Nursing and Midwifery Education in the Twenty-first Century

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1. **INTRODUCTION**

An Intercountry Consultation on Nursing and Midwifery Education in the 21st Century was held in Bangkok, Thailand from 20-24 December 1999. Twenty participants from all ten countries of the Region, three special invitees and five observers attended, besides the WHO Secretariat comprising country, Regional Office and headquarters representative. The list of the participants and programme of the Consultation appears in Annexes 1 and 2 respectively.

2. **INAUGURAL SESSION**

Professor Dr Pornchai Matangkasombat, President, Mahidol University, Bangkok, Thailand inaugurated the meeting. He said that medical and nursing professions in Thailand had received high recognition in society, because they were founded by the Royal Family and had contributed significantly to the health of the people. He hoped that the meeting would strengthen collaboration in the nursing profession among countries in the Region through the millennium.

Dr Vallop Thaineau, Director-General, Department of Health, Ministry of Public Health, extended his gratitude to WHO/SEARO for convening the meeting in Thailand and extended a warm welcome to all. He said that nurses and midwives were well recognized in Thailand for their significant contribution to health services, particularly for their role in achieving Health for All goals. Nurses and midwives needed to be well-educated so that they would be able to provide quality care. Therefore, it was essential to identify issues and challenges confronting nursing and midwifery education and devise appropriate strategies to strengthen nursing and midwifery education in the Region.

Dr Thaineau also noted that the year 1999 was a special year for Thailand, as the country celebrated the Sixth Cycle Birthday Anniversary of His Majesty King Bhumibol Adulyadej who had been supporting numerous
health care activities in Thailand. Furthermore, Her Royal Highness the Princess Mother, who was a nurse, had dedicated and pursued her life-long humanitarian work for the health of the Thai people. Therefore, it was the most appropriate time to conduct this meeting in Thailand. He wished the participants a successful meeting and an enjoyable stay in Bangkok.

The address of Dr Uton Muchtar Rafei, Regional Director, World Health Organization South-East Asia Region was read out on his behalf by Mr Richard Kalina, Management Officer, Office of the WHO Representative to Thailand. After extending his greetings, the Regional Director drew attention to a number of activities that had been undertaken by WHO and Member Countries in the Region to reorient nursing and midwifery education and service in support of national Health for All goals. He noted that nursing and midwifery education had made substantial advancement while nursing and midwifery services had made considerable progress.

Dr Rafei said that as the world moved into the 21st Century, it became necessary to reflect on past successes and failures as well as on current and future challenges. The changing health needs and service requirements in the next century would necessitate changes in nursing and midwifery services. Consequently, the role and functions of nurses and midwives would also change, and nursing and midwifery personnel had to be well prepared to meet the challenge. Therefore, the consultation was organized to identify strategies to strengthen nursing and midwifery education to meet the challenges of the 21st Century. The Regional Director urged the participants to propose realistic and implementable strategies and assured them of WHO’s continuing assistance and collaboration.

Dr Naeema Al-Gasseer, Senior Nursing and Midwifery Scientist, WHO/HQ stressed the importance of the meeting in formulating strategies for nursing and midwifery education in the countries of the South-East Asia Region, based on health care needs of the countries, particularly for the poor, disadvantaged and the vulnerable. She said that the strategies should be realistic and support healthcare reform, taking into account the Resolution WHA 49.1 “Strengthening Nursing and Midwifery”.

Ms Judi Brown, Deputy Director of the Board of Management, International Confederation of Midwives (ICM), stressed the important role of midwives in providing maternity care to women, babies and families. Health
care reform and new models of health care management were major challenges to nursing and midwifery in the 21st century. Midwifery and nursing had to continue to evolve and increase their involvement in research and resource management to design strategies to achieve health gain. In order to achieve these goals, cooperation and partnership were essential. She assured ICM’s commitment to continuing partnership with midwives, nurses, WHO and communities.

3. INTRODUCTION TO THE CONSULTATION

At the outset of the technical session, Dr Tassana Boontong (Thailand) was nominated as Chairperson; Ms Vijaya K C (Nepal) as Co-Chairperson; and Dr Archir Yani S Hamid (Indonesia), Ms Kusum Vithana (Sri-Lanka) and Dr Pailin Nukulkij (Thailand) as Rapporteurs.

Dr Duangvadee Sungkhobol, Regional Adviser for Nursing and Midwifery, WHO/SEARO recalled that WHO/SEARO had been assisting countries of the Region to reorient nursing and midwifery in support of national Health for All goals. Special efforts had been made to strengthen nursing and midwifery education in order to produce competent nurses and midwives meeting the service requirements. In addition, provision had also been made for the strengthening of nursing and midwifery services in SEAR countries leading to considerable advancement in this field in the Region. It was essential to learn and devise effective strategies at country level for bringing about the required development. This would further strengthen nursing and midwifery education in the Region.

The objectives of the meeting were:

1. To review the progress in reorientation of nursing and midwifery services and education in SEAR countries, particularly their impact on the quality of care in institutional and community settings;
2. To examine the implications of challenges in the 21st century on nursing and midwifery education;
3. To devise strategies to strengthen nursing and midwifery education in SEAR in relation to the challenges of the 21st century, and
(4) To propose recommendations for strengthening nursing and midwifery education in SEAR countries in the 21st century.

4. NURSING AND MIDWIFERY IN THE WHO SOUTH-EAST ASIA REGION

In the past decades, WHO/SEARO had taken various initiatives for the development of nursing and midwifery. Priority areas for collaboration in the recent years were improved nursing and midwifery planning and management, strengthened collaboration between nursing education and services, strengthened midwifery practice for safe motherhood, enhanced contribution of nursing and midwifery in health development, improved nursing and midwifery personnel development and strengthened regulatory mechanisms for quality assurance in both nursing and midwifery education and services.

It was further elaborated that for strategic planning, a Regional Strategic Plan for Nursing and Midwifery Development was formulated after a regional consultation in 1995. Eight key outcome areas identified were (1) Increased contribution of nursing and midwifery to policy development in all relevant areas; (2) Effective contribution of nursing and midwifery to achieving key national health targets; (3) Improved quality of nursing and midwifery care; (4) Improved planning and management of human resources in nursing and midwifery within the context of HRS development; (5) Capable nursing and midwifery managers; (6) Revitalized education system; (7) Relevant regulatory mechanism for nursing and midwifery education and services; and (8) Effective networks and strategic alliances with key people and organizations within and among SEAR countries. Moreover, several countries in the Region had developed National Action Plan for Nursing and Midwifery.

For nursing and midwifery education, all countries now have their own basic nursing and/or midwifery education programme. Some countries have developed graduate nursing education programme. A few regional training programmes in selected specialties were also developed.

Furthermore, several initiatives had been undertaken to strengthen nursing services. These included development of quality assurance mechanisms; promotion of self-care; development/strengthening of community health nursing services; improvement of nursing service management; development of guidelines for planning nursing workforce
requirements, for collaboration between nursing service and education and for regulatory system to strengthen nursing and midwifery; development of Standards of Midwifery Practice for Safe Motherhood; and support towards the establishment/strengthening of a nursing council.

One of the major challenges confronting the Region was the continuing shortage and uneven distribution of nursing and midwifery personnel along with the imbalance in number and types in relation to other categories of health personnel. This needed to be addressed critically and continuously.

Future plans for developing nursing and midwifery in the Region included preparation of strategy documents on Development of Nursing and Midwifery Education in the 21st century, based on the outcomes of this consultation; promotion of the utilization of Standards of Midwifery Practice for Safe Motherhood; development of standards of nursing practice; development of short course training programme on Quality Management in Nursing and Midwifery; development of a model to strengthen the role of health personnel in the community and home based care and promotion of networking and collaboration for nursing and midwifery within and among the countries of the Region.

5. LESSONS LEARNED IN THE REORIENTATION OF NURSING AND MIDWIFERY SERVICES AND EDUCATION: COUNTRY LEVEL EXPERIENCES

5.1 Bangladesh

Ms. Minati Sarma, Director, Directorate of Nursing Services, Ministry of Health and Family Welfare and Ms Rabeya Kathun, Principal, College of Nursing, Dhaka jointly presented recent developments of nursing and midwifery in Bangladesh. It was pointed out that one of the major developments was the formulation of national plan of action for nursing and midwifery in 1994. The expected outcome of the national plan included reorientation of nurses to nursing, strengthening of the Directorate of Nursing Services, Nursing Council, College of Nursing, and clinical field practice areas.
Conceptual reorientation of nurses to nursing was considered essential in order to improve the quality of care. The limited facilities and other resources was one of the factors contributing to the poor quality of health care in Bangladesh. Therefore, the Directorate of Nursing Services needed strengthening to enhance its capacity to manage nursing services effectively and efficiently. The College of Nursing, which was established in 1970 to offer post-basic nursing education programme i.e. post-basic B.Sc. degree, also needed to be strengthened so that the quality of education could be further improved.

