only by those whose educational preparation and competencies are consistent with this broad scope of nursing practice. Professional nurses direct, supervise, train and are accountable for the work of auxiliaries and support staff.

Specialist nurses function as advanced practitioners and care managers in primary care settings and in specialized hospital units. The specialist nurses are also researchers, teachers, managers and consultants to other staff. Priorities for specialization in the Region are midwifery, community health nursing, psychiatric/mental health nursing and critical care nursing.

The mix of specialist nurses, professional nurses, physicians, other health professionals and auxiliary and support staff may vary from setting to setting depending on resources for health care technological advances, level of development of health services, and community participation. However, in all health care settings nurses are the backbone of the health services.

In its Ninth General Programme of Work, for the period 1996–2001 [17], WHO set forth goals for health with specific target figures, within a policy framework that includes:

- integrating health and human development in public policies;
- ensuring equitable access to health services;
- promoting and protecting health;
- preventing and controlling specific health problems.

Nurses have a major role to play in ensuring equitable access, promoting and protecting health, and controlling specific problems in the Eastern Mediterranean Region. Therefore, to achieve the goals and specific targets of the Ninth General Programme of Work, the countries of the Eastern Mediterranean Region must continually strengthen nursing and midwifery. The foundation for continued development is the provision of sound basic nursing education based on approved standards, and the orderly development of specialization in priority areas.

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