Specialised nurses in Bangladesh, who cares?

An explorative study on modelling a specialised nursing educational system in Bangladesh

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Accreditation

Recognition by a non-governmental, external agency of a school, programme or service that has met certain established standards beyond those which are minimally acceptable. Participation in the process is voluntary. (ICN 1997)

BANBEIS

The Bangladesh Bureau of Educational Information and Statistics is attached to the Ministry of Education and has a statistics division and a documentation, library and publication division.

BNC

The Bangladesh Nursing Council is an organisation that ensures the standard of basic nursing education. It acts as a national education board to ensure good quality education for nurses and it is the official body which regulates practice to ensure that clinical standards are maintained.

DNS

The Directorate of Nursing Services is responsible for the planning, administration, organisation, supervision, coordination and evaluation of the Nursing educational programmes and Nursing services of the entire country of Bangladesh. Also the admission of student nurses and the creation of posts is an important responsibility. This also is the institution that formulates policies related to Nursing educational institutes and training. It falls directly under the Ministry of Health and Family Welfare.

Experienced nurse

Experienced nurses in Bangladesh are regulated by government to practice under the supervision of a registered nurse. Competency standards reflect the standards and scope of practice for which the enrolled nurse is responsible. (DNS, 2001)

ICN

The International Council of Nurses is a federation of national nurses' associations (NNA's), representing nurses in more than 120 countries. Founded in 1899, ICN is the world's first and widest reaching international organization for health professionals. Operated by nurses for nurses,

ICN works to ensure quality nursing care for all, sound health policies globally, the advancement of nursing knowledge, and the presence worldwide of a respected nursing profession and a competent and satisfied nursing workforce. (ICN, 2003)

ICN Code for Nurses

The ICN Code for Nurses is the foundation for ethical nursing practice throughout the world. ICN standards, guidelines and policies for nursing practice, education, management, research and socio-economic welfare are accepted globally as the basis of nursing policy.

Nursing

Nursing as an integral part of the health care system, encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles.

(ICN, 2003)

Nursing Specialist

The nursing specialist is a nurse prepared beyond the level of a nurse generalist and authorised to practise as a specialist with advanced expertise in a branch of the nursing field. Speciality practice includes clinical teaching, administration, research and consultant roles. (ICN, 2003)

Post-basic nursing education

Post-basic nursing education for speciality practice is a formally recognised programme of study built upon the general education for the nurse and providing the content and experience to ensure competency in speciality practice. (ICN, 2003)

Specialised Nursing Education

This is considered in this study a structured post basic nursing course combining theory and clinical experience in a specific field of health care. Theory and practice are combined in the

study-programme, which is based on "the concurrency concept". This means that students must be able to practice their profession as a specialised nurse while they attend the courses.

Specialist Nursing Education

This is a formally recognized post-basic program for nurses previously recognized as registered nurses with a minimum of one year of nursing experience, that:

- takes place in an institute of higher education (University or equivalent) while assuring adequate access to clinical resources for the clinical practicum;
- _ is continued from year to year;
- is recognized by an appropriate authority;
- has specified admission requirements;
- has a full time teaching staff or faculty including nurses qualified by education and experience;
- is controlled and administered by the nursing profession.

The length of the program will vary with the content of the basic nursing education, but may be equivalent to approximately one year (12 months full-time or more) with a minimum of 240 classroom hours and a minimum of 50 % clinical and /or practice training.

(European Network for Nurses Organisations, 2000)

SRN

The British Council and NICARE manage a project to Strengthening the Role of Nursing in Bangladesh. Several activities are performed, focused on the basic educational curriculum and the nursing practice. The purpose of SRN is to strengthen the capacity of nursing by working with the main agencies responsible for nursing in the country.

WHO

The World Health Organization is the United Nations specialized agency for health. Its objective is the attainment by all people of the highest possible level of health. Health is defined as a state

of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

WHOSIS

The WHO Statistical Information System is the guide to health and health-related epidemiological and statistical information available from the World Health Organization.

1. Introduction

Healthcare is a rapidly changing field of work. There are new diseases and technologies coming almost every day. Nursing is an essential profession in any society which contributes to the health and well being, not only of individuals and families, but of whole communities. Just like the medical staff, nurses have to be up to date on the latest information. Therefore it is important education for nurses doesn't stop when they graduate.

Continuing education for nurses is vital for the ongoing development of the individual nurse, organizations and the nursing profession. The care demands of patients are broad and require a good match between differing levels of nursing skills.

In 1995 ACADE, Academy for Specialised Health Care Education (see also appendix 1) was first invited by the director of Monowara Hospital Pvt. Ltd. in Dhaka, Bangladesh, to develop a specialised nursing course on Hospital Hygiene and Infection Control. Because a team visited all the participating hospitals to make sure the conditions of their students were optimal, they noticed big problems with the nursing quality. During the next implementation visits it was found out that there is a big need for specialised nursing education in Bangladesh. There were several courses in the past, mostly private or foreign initiatives. But they no longer exist, since there now are no teachers and students for these specialised courses. This is a big lack in the nursing educational system. Through designing new curricula designed for developing student nurses' skills in the specialised fields of nursing care the quality of nursing will improve. This not only requires a change in the educational system, but also a change in clinical practice of the traditional nursing care approach. For this to be successful, important decisions have to be taken by nurse teachers and practicing nurses supported by their respective managers.