It was noted that the theory-practice gap was considerably reduced by providing appropriate training, utilizing four centres for continuing education and two rural teaching centres for field practice. In-service training programmes in selected areas were also conducted in support of national health programmes. The curriculum of the college of nursing was revised in 1998 to place greater emphasis on the development of critical thinking ability.

The Nursing and Midwifery Act was enacted to regulate and maintain standards in nursing education and practice. Development of professional standards and code of conduct was in progress. A professional newsletter was produced and disseminated widely. A Nursing Research Cell was established in 1999 at the College of Nursing to facilitate research development in nursing in the country.

It was further noted that constraints encountered included delay in obtaining government approval on the National Plan of Action, shortage of qualified teachers, inadequate teaching-learning facilities, theory-practice gap, inadequate monitoring and mentorship in nursing and midwifery education, inadequate collaboration between education and services, lack of career mobility and job satisfaction as well as poor professional motivation.

The main recommendations for further strengthening of nursing and midwifery in Bangladesh included strengthening quality assurance mechanisms; increasing the number of qualified teachers; closing the theory-practice gap; increasing career mobility; integrating gender issues in nursing education and educating nurses about human rights and nurses' roles.
5.2 Bhutan

Mr Dorji Wangchuk, Principal, Royal Institute of Health Science (RIHS) informed that the Royal Government of Bhutan was committed to providing equitable access to basic health and education facilities for all its population, and the health services were being provided free of cost. Nursing services in Bhutan were the backbone of the health care delivery system, representing over 40% of the health professional. There was no nursing association or nursing council in Bhutan at present. However, in order to improve the quality of care, various committees such as nursing service committee, nursing staff development committee, and nursing practice committee had been set up at the national level. Establishment of a nursing sub-committee at the district level was also planned. The SEARO midwifery standards was adapted for use in Bhutan. These standards were published by the Health Division and were disseminated to all health personnel. The Nursing Procedure Manual was being revised. Guidelines for nursing management were developed and used at the national referral hospital.

Nursing and midwifery were integrated in Bhutan. In addition to nursing training a general nurse midwife received six months of midwifery training, while the auxiliary nurse midwife and assistant nurse received four months of midwifery training. Pre-service education for all nurses was provided at the RIHS. Nurses at the degree level were trained outside the country. In-service training was conducted both within and outside the country.

Some constraints encountered included shortage of hostel accommodation and classrooms; lack of teaching materials, especially books; shortage of qualified faculty members; and lack of properly planned in-service training programmes. Furthermore, obtaining placement for post-basic training in foreign countries was also difficult due to the poor educational background of the nurses.

Major recommendations to further strengthen nursing education in Bhutan included provision of adequate classrooms and teaching facilities including books, journals, audiovisual aids, computers with e-mail and internet facilities; recruitment of more faculty members on a priority basis; upgradation of faculty members qualification for post-basic and degree courses; and establishment of institutional linkages with well-established institutes within the Region.
5.3 Democratic Peoples' Republic of Korea

Dr Kim Sang Ho, Director, Department of Labour, Ministry of Public Health, Pyongyang with the assistance of Dr Kim U Yong, an interpreter, reported that special efforts had been undertaken to recover from the long-term economic blockade and natural disasters in his country. Nursing and midwifery education was subsumed under the medical education system. Nurses and midwives worked at all the various health facilities at different levels of the health care system. They were posted on the basis of their qualifications and job responsibility in the provision of nursing and midwifery care.

He informed that primary education is free for all citizens in DPR Korea. The Ministry of Public Health was responsible for managing nursing and midwifery education. Nursing and midwifery students received stipends from the government during their training. There were two types of nursing educational programmes: a four-year programme and a two-year programme. After graduation, a nurse from the four-year programme was recognized as a second class nurse, while those from two-year programme were recognized as fourth class nurses.

He further pointed out that for midwifery education, a separate two-year midwifery educational programme produced fourth class midwives. After putting in more than three years of service, nurses and midwives can pursue their study at a higher level.

One of the significant achievements in DPR Korea is the substantial increase in the numbers of nurses and midwives during the recent years. In addition, in order to ensure the quality of nurses and midwives, nursing and midwifery curriculum were reviewed and revised, so that 40% of the teaching programme was now devoted to clinical and field practice. Moreover, there was a well-established system for in-service education for nurses and midwives to keep them up to date with recent development in national health services. Nurses at the central level went out to provide in-service education at the peripheral level. At the same time, nurses at the periphery come for in-service education at the central level. The better prepared nurses and midwives were responsible to train nurses and midwives with less education. The main problem faced by DPR Korea was inadequate teaching learning facilities.
5.4 **India**

Mrs Swati Dinkar Panya, Principal, School of Nursing, Civil Hospital, Ahmedabad, Gujarat noted that nursing personnel in India were front line workers who provided care in support of national Health for All goals in the hospital as well as the community.

There were three types of pre-service nursing and midwifery educational programmes in India: 18-month Auxiliary Nurse Midwife Course (ANM), three year General Nursing and Midwifery Course (GNM) and four-year B.Sc Nursing. The curricula for all programmes were community-oriented. In addition, there were also advanced educational programmes in nursing and midwifery offered in the country, such as Master of Nursing and Master of Philosophy programmes, several short term specialized courses and various in-service educational programmes.

She further pointed out that the ANM worked in sub-centres and primary health care centres as a multipurpose health worker. The GNM and BSc nurse graduates primarily worked in the hospitals. However, they were also involved in primary health care and community health centres to supervise the multipurpose health workers.

India being a large country having geographical sociocultural and religious diversity, the quality of nursing and midwifery education and services varied between states. Some states did not have sufficient health manpower as needed. Nursing education depended largely on foreign publications, which might not be relevant to country’s context.

5.5 **Indonesia**

Dr. Achir Yani S. Hamid, Vice Dean for Academic Affairs, Faculty of Nursing, University of Indonesia, Mrs. Helwiyah Ropi, Head of Baccalaureate Nursing Programme University of Padjajaran, and Ms. Yeti Irawan, Diploma III Midwifery Programme, St. Carolus Hospital, jointly reported on the reorientation of nursing and midwifery education and services in Indonesia.

The meeting was informed that nurses and midwives were a significant workforce in the health services in Indonesia. In all hospitals in Indonesia,
more than 60% hospital employees are nurses. Furthermore, there was at least one community midwife in each of the more than 60,000 villages in the country. However, most women still utilized the services of a traditional birth attendant for delivery. Moreover, the health services are moving towards laying greater emphasis on health, instead of illness, with intensive promotive and preventive measures. Nurses and midwives would need to have professional competencies to effectively contribute to this shift.

Nursing education in Indonesia started in 1913. The national workshops convened by the Consortium of Health Sciences in 1983 strongly recommended the development of higher nursing education in order to produce qualified nurses to meet the need for high quality nursing services at all levels of the health care system. These gave an impetus for advancing nursing education to the higher education system in Indonesia.

At present, the nursing educational programmes offered in the country included 1) Certificate Programme for Health Nurses – a three-year programme for junior high school graduates (9 year-general schooling); 2) Diploma Programme in Nursing (D III) – a three-year programme for senior high school graduates (12 year-general schooling); 3) Baccalaureate in Nursing – two-year post diploma (Programme B) for diploma nursing graduates and four-year generic (Programme A) for senior high school graduates; and 4) Master of Science in Nursing. It was planned to develop a Doctoral Programme in Nursing in the future.

For midwifery education, there were Programme A – a one year midwifery education programme for health nurses, Programme B – one year midwifery education for diploma nursing graduates, and Programme C – three-year midwifery education, direct entry, for junior high school graduates, which was only implemented in selected provinces and was now discontinued. Diploma midwifery programme at the D III level was recently implemented in 1996.

Recent developments in nursing and midwifery services included formulation of a national plan of action for nursing and midwifery workforce development; development of teaching hospitals including use of the teaching hospital for nursing education; creating awareness and gaining common understanding on nursing as a profession and its significant contributions to
quality health care, through scientific nursing seminars, national workshops/congresses, and meetings; conducting and publishing nursing research.

It was further noted that the country had now recognized that nursing service is a professional service as stated in the Health Law. Nurses were expected to provide nursing care based on scientific knowledge acquiring from nursing higher education and they have the authority to practice within its discipline. According to the Government decree, nursing personnel comprised of nurses and midwives. There was also a Government decree dealing with regulation in midwifery practice. For nursing regulation, efforts were being made for the establishment of a regulatory system, including the nursing council to control the quality of nursing education and practice.

Major constraints reported were inadequate number of qualified nurses and midwives with professional competencies; insufficient leaders in nursing and midwifery to facilitate and direct further improvements in nursing and midwifery practice; and limited coordination of planning, production, utilization and management of nursing and midwifery workforce.

Main recommendations to further develop nursing and midwifery in Indonesia included provision of continuing and advanced nursing and midwifery educational programmes including education; social marketing of nursing roles and functions to major key stakeholders in nursing, through seminars or other scientific meetings; establishment of regulatory system for nursing practice; development of appropriate nursing care delivery models; strengthening nursing research activities; and networking within and outside the country. It was concluded that the quality of nursing and midwifery service and education could be improved through the implementation of the national strategic plan of action. It was anticipated that the Directorate of Nursing, which was to be established at the Ministry of Health as a follow up action in the implementation of the national action plan, would be responsible for implementing those activities included in this action plan.
5.6 Maldives

Ms Ihsana Ahmed, Director of Nursing, Indira Gandhi Memorial Hospital (IGMH) reported that nursing services in Maldives were initially provided on an outpatient basis. All professional nurses were trained abroad until 1991, when the Institute of Health Sciences (IHS) offered the diploma in nursing and midwifery. Nurse aides and paramedical staff were trained at the institute. Many nurses were sent abroad for advanced education and training. A few nurses had obtained a degree and many were planning to pursue higher education.

Maldives' health care system was based on a four-tier referral system: the grass root health post, health centres, regional hospitals, and tertiary referral hospital in the capital, Male’. The opening of the four regional hospitals and Indira Gandhi Memorial Hospital (IGMH) threw up a challenge to nursing and midwifery services and education, especially in respect of the need for specialization in specific nursing fields. At the same time, the workforce requirement for nursing and midwifery services were planned according to the services required at each level of the health care delivery system.

Major developments in nursing and midwifery education and services in the 1990s included development of three-year diploma in nursing and midwifery course; placement of nurses in health centres, school and clinics; opening of IGMH; launching of Health Master Plan (1996) and National Action Plan for Nursing/Midwifery Services (1997); affiliation of IHS with universities in Australia; establishment of Nursing and Midwifery Directorate in the Ministry of Health, and establishment of Nursing and Midwifery Council (1999).

Some problems and constraints of nursing and midwifery education and services in the Maldives included shortage of trained nurses, inadequate training facilities at IHS, inadequate opportunities for training within and outside the country and inadequate quality assurance both in training programmes and nursing services.

Ms Ahmed concluded that the development and implementation of the action plan for nursing and midwifery were critical factors to the success of activities undertaken.
5.7 Myanmar

Dr. Lin Aung, National Professional Officer from WHO Country office in Myanmar made a presentation on behalf of Professor Mala Maung, Rector of the Institute of Nursing and Daw Khin May Win, Director (Nursing), Department of Health, Myanmar. He said that the Division of Nursing at the Department of Health, Ministry of Health was responsible for the overall management of nursing services. Its chain of command was through 16 state and divisional level nursing officers down to 315 Township Health Nurses (THNs). THNs were key nurse managers for delivering community health nursing services for both curative and preventive aspects. The provision of community health care by competent THNs can make a great difference in quality of health services provided to the public.

He further stated that nursing and midwifery education was under the responsibility of the Department of Medical Sciences, Ministry of Health. The Nursing Training Centre, Yangon, which was established in 1986, was upgraded to the Institute of Nursing (IoN) in 1991. The Institute of Nursing, Mandalay was set up in 1998. In addition, 18 nursing training schools (offering the Diploma in Nursing) and 19 midwifery training schools (offering the Certificate in Midwifery) were strategically established in the various states and divisions, with a community-oriented curricula. The post-basic Bachelor of Nursing Science (BNS) programme and a four-year BNS generic programme were also established. The Master of Nursing Sciences (MNS) distance education programme was conducted at The Institute of Nursing, Yangon from 1996 to 1998 by the University of Adelaide, Australia to prepare nurses for leadership roles in education, research, and health service development. A proposal to establish the MNS programme in the country had been submitted to the national authorities concerned. The IoN, government and NGOs (e.g. Myanmar Nurses’ Association) hosted conferences, seminars and workshops for continuing nursing and midwifery education.

The major activities for the reorientation of nursing services and education were provision of safe and effective comprehensive MCH care in the rural health settings; development of effective community nursing management system; implementing patient centred nursing care; continuing nursing and midwifery education to name just a few. Constraints and/or problems encountered were inadequate professional autonomy; lack of standardized practice to improve quality of care; insufficient number of
qualified nurse educators, service providers, managers and researchers; inadequate learning materials; limited opportunities for in-service continuing education for nursing service personnel; and low level of interest in research, to name just a few.

In order to address some of the above-mentioned problems, WHO provided support for strengthening nursing services management as well as midwifery education; development of patient-centred nursing care; and adaptation and implementation of WHO/SEARO Standards of Midwifery Practice for Safe Motherhood.

5.8 Nepal

Ms Vijaya KC, Special Secretary, Ministry of Health and Ms Geeta Pandey, Associate Professor in Nursing, Maharajganj Nursing Campus, Kathmandu reported that nursing and midwifery education in Nepal was started in 1956 by the Ministry of Health. Later on in 1972, it came under the Ministry of Education, in the Institute of Medicine, Tribhuvan University. However, in the early 1990s, the education of auxiliary nurse-midwife (ANM) was transferred to the Council of Technical Education and Vocational Training while the education at the certificate level and above remained with the Institute of Medicine. There were altogether seven certificate nursing schools and 32 ANM schools. In addition, programmes for post-basic BSc Nursing, basic BSc Nursing and master’s degree in nursing - focusing on women’s health and development were also offered in the country. All programmes were primary health care-oriented.

Several achievements had been witnessed in Nepal. These included production of nurses and midwives in the country; periodic revision of nursing curriculum to incorporate new developments in health care; ongoing faculty development programmes – within and outside the country, strengthened coordination and collaboration between education and service; production of teaching learning materials in local language, and development and implementation of national guidelines for maternity care at various levels of the health system; establishment of a Nursing Council and accreditation mechanisms for nursing and midwifery educational programmes; and increased nursing research activities.
Major constraints encountered were: shortage of nursing and midwifery workforce including qualified teachers and supervisors to supervise the students’ clinical practicum; limited opportunity for nurses to get exposure to modern technology; lack of properly planned in-service education programmes for nurses and midwives; limited opportunities for career development, and inability to retain qualified nurses in the remote areas.

Recommendations to further strengthen nursing and midwifery in Nepal included HRD planning for nursing and midwifery services; ongoing preparation of nurse teachers and supervisors in the relevant fields; systematic planning and conduct of in-service programmes for nurses and midwives, enhanced support for developing appropriate teaching learning materials, and establishment of suitable mechanisms to retain the qualified nurses in the remote areas.

5.9 Sri Lanka

Mrs. D M M de Silva, Principal, School of Nursing, Kandana, underscored the commitment of the government of Sri Lanka to maintain a high standard of health care in the country. She said that Sri Lanka had good health indicators comparable to those of developed countries.

In Sri Lanka, the training for nurses had been strengthened and the number of registered nurses and midwives increased in the last 10 years. However, the nurse population ratio was still at 1:1200, therefore it was important to accelerate and expand the training capacity of schools of nursing. The Nursing and Midwifery Council Act was enacted in 1988, but the council had yet to be operationalized. Curricula for both basic nursing education and advanced specialties were revised to meet health service needs. Nurses now had more opportunities to continue their study in the country and abroad. A post-basic B Sc Nursing programme by distance education was being offered in Sri Lanka since 1994, from which 60 nurses had already graduated. Moreover, action was being taken to develop and implement a conventional post-basic B Sc Nursing programme in a university. In addition, the education and utilization of midwives were strengthened, their training was extended to 18 months and they were given more community health service responsibilities in support of the national primary health care objectives.
It was further noted that special attention was also given for the re-establishment of posts of public health nurses in which nurses would be given more responsibilities as direct care-givers as well as supervisors in the community health nursing services. Expected roles and function of public health nurses were already defined. An educational programme to prepare qualified community health nurses was being planned to help address the existing health problems in the country.

5.10 Thailand

Dr. Pailin Nukulkij, Director, Education Development Division, Proboromarajchanok Institute for Health Manpower Development, Ministry of Public Health, and Ms Arieya Sapphalek, Acting Director, Nursing Division, Ministry of Public Health jointly presented the experiences of Thailand in the reorientation of nursing and midwifery.

Nursing education in Thailand started in 1896 and was evolved from apprenticeship system to hospital training and later on to higher education system. The master’s degree programme for nurses had been offered in the country since 1977. Nursing curriculum was oriented in support of the National Health Policy. Currently there were 66 nursing schools which fell under the jurisdiction of various sectors, viz. Ministries of University Affairs, Health, Interior, Defence; Bangkok Metropolitan Administration; Red Cross, and the private sector.

Nursing and midwifery are integrated in Thailand. There was a well-established system of nursing education in which nurses with lesser qualification could progressively pursue advanced education up to the doctoral level in nursing science degree. Senior high school graduates can either enter into a two-year technical nursing educational programme, i.e. certificate of nursing sciences or a four-year professional nursing educational programme, i.e. bachelor’s degree in nursing sciences or equivalent. The Technical Nurse, after a minimum of two years’ working experience, could pursue a two-year Post-Basic Bachelor of Nursing Science to become a Professional Nurse. Professional Nurses could continue their education in the master’s or doctoral degree in nursing as well as short course programmes in selected nursing specialties. Moreover, practical nurses (graduates of 1½ year-practical nursing educational programme) and midwives (graduates of 1½ year-midwifery educational programme, this programme was discontinued in
the 1970’s) could also enrol in the Technical Nursing programme and pursue further professional nursing education and soon.

Major developments of Thailand’s nursing education in the 1990’s included establishment of quality assurance system aiming to achieve international standards, such as ISO 9002, ISO 1400; strengthening a system for licensing and relicensing of professionals by the Nursing Council; promotion of problem based and student centred-learning, and affiliation of nursing schools under the jurisdiction of other ministries with the faculties of nursing under the Ministry of University Affairs to further improve the quality of education. It was noted that professional organizations, particularly the Nurses’ Association and the Nursing Council had strong leadership and actively supported professional development as well as maintained the standards and quality of nursing education and services.

For nursing and midwifery services, the main activities within the past ten years focused on the improvement in the quality of nursing services at all levels of the health system. The Nursing Division had initiated the Quality Improvement Project in 1987 to improve the quality of nursing care in the country in both hospital and community settings. Activities under this project included job analysis to determine required improvements; development and implementation of standards for patient care, and development of various nursing procedural manuals. Initially only 19 regional hospitals were involved in this project. Nurses and consumers were satisfied with this initiative and hence it was expanded to every hospital throughout the country.

There was also a need to further improve the quality of nursing care in the community. Therefore, standards of nursing care in the community were developed and widely distributed to all health centres throughout the country. In addition, in-service education for nurses working in the community was conducted with emphasis on prevention and control of communicable diseases. Furthermore, nursing service system for self-care and home care was established.

It was highlighted that in order to strengthen quality improvement in nursing services, the Nursing Division had set up the Nursing Quality Development Network. This network aimed to enhance the supervision and technical back-up support as well as consultation for nurses working at various levels of the health care delivery system. Nurses from the central administration would provide support for nurses at the regional and provincial hospitals, nurses from the regional and provincial hospitals would provide
support for nurses in the district hospitals, and nurses from the district hospitals would provide support for those working in the health centres. It was underscored that competencies and quality of nursing personnel were crucial for improving the quality of nursing care. Hence, they had to be developed continuously and should receive ongoing technical support.

6. SUMMARY OF MAJOR ACHIEVEMENTS AND ISSUES/PROBLEMS/CONSTRAINTS ENCOUNTERED IN REORIENTING NURSING AND MIDWIFERY SERVICE AND EDUCATION

From country presentations on lessons learned in reorientation of nursing and midwifery services and education, summary of major achievements, issues/problems/constraints encountered, and effective strategies learned were as follows:

6.1 Major Achievements

(1) Nursing and Midwifery Services

- Well formulated national action plan for nursing and midwifery development, with broad base participation, as an integral part of a national health plan in some countries;
- Increased involvement of nurses and midwives in health policies and programme formulation in a few countries;
- Established structure within the health ministry facilitating nursing and midwifery development;
- Established mechanisms for assuring and improving quality of nursing and midwifery services;
- Increased recognition for advanced preparation of nurses and midwives for quality care in all countries;
- Cost-effective innovative approaches for in-service education for nursing and midwifery personnel;
• Greater collaboration between education and service sectors for nursing and midwifery development;
• Increased efforts for health promotion and protection and community health services;
• Increased attention to the provision of holistic and patient/client-centered care;
• Greater attention to improved quality of midwifery services for Safe Motherhood, and
• Increased research studies in nursing and midwifery.

(2) Nursing and Midwifery Education
• Revised nursing and midwifery curriculum meeting changing health needs and service requirements within the country context;
• Established mechanisms for assuring and improving quality in nursing and midwifery education in some countries;
• Increased number of programmes at master and doctoral levels for nurses and midwives within the Region;
• Collaboration within and among countries for optimal use of resources for provision of advanced education programmes;
• Networking among education institutes for educational development in a few countries;
• Increased attention for greater collaboration between education and services for relevance and quality of education for most countries;
• Availability of distance education as a means to provide greater opportunities for advanced education for nurses and midwives;
• Increased numbers of qualified teachers and clinical instructors in a few countries, and
• Raised entry qualification of students for provision of higher nursing and midwifery educational programmes.

(3) Nursing and Midwifery Regulation
Nursing and midwifery councils established in some countries to regulate and enhance the quality of nursing and midwifery education and services, and

Established system for licensing and re-licensing of nursing and midwifery personnel to ensure competency of personnel in a few countries.

6.2 Issues/Problems/Constraints Encountered

- Shortage and poor distribution of nursing and midwifery personnel;
- Shortage of qualified teachers and capable managers;
- Inadequate number of qualified or properly trained nurses/midwives;
- Inadequate leadership skills of nurses and midwives;
- Insufficient administrative and political support;
- Limited opportunities for continuing education and career advancement;
- Lack of well-established system of continuing education for nursing and midwifery personnel in some countries;
- Unclear or ill-defined roles and functions of nurses and midwives with different educational backgrounds;
- Inadequate professional autonomy in many countries;
- Insufficient teaching-learning resources;
- Insufficient funds for educational programmes and faculty development;
- Theory-practice gaps;
- Insufficient professional role models, and
- Low quality of care in some countries.

6.3 Effective Strategies Learned

- Collaboration within the profession for optimal use of resources, and
- Unity within the profession to influence policy decisions affecting nursing and midwifery.
7. **NURSING AND MIDWIFERY DEVELOPMENT: GLOBAL PERSPECTIVE**

The major goals of the World Health Organization, among others, included helping to combat ill-health of the world population and building healthy communities and populations, and to set up norms and standards. Challenges to the global health system would influence nursing and midwifery development. These global health challenges included balance between health outcomes and health system development, exclusion of the health of the poor and disadvantages, private sector growth including public-private sector balance, the right balance of health institutions to provide cost-effective care, improving salaries and incentives in the health sectors, responding to complex emergencies, and globalization. Increase in disparity in access to health care, rapid environmental changes and degradation, effects of economic crisis on health care financing, inability of technology to tackle epidemics and deadly threats from diseases, and provision of effective health delivery system and access to care in the face of internal conflict, civil wars and disasters were additional challenges that health professionals had to encounter.

The key issues leading to changes in nursing/midwifery education and practice included globalization and world trade; financial and economic impacts; structural change and health system reform; demand for community mobilization and involvement; the changing roles of health care professionals; competencies required and preparation of nurses and midwives, and impact of advanced information and communication technology on education, practice and research.

It was stressed that nurses and midwives had a significant role to play in addressing the prioritized health problems in order to promote well-being of the world populations. Some of these priorities were: reducing the burden of sickness and suffering resulting from communicable as well as noncommunicable diseases, quality health care to children, adolescents and woman, reduction of maternal mortality and morbidity, promotion of immunization, reducing malnutrition, and greater attention to mental health. Development of strategies for exchange of expertise between institutions, increased studies and research to build knowledge based on evidence; dissemination and use of research findings; incorporation of accountability
mechanisms and social responsiveness into the curricula, increased collaborations to enable nurses and midwives to be involved in research, development of capacity at different levels of nursing and midwifery, and building partnerships and alliances to strengthen nursing and midwifery education were some of the ways in which the goals of WHO, nursing and midwifery profession could be achieved. These strategies had to be appropriate to the individual country context.

8. CHALLENGES TO NURSING AND MIDWIFERY IN SEAR COUNTRIES IN THE 21ST CENTURY

Dr. Win May, Scientist, Human Resource for Health, WHO/SEARO said that challenges evolving from change in the society had significantly impacted on the health systems and consequently on nursing and midwifery profession, and vice-versa - to some extent. Therefore, it was crucial to identify these challenges and their implications for both nursing and midwifery services and education in order to enable identification of strategies to strengthen nursing and midwifery education.

Major challenges from society were gender inequity, knowledge explosion and access to information, better informed clients and psychological stress, elaborated as follows:

**Gender equity**

As a result of gender inequity, women in some countries of the Region were vulnerable and disadvantaged in terms of their education, health status and subject to violence. Nurses and midwives had to advocate for women’s health.

**Knowledge explosion and access to information**

Nursing and midwifery education had to equip graduates to be able to cope with knowledge explosion including use of information technology. Life-long learning should be emphasized and access to information technology was needed to improve the nurses’ competencies.
Better informed clientele

Consumers of health care had increased awareness of their rights and responsibilities. Also, better education and self-help movement had facilitated better knowledge and skills in self-care. Health care consumer needed to be treated as equal partners in the health care delivery system.

Psychological stress

Natural disasters, war, population movements, economic upheavals as well as changing lifestyle, particularly for city life led to increased psychological stress. Stress could cause several illnesses and social problems. The need to emphasis on mental health service to individual, family and community was imminent.

The challenges to the health care systems influencing the health care services, were as follows:

Health sector reforms

It was necessary to reform health care services for effective care and better health outcomes. The three principles of health care reform were equity, quality and efficiency. Equity in health care implies need-based provision of health care services to the population, particularly the vulnerable and marginalized groups. Quality of health care, including quality of nursing care is an important factor in ensuring the health of the population. Efficiency in health sector reform depended on the effectiveness of health personnel utilization. A rational skill mix was the most efficient use of human resource for health.

Epidemiological transition

Noncommunicable diseases were on the rise while infectious diseases were still leading causes of morbidity and mortality in many countries in the Region. Countries were confronted with the double burden of both communicable and noncommunicable diseases. Greater attention had to be given to health protection and promotion in order to prevent these diseases.
Continuing high maternal and infant mortality

Despite concerted efforts to improve maternal and child health, several countries in the Region were still confronted with high maternal and infant mortality. Nursing and midwifery service and education needed to be reoriented to address this problem effectively.

Specialization

With advancement in medical knowledge and technologies, there was an increased demand for specialization. Nurses and midwives would need to be well equipped to deal with complex technology in diagnosis and treatment of clients as well as ethical issues involved.

   The challenges within the nursing and midwifery profession which had a direct impact on education and practice of nurses and midwives were as follows:

Shortage of nursing and midwifery personnel

All countries in the Region experienced a problem of continuing shortage of nurses and midwives along with imbalances in numbers and types in relation to other categories of health personnel.

Insufficient teaching-learning resources

The availability of qualified teachers and teaching-learning materials was inadequate in many countries in the Region. Sharing of expertise and resources and using innovative approaches in education would need to be strengthened.

Career mobility and advanced education

There were limited career opportunities for nurses and midwives in some countries. Planning for continuing education was necessary. Advancement of nursing education in universities or institutes of higher education would also
improve the quality of nurses/midwives and consequently the quality of services.

Changing role of the nurses and midwives

In the age of health care reform, the roles of nurses and midwives had been expanded. In addition to direct care-givers, nurses took on the roles of manager and coordinators of care, managers of health services, clinical specialists, and researchers.

Need for accountability

Nursing and midwifery professions needed to demonstrate their accountability in the provision of high standard care for clients. In the age of globalization, equivalence in nursing and midwifery education among countries was important to assure the accountability of nursing and midwifery care.

Nursing and midwifery education in the 21st century required inevitable improvement to produce qualified graduates to meet the above-mentioned challenges.

9. IMPLICATIONS OF CHALLENGES IN THE 21ST CENTURY ON NURSING AND MIDWIFERY

The meeting, through group discussions, identified major challenges and their implications to nursing and midwifery. The review of the challenges in the 21st century and country level experiences presented in the earlier sessions provided the necessary background information for the group work. The meeting identified health care reform and paradigm shift, information technology and knowledge explosion, changing and expanded roles of nurses and midwives, shortage and poor distribution of nurses and midwives, environmental changes and hazards, and continuing high maternal mortality ratio (MMR) and infant mortality rate (IMR) as the foremost challenges. Detailed information on the implications of each of these challenges are provided in Annex 4.
10. MEETING CHALLENGES TO NURSING AND MIDWIFERY EDUCATION IN THE 21ST CENTURY

The need to take into account commitments of WHO and the countries in the Region in addressing health problems when devising strategies to strengthen nursing and midwifery education to meet the challenges of the 21st century was underscored. The Declaration on Health Development in the South-East Asia Region in the 21st Century adopted at the 25th meeting of the Health Ministers in August 1997 and endorsed by the Regional Committee for South-East Asia in September 1997 highlighted the foremost challenges of health development. These were: closing the gaps and inequities in health; creating conditions that promote health and self-reliance; ensuring basic health services to all, especially the poor, women and other vulnerable groups; upholding and enforcing health ethics; and placing health at the centre of development. In order to address these challenges, Member Countries were urged to take actions and commit themselves to Health Sector Reform, Healthy Public Policy and other actions relevant to country’s context.

For Health Sector Reform, countries in the Region were urged to accord the highest priority to alleviate the burden of disease disabilities, premature death and suffering affecting the people; ensure universal access to quality health care; invest in women’s health and development to eliminate gender discrimination and disparities; encourage application of scientific knowledge and technology; mobilize financial resources for health and promote effectiveness and efficiency; increase the involvement of communities in health development; propagate and preserve medical plants; and promote traditional medicine.

For Healthy Public Policy, Member Countries were urged to create a healthy environment to support health; ensure quality health programmes for children and families; strengthen existing partnerships and forge new partners for health development at all levels; prevent health hazards that may result from development; ensure adequate nutrition for the needed; intensively advocate for health; and uphold and enforce health ethics.

Countries in the Region were also urged to ensure the quality and social relevance of education and training for health personnel; strengthen
epidemiological surveillance, health information and health care for the elderly, and develop regional self-reliance.

The four WHO strategic directions to address global health issues were: (1) reducing excess mortality and disability; (2) reducing risk factors to human health; (3) developing health systems that equitably improve health outcomes, and (4) developing an enabling policy and promoting an effective health dimension to seed policy. The participants were requested to address key strategic issues to strengthen nursing and midwifery education to meet the challenges of the 21st century, including improvement of production and utilization of nursing and midwifery personnel; design and implementation of new and better means of preparing future nurses and midwives; overcoming obstacles; ensuring quality and social relevance of education and training for nursing and midwifery personnel; and contribution through nursing and midwifery education in realizing the Region’s commitment for health development.

11. STRATEGIES TO STRENGTHEN NURSING AND MIDWIFERY EDUCATION IN RELATION TO THE CHALLENGES IN THE 21ST CENTURY

The meeting, through group work, identified strategies to strengthen nursing and midwifery education in relation to each of the identified challenge in the 21st century. The outcomes of the group work are provided in Annex 4.

Based on the outcomes of the group work, the meeting further elaborated, in the plenary discussion, the identified strategies into seven major areas as follows:

11.1 Curriculum

- Competency-based curriculum with both community and hospital/institution based practice
- Inclusion of:
  - Computer literacy and information technology
  - Health promotion and protection
11.2 Faculty

- Development of qualified teachers and setting up the proper student-teacher ratio;
- Fostering faculty professional practice, and
- Strengthening faculty development in research and publications.

11.3 Teaching-learning Process

- Utilization of self-directed, critical thinking, problem-solving process in order to sustain life-long learning skills;
- Development of research/inquiry skills;
- Encouragement of multi-professional/multidisciplinary education, and
- Development of professional role models in field practice areas.

11.4 Quality Assurance

- Establishment of quality assurance system in nursing and midwifery education;
- Development of an accreditation system;
- Systematical review and revision of curriculum, and
- Supervision, monitoring and evaluation of the curriculum development and implementation.
11.5 Collaboration
- Strengthening of collaboration between nursing and midwifery services and education in order to improve the quality of nursing and midwifery services and education as well as to narrow gaps between them;
- Development of networking and partnership between nursing and midwifery services as education sectors as well as among nursing and midwifery institutions, and
- Coordination in nursing and midwifery human resource planning, production and management

11.6 Utilization of Nursing and Midwifery Personnel
- Fostering advanced nursing and midwifery practice;
- Increasing local recruitment of qualified candidates based on the identified criteria in order to decrease mal-distribution;
- Establishment of regional training centres;
- Reviewing and refining roles and functions of various categories of skill-mixed health team;
- Rationalized of skill mixed team;
- Development of continuing education system;
- Development of career path for nursing and midwifery personnel;
- Improving working conditions of nursing and midwifery personnel;
- Provision of appropriate incentives to personnel working in remote areas, and
- Fostering male participation in nursing and midwifery as appropriate.

11.7 Regulation
- Licensing and re-licensing of nursing and midwifery working workforce;
- Establishment of system to link continuing education with re-licensing, and
- Certifying advanced practice in nursing and midwifery.
12. RECOMMENDATIONS

Based on the plenary and group discussions resulting from the terms of reference, the following recommendations to strengthen nursing and midwifery, particularly nursing and midwifery education were made:

12.1 For Member Countries

(1) In order to define roles and functions and enable proper projection of the appropriate numbers and categories of health personnel, particularly for nursing and midwifery, policies on human resource for health development should be reviewed and if necessary, revised.

(2) Participation of nurses and midwives in health policy and programme planning, health care reform and healthy public policy formulation should be enhanced.

(3) Minimum competencies and educational requirements of different levels of nursing and midwifery personnel at the various levels of health care system based on the health service requirements should be identified.

(4) Formulation and implementation of the National Plan of Action for nursing and midwifery as an integral part of National Plan should be supported.

(5) Strategic alliances should be made with major key stakeholders such as trade unions, professional associations and community groups to facilitate development in nursing and midwifery.

(6) Nursing and midwifery leadership development should be supported through networking and strategic alliances.

(7) The use of nursing and midwifery personnel as primary care providers should be promoted.

(8) Health promotion and protection should be fostered and back-up supports should be provided for informal care-givers in the family and community to promote self-care.

(9) Quality Assurance systems, including accreditation must be developed and strengthened to foster continuous improvement of the quality of nursing and midwifery care and education.

(10) Development and implementation of continuing education system to update and upgrade knowledge and skills of nursing and midwifery
personnel, including a programme for advanced nursing and midwifery practice is necessary in order to enhance nursing and midwifery contribution in support of national health programmes.

(11) Nursing and midwifery curricula should be reviewed and revised periodically to ensure quality and social relevance to the health needs of the population and foster life-long learning.

(12) Upgradation of the skills and knowledge, including advanced professional skills in nursing and midwifery, information technology, research, and educational sciences of the faculty should be supported.

(13) Implementation of multi-professional and multidisciplinary education and training as well as various modes of delivery (such as distance education) should be supported.

(14) A demonstration unit to provide services to the community such as home-based care, day care centre for children, day care programme for the elderly, health promotion centre should be established which can be used as a research and training site for students and faculty members. It can be carried out with collaboration between education and service sectors as well as other disciplines.

(15) Research studies in nursing and midwifery as well as in the health systems along with application of research findings to foster evidence and research-based practice should be supported.

12.2 For National Professional Organizations

(1) The importance of nursing and midwifery services to improve health outcomes of the population of the Region should be advocated to policy makers, politicians and other major stakeholders.

(2) The development and strengthening of regulatory bodies of nursing and midwifery should be supported to increase the autonomy of the profession.

(3) Partnership and networking between organizations within country and among countries should be strengthened.

(4) Development of a National Action Plan should be supported.

(5) The International Nursing and Midwifery Association should support the National Professional Associations in their efforts to strengthen nursing and midwifery.
12.3 For WHO

(1) The importance of nursing and midwifery services to improve health outcomes should be advocated at high-level regional meetings such as the Regional Committee, Health Ministers’ and Health Secretaries’ meetings and other regional forums.

(2) The formulation and implementation of a National Action Plan for nursing and midwifery as an integral part of National Health Plan should be supported.

(3) Networking for leadership development, advanced nursing and midwifery practice and faculty development should be supported within and among countries within and outside the Region.

(4) Minimum competencies of different levels of nursing and midwifery personnel within the Region should be identified.

(5) The minimum set of indicators for quality assurance in nursing and midwifery education and services should be developed.

(6) Development and sharing of technical tools and experiences for quality assurance in nursing and midwifery education and services should be promoted.

(7) A system to monitor and evaluate the follow up actions of the recommendations of the consultation should be developed.
Annex 1

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Annex 2

PROGRAMME

**Monday, 20 December 1999**

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<td>08.30</td>
<td>Registration</td>
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<tr>
<td>09.00</td>
<td>Inaugural Session</td>
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<tr>
<td>10.00</td>
<td>Introduction to the Consultation</td>
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<tr>
<td>10.30</td>
<td>Video Presentation on “The Pulse of Health Care: Nursing and Midwifery in SEAR”</td>
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<tr>
<td>10.50</td>
<td>Overview of Nursing and Midwifery in SEAR Countries</td>
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<tr>
<td>13.00</td>
<td>Lessons Learned in Reorientation of Nursing and Midwifery Services and Education: Presentation of Country Level Experiences</td>
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<td>• Bangladesh (2 Reports)</td>
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<td>• Bhutan (2 Reports)</td>
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<td>14.40</td>
<td>• DPR Korea (1 Report)</td>
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<td>15.00</td>
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**Tuesday, 21 December 1999**

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<td>Lessons Learned in Reorientation of Nursing and Midwifery Services and Education: Presentation of Country Level Experiences (cont’d)</td>
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<td>• Maldives (2 Reports)</td>
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<td>09.40</td>
<td>• Myanmar (2 Reports)</td>
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<td>• Nepal (2 Reports)</td>
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<td>11.20</td>
<td>• Sri Lanka (2 Reports)</td>
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<td>13.00</td>
<td>• Thailand (2 Reports)</td>
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<tr>
<td>13.40</td>
<td>Summary of Major Achievements, Issues and Problems/Constraints Encountered in Reorienting Nursing and Midwifery Services and Education</td>
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<tr>
<td>14.30</td>
<td>Nursing and Midwifery Development: Global Perspectives</td>
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<td>15.30</td>
<td>Overview of Challenges to Nursing and Midwifery in the 21st Century</td>
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**Wednesday, 22 December 1999**

08.30 - 11.00  Group Work Session 1:
Implications of Challenges from Society and Health Care System on Nursing and Midwifery Education

11.00 - 12.00  Presentation of Report of Group Work Session 1

13.00 - 15.30  Group Work Session 2:
Implications of Challenges within Nursing and Midwifery Profession on Nursing and Midwifery Education

15.30 - 16.30  Presentation of report of Group Work Session 2

**Thursday, 23 December 1999**

08.30 - 09.30  Meeting Challenges to Nursing and Midwifery Education in the 21st Century

09.30 - 14.30  Group Work Session 3:
Strategies to Strengthen Nursing and Midwifery Education in Relation to the Challenges in the 21st Century

14.30 - 15.30  Presentation of Report of Group Work Session 3

15.30 - 16.30  Plenary Discussion:
Recommendations for Strengthening Nursing and Midwifery Education in SEAR Countries

**Friday, 24 December 1999**

08.30 - 10.00  Preparation of Draft Recommendations

10.30 - 11.30  Adoption of recommendations

11.30 - 12.00  Closing Session
Annex 3

CHALLENGES TO NURSING AND MIDWIFERY AND THEIR IMPLICATIONS ON NURSING AND MIDWIFERY SERVICES AND EDUCATION

I. Challenges from Society

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<th><strong>• Urbanization</strong></th>
<th><strong>• Gaps between “haves” and “have nots”</strong></th>
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<tr>
<td><strong>• Population explosion, changes in proportion of population</strong></td>
<td><strong>• Gender Inequity</strong></td>
</tr>
<tr>
<td><strong>• Changing family relations and life style</strong></td>
<td><strong>• Reform in all sectors, including health</strong></td>
</tr>
<tr>
<td><strong>• Social stress</strong></td>
<td><strong>• Information technology and knowledge explosion</strong></td>
</tr>
<tr>
<td><strong>• Psychological stress</strong></td>
<td><strong>• Consumer power, better informed clients and clients’ right</strong></td>
</tr>
<tr>
<td><strong>• Alcohol and drug abuse</strong></td>
<td><strong>• Changing of constitutional law and legislation</strong></td>
</tr>
<tr>
<td><strong>• Sex abuse</strong></td>
<td><strong>• Political violence and civil strife</strong></td>
</tr>
<tr>
<td><strong>• Unemployment</strong></td>
<td><strong>• Natural disasters, environmental degradation and changes/hazards</strong></td>
</tr>
<tr>
<td><strong>• Cross-border movement</strong></td>
<td><strong>•</strong></td>
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<tr>
<td><strong>• Women going out to work</strong></td>
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II. Health Care Challenges

| **• High health care costs** | **• Frequently changing models of healthcare management** |
| **• Health sector reform** | **• Lack of implementation and proper monitoring of policies and plan** |
| **• Paradigm shift in health care, with emphasis on health promotion and protection as a cost-effective alternative to curative care** | **• Lack of consideration for ethics and human rights** |
III. Challenges within Nursing and Midwifery Profession

| Poor distribution of resources, including limited facilities for rehabilitation | Epidemiological transition |
| Minimal involvement of nurses in decision-making | Continuing problem of high Maternal Mortality Ratios and Infant Mortality Rates |
| Need for specialization and demand for specialization in nursing | Occupational health hazards |
| Demand for professional accountability | Brain drain of health care professionals |
| Need for holistic care | Cross-border movement of professional and diseases |

IV. Implications of Challenges from Society

<table>
<thead>
<tr>
<th>Nursing and midwifery services</th>
<th>Nursing and midwifery education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Implications of information technology and knowledge explosion on:</strong></td>
<td><strong>Mechanism for revision and development of curriculum periodically</strong></td>
</tr>
<tr>
<td>Requirement for computer literacy of nurses and midwives</td>
<td>Including information technology in basic nursing education</td>
</tr>
<tr>
<td>Facilitation of learning of nurses and midwives</td>
<td>Providing inservice education for nurses and midwives</td>
</tr>
<tr>
<td>Development of management information system</td>
<td>Utilizing tele-nursing</td>
</tr>
<tr>
<td>Reorientation of nursing personnel and midwifery personnel</td>
<td>Producing more CAI</td>
</tr>
<tr>
<td>English language literacy for nursing and midwifery personnel</td>
<td>Providing English proficiency courses</td>
</tr>
<tr>
<td>Need for understanding and sensitivity to transcultural nursing</td>
<td></td>
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<tr>
<td>Development of nursing homepage</td>
<td></td>
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</tbody>
</table>
### 2. Implications of changes in proportion of population on:

<table>
<thead>
<tr>
<th>Nursing and midwifery services</th>
<th>Nursing and midwifery education</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Response to particular group leads to specialization of nursing</td>
<td>• Balancing between health promotion, illness prevention, curative and rehabilitation</td>
</tr>
<tr>
<td>• Empowerment of families</td>
<td>• Provision of community-based and hospital-based practice</td>
</tr>
<tr>
<td>• Focussing on health promotion, prevention, screening and early treatment</td>
<td>• Advocacy for women and vulnerable groups</td>
</tr>
<tr>
<td>• Increasing clinical competence, integrated care and community-based approach in nursing and midwifery services</td>
<td></td>
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<tr>
<td>• Increasing awareness of signs of stress</td>
<td></td>
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<tr>
<td>• Intensifying mental health content and community mental health</td>
<td></td>
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<tr>
<td>• Integration of mental health in health care services</td>
<td></td>
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<tr>
<td>• Establishment of “hot line” service for crisis intervention</td>
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### 3. Implications of psychological stress on:

<table>
<thead>
<tr>
<th></th>
<th>Nursing and midwifery education</th>
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<tbody>
<tr>
<td>• Greater emphasis on mental health promotion in basic nursing and midwifery programme</td>
<td></td>
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<tr>
<td>• Provision of inservice training on crisis intervention</td>
<td></td>
</tr>
<tr>
<td>• Provision of counselling especially for children</td>
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### 4. Implications of better informed clients and clients’ rights on:

<table>
<thead>
<tr>
<th></th>
<th>Nursing and midwifery education</th>
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</thead>
<tbody>
<tr>
<td>• Regards clients as equal partner</td>
<td>• Incorporate clients’ rights in every nursing and midwifery programme</td>
</tr>
<tr>
<td>• More emphasis on health promotion</td>
<td>• Development of role modeling in clinical practice</td>
</tr>
<tr>
<td>• Clients’ advocacy</td>
<td>• Development of learning module in ethics and clients’ rights</td>
</tr>
<tr>
<td>Nursing and midwifery services</td>
<td>Nursing and midwifery education</td>
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<tr>
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<tr>
<td>• Utilization of Informed Consent</td>
<td>• Utilizing simulated clients in nursing and midwifery education</td>
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<td></td>
<td>• Encouragement of evidence-based practice and problem-based learning</td>
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</tbody>
</table>

5. Implications of environmental changes and hazards on:

• Strengthening and developing education and information regarding environmental protection and ecological balance
• Empowerment of individual, family and community to take care of their environment
• Encouragement of healthy life-style of students

V. Implications of Challenges from Health Care System

1. Implications of health sector reform on:

• Reorientation of health care finance
• Decentralization of health care services
• Increasing the quality and efficiency of health care system by using nurses and midwives as primary care providers, sharing resources, using alternative care, development of health team, monitoring and evaluation of care

2. Implications of demand for professional accountability on:

• Development of community based-curriculum
• Establishment of quality assurance in nursing and midwifery education
• Establishment of advanced practice in nursing and midwifery

3. Implications of paradigm shift in health care on:

• Increasing emphasis on health promotion and illness prevention
• Empowerment of family
### Nursing and Midwifery Services

- Primary health care approach
- Appropriate distribution of nurses and midwives in primary

### Nursing and Midwifery Education

- Incorporate standards of midwifery practice and IMCI in basic nursing and midwifery education
- Establishment of continuing education in maternal and child nursing

### 4. Implications of High IMR and MMR on:

- Implementation of standard of midwifery practice and life-saving skills
- Implementation of Integrated Management of Childhood Illness (IMCI)
- Development of specialization in maternal and child nursing and paediatric nursing

### 5. Implications of the Demand for Specialization in Nursing and Midwifery on:

- Identification of needs of people for specialization of nursing, such as emergency and oncology
- Development of consultation system in nursing system
- Establishment of clinical specialist position
- Establishment of specialization programme at post basic and graduate education
- Upgrading nursing and midwifery teachers' qualification
- Strengthening networking, dissemination of information at national and internal levels
- Certification and recognition nursing and midwifery expertise

### 6. Implications of Other Challenges on:

- Preparing for nursing and midwifery leadership at all levels of services
- Better collaboration between nursing and midwifery services and education
- Better planning for HRD in order to have proper distribution of nursing and midwifery personnel
- Improvement of career development
- Increasing preparation for academic leadership and qualified faculty
- Increased requirement for quality enhancement of teachers in terms of competency, experiences, and efficacy
- Strengthening networking and partnership within and among the professionals at the national and international levels
- University level preparation for nurses and midwives
### Nursing and midwifery services
- Establishment of quality assurance system
- Strengthening evidence-based nursing and midwifery interventions
- Empowering community to undertake self-care and get involved in health service development
- Development of team approach to health provision
- Networking and strong partnerships within and among professionals at the national and international levels
- Increasing role of nurses and midwives in provision of health education techniques to the community
- Flexibility for health professionals to move across services and borders
- Shifting of the gender imbalance within profession by recruiting more males

### Nursing and midwifery education
- Implementing quality assurance mechanism
- Increasing competency in research
- Establishment of performance indicators for teachers, students and educational program
- Development of mentorship mechanism at all levels
- Development of competency-based curriculum and include the essential contents such as critical thinking, care management, health promotion, disease prevention, rehabilitation and PHC, ethics, utilization of research findings
- Strengthening clinical competencies of faculty
- Providing support for on-the-job training
- Recognition of potential for leadership in development, implementation and use of new information technology
- Requirement for multidisciplinary education
- Recruitment of high quality students and faculty
- Provision of appropriate clinical, community and field practice areas
- Strengthening regulatory mechanism to ensure quality of care
- Request for political commitment for quality of nursing and midwifery education
- Mobilizing resources for training and education
<table>
<thead>
<tr>
<th>Nursing and midwifery services</th>
<th>Nursing and midwifery education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilization of nursing process in practice</td>
<td>• Utilization of nursing process in practice</td>
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<tr>
<td>Establishment of regulatory bodies and mechanisms for re-licensing and linking to continuing education</td>
<td>• Establishment of regulatory bodies and mechanisms for re-licensing and linking to continuing education</td>
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<tr>
<td>Providing alternative ways of nursing education such as distance learning</td>
<td>• Providing alternative ways of nursing education such as distance learning</td>
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<tr>
<td>Improving career development paths</td>
<td>• Improving career development paths</td>
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<tr>
<td>Strengthening professional accountability</td>
<td>• Strengthening professional accountability</td>
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<tr>
<td>Appropriate utilization of nursing and midwifery workforce</td>
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VI. Implications of challenges within the nursing and midwifery profession

1. Implications of the shortage and mal-distribution of nurses and midwives on:

| • Development of national plan for nursing and midwifery workforce based on needs assessment | • Improving social marketing to increase local recruitment |
| • Increasing recruitment of students from the local community | • Increasing collaboration between nursing education and service |
| • Improvement of incentives for nurses and midwives working in rural areas | • Increasing leadership training |
| • Providing equal access for advancement of education | |
| • Improving social marketing strategy | |
| • Revision of job description and elimination of non-nursing jobs | |
| • Cooperation in planning, production and utilization of nursing and midwifery workforce | |

2. Implications of limited resource on:

| • Improvement of resources management in nursing and midwifery service and sharing of resources between service and education | |

### Nursing and midwifery services
- Sharing responsibilities and functions between service and education
- Development of regional training sites
- Strengthening regional cooperation
- Encouragement of multi-professional training
- Revision of roles and functions of all health care workers and development of health care team

### Nursing and midwifery education

<table>
<thead>
<tr>
<th>3. Implications of changing and expanding roles of nurses and midwives on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Strengthening roles of nurses and midwives in family nurse practitioner, advance practice nurse/midwife, nurse researcher, manager of health services, case manager, coordinator and counselor</td>
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<tr>
<th>4. Implications of weak professional autonomy on:</th>
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<tbody>
<tr>
<td>- Strengthening self governance of nursing and midwifery profession</td>
</tr>
<tr>
<td>- Provision of quality care</td>
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<tr>
<td>- Provision of opportunity for nurses and midwives in management positions</td>
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<tr>
<th>5. Implications of an accountability on:</th>
</tr>
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<tbody>
<tr>
<td>- Establishment of Nursing and Midwifery Act, Nurses Council</td>
</tr>
<tr>
<td>- Establishment of professional standards and accreditation mechanism in nursing service</td>
</tr>
<tr>
<td>- Establishment of standards for nursing and midwifery licensing and re-licensing</td>
</tr>
<tr>
<td>- Enforcing professional ethics</td>
</tr>
<tr>
<td>- Revision of national curriculum with an emphasis on accountability</td>
</tr>
<tr>
<td>- Ensuring quality of training at both basic and graduate programmes in nursing and midwifery</td>
</tr>
<tr>
<td>- Setting the requirement for student recruitment</td>
</tr>
<tr>
<td>- Strengthening the quality of teachers</td>
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<tr>
<td>- Facilitation of active learning, self-directed learning, evidence-based learning</td>
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<tr>
<td>- Strengthening of appropriate teacher-student interaction</td>
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Annex 4

STRATEGIES FOR STRENGTHENING NURSING AND MIDWIFERY EDUCATION IN RELATION TO CHALLENGES TO NURSING AND MIDWIFERY

1. Health Care Reform and Paradigm Shift

At country level

(1) Strengthen basic nursing and midwifery curriculum-based on projected needs on health of the society to include:
   - Competency based education;
   - Management and leadership skills;
   - Professional knowledge and skill in health promotion, disease prevention, rehabilitation and PHC;
   - Ethics;
   - Self-directed learning, life-long learning with critical thinking and problem solving abilities;
   - Equal opportunities for rural area nurses in nursing education, and
   - Incorporation of family health nursing in the curriculum.

(2) Establishment of accreditation system in nursing and midwifery education and fostering monitoring and evaluation system;

(3) Fostering collaboration between nursing education and services;

(4) Setting policies for equitable access to teaching-learning resources;

(5) Ensuring adequate budget for nursing education and research;

(6) Strengthening research and development in nursing and midwifery education;

(7) Publishing board health issues and policies relating to nursing and midwifery;

(8) Incorporation of “nursing and midwifery education development plan” in the national education development plan;

(9) Development of an action plan for nursing and midwifery, and

(10) Fostering multidisciplinary education, especially in clinical/filed practicum.
2. **Information technology and knowledge explosion**

   **At country level**
   
   (1) Establishment of mechanism for periodical review and revision of curriculum;
   
   (2) Introduction of Information Technology (IT) starting from basic curriculum;
   
   (3) In-service and continuing education on IT for nurses and midwives;
   
   (4) Introduction of tele-nursing programme;
   
   (5) Development of computer-assisted learning;
   
   (6) Development of Nursing Home page;
   
   (7) Focus on health promotion, and
   
   (8) Inclusion of ethics, client’s rights and laws in the curriculum.

   **At regional level**

   (1) Regional training/workshop on IT for nurses and midwives;
   
   (2) Provision of technical support for setting computer labs;

3. **Changing and expanded roles of nurses and midwives**

   **At country level**

   (1) Establish advanced practice programme for nurses and midwives at the post-basic level;
   
   (2) Inclusion of nursing research in the curriculum;
   
   (3) Ensure adequate qualified nurse and midwife teachers;
   
   (4) Define scope of advanced nursing/midwifery practices, and
   
   (5) Provide opportunity for students in rural area to study nursing.

   **At regional level**

   Exchange of expertise within and outside the Region
4. Shortage and maldistribution of nurses and midwives

At country level

(1) Social marketing;
(2) Encouragement of local recruitment, and
(3) Collaboration of nursing and midwifery human resource planning, production and utilization.

At regional level

(1) Fostering linkages and exchange of expertise/experience in quality assurance and accreditation in nursing and midwifery education;
(2) Identification of focal point for distribution of information;
(3) Creation of peer support networking among senior nurse/midwife managers and educators;
(4) Fostering joint research projects and publications, and
(5) Mobilization of support for faculty development, such as scholarship for graduate study and training

5. Environmental change and hazard

At country level

(1) Incorporation of epidemiology and ecology in the curriculum and extracurricular activities;
(2) Role modeling for healthy lifestyle, and
(3) Development of healthy lifestyle of students through professional socialization

6. High MMR and IMR

At country level

(1) Inclusion of Standards of Midwifery Practice for Safe Motherhood and IMCI in basic curriculum;
(2) Fostering reproductive health throughout life span approach, and
(3) Establishment of continuing education and specialized programmes on Maternal and Child Health Nursing and Paediatric Nursing.
7. **Other challenges**

**At country level**

1. Development or strengthening a system for continuing education, including in-service education, based on the assessed training needs;
2. Promotion of flexibility in delivery of educational programme such as distance learning and tele-education;
3. Development of advocacy and lobbying strategies to enhance political commitment for quality nursing and midwifery education;
4. Strengthening the legislation and regulation, including developing nursing and midwifery councils for some countries where it does not exist;
5. Recruitment of high quality students and faculty;
6. Ensuring adequately prepared faculty to meet the needs of the programme;
7. Development of policy for faculty practice;
8. Establishment of a system for leadership development;
9. Development of mechanisms for quality assurance in nursing and midwifery education including accreditation;
10. Development of networking and partnership within the country;
11. Formulation of a national plan of action for nursing and midwifery education development in accordance with HRH plan and the scope of practice;
12. Development of standards and performance indicators and strictly monitor for measuring output;
13. Strengthening research in nursing and midwifery, particularly action-oriented research;
14. Fostering collaboration between education and service sectors in order to improve the quality of services and education;
15. Support the development of teaching-learning materials;
16. Development of mechanisms for career path development;
17. Strengthening mentorship mechanisms (e.g., create clinical nurse specialist posts), and
18. Link re-licensing with continuing education to ensure continuing competencies.
At regional level

(1) Development of regional standards for nursing and midwifery education;
(2) Establishment of regional mechanisms to promote nursing and midwifery leadership;
(3) Provision of support for the development of nursing and midwifery education in countries of the Region;
(4) Development of regional training centres;
(5) Fostering networking and strong partnerships that ensures the follow-up, implementation and evaluation of nursing and midwifery education strategies;
(6) Resource mobilization for the strengthening of nursing and midwifery education in the Region, and
(7) Establishment of a Regional Expert Group to advise and coordinate activities for improvement of nursing and midwifery education.
In the twenty-first century, it must now expand to encompass at least two years of postsecondary education. In the colonial days of the early 1600s, public education primarily consisted of grammar schools for boys. Then, as the needs of the country changed around the middle of nineteenth century, age-based grades were introduced, along with standardization of public school curricula. This was America’s first information revolution—the new democracy and unfettered capitalism in print. Between 1790 and 1835, while the population grew from 3.9 million to 15 million, the number of newspapers increased eleven-fold, from 106 to 1,258. Education in the 21ST century—how is it different from the 20TH century? It's different by virtue of shifting learning goals; technologies that influence how we behave, perform, and produce; inclusion of students from populations not previously well represented; and globalization that affects some but not all learning environments. Assessment within the education provision in the 21st century is seen increasingly as playing a constructive role—supporting teaching and learning, and providing feedback to the education system about how it is performing. Nearly all student information we co