After a quick scan in Bangladesh performed in March 2001 and a study tour to the Netherlands by the Bangladesh deputy secretary of the Ministry of Health & Family Welfare and the acting Director of the Directorate of Nursing Services the same year, the essence became more and more clear that specialised nurses should be trained in Bangladesh in order to maintain safe patient care. Careful thinking about how to introduce curricula and how to support the planning process are included in a curriculum development process. The subject of this study was to explore the initiation of specialised nursing education in Bangladesh. In the absence of formal specialised nursing educational programs, this study describes the process of asking nurses their feelings towards participation in a specialised nursing course. Therefore the local nurses who are to enrol in specialised nursing education and eventually become mentors in any proposed programme, were involved in this study.

Another essential step in a curriculum development process is to involve the teachers and give them the opportunity to put in their points of view. They are the most important persons to take account of the specific context of their own communities and schools. They are also the obvious persons to make the necessary adjustments to sort out general policies and objectives and conceive of ways of enacting them. For this it was chosen to also focus on the nursing teachers of Bangladesh who currently work, to explore their opinion on modelling a system of specialised nursing courses.

The aim of this study was to provide the local authorities with sufficient information tot set up a system of specialised nursing education. Because of the positive experiences during the execution of the courses, training nurses to specialize in hospital hygiene and infection control, the researcher of this study thought it should be possible to perform specialised nursing education in other fields of health care as well. The second purpose of this study was to understand the practice, concerns and preferences of nurses and nurse teachers who currently work in the local context.

The main question of this study was to find indications for modelling a sustainable system of specialised nursing curricula that best meets the educational needs in the Bengali context. Accordingly this study will try to provide answers on the following research questions:

- 1. How do nurses feel towards participating in a specialised nursing course?
- 2. What is needed to model a sustainable system of specialised nursing education according to the nurses and nurse teachers involved?

2. Context information

2.1 Introduction

The main question of this study is to find indications for modelling a sustainable system of specialised nursing curricula that best meets the educational needs in the Bengali context. To offer the framework on which this study was based, in this section context information on the local situation is described. Therefore the following concepts are discussed: context of research; nursing, continuing nursing education and specialised nursing education in Bangladesh.

2.1.2 Context of research

The People's Republic of Bangladesh is a republic since 1971. It is one of the most high density countries in the world with a population of about 144 million people. Capital city is Dhaka with a population of about 8.5 million people. The state religion is Islam, but other religions may be practiced. Bangladesh faces many problems of poverty, such as high illiteracy rate and low access to health care. Many children are unable to continue formal schooling because of the economic limitations of their families and the low social value of education. Over a third of the population lives in poverty. Since most of the country is situated on deltas of large rivers, about a third of the country floods annually during the monsoon rainy season.

Luckily due to development efforts during the past thirty years the situation of the country has improved concerning food supply, immunization of children and access to safe drinking water. Life expectancy has also risen since.

However, the impression the world still has of Bangladesh is a land of floods, cyclones, famine, low life expectancy and often changes of government. And even now Bangladesh is one of the most densely populated countries in the world which faces many problems of over-population now and in future. Despite all this it is also a beautiful country with a broad variety in landscape.

> "There is a land in this world - incomparably beautiful and sad; There the banks green incessantly with sweet-smelling grass; There kanthal, aswatha, bat, jarul and hijal trees grow; There amidst morning clouds arises the nata fruit-like red sun;"

Jibanananda Das, There is a Land, Beautiful Bengal (1934)

2.1.2 Institutionary bodies

The Ministry of Health and Family Welfare is the main stakeholder in the health and population sector. This Ministry made it her policy to invest in upgrading the status and the education of nurses. Nurses must be employable nationally and internationally. This requires a concerted approach. Government and the profession should work closely together to ensure there is a strategic direction to workforce planning issues. This should be combined with governments providing appropriate funding to attract and develop sufficient numbers of nurses and stimulate continuing nursing education.

The Directorate of Nursing Services (DNS) falls directly under the Ministry of Health and Family Welfare. DNS is responsible for the planning, administration, organisation, supervision, coordination and evaluation of the nursing educational programmes and nursing services of the entire country of Bangladesh. Also the admission of student nurses and the creation of posts is an important responsibility. In addition this is the institution that formulates policies related to nursing educational institutes and training.

The Bangladesh Nursing Council (BNC) is an organisation that ensures the standard of basic nursing education. It acts as a national education board to ensure good quality education for nurses and it is the official body which regulates practice to ensure that clinical standards are maintained. Some post- registration Rehabilitation Nursing Courses are affiliated to the BNC.

Nurses are united in the Bangladesh Nursing Association. It was registered in 1973 and main goal is to protect and elevate the profession of nursing, and to uphold the dignity and honour of the nursing profession. They are also a member of the International Nursing Association.

2.2 Context information on Nursing

Since the independence in 1971, nursing in Bangladesh has developed. From a small number of nurses, most local girls, hardly educated, there are at the moment approximately 13.000 Registered Nurses who are working for the Government sector. Apart from this some five

thousand nurses are working in the private clinics and hospitals. At national level there are 13 Government Medical College Hospitals and 526 general hospitals in the country. Nurses should make up the majority of healthcare professionals in any hospital to provide the necessary 24-hours coverage. Nevertheless the official nurse – doctor ratio is 1:2. This means an overwhelming lack of human resources. The nursing shortage is compromising patient safety and diminishing health care quality. Of course this is not a very healthy situation, but mainly has to do with most hospitals policies. Hospitals simply are not hiring enough nurses to provide safe patient care, moreover nurses are badly paid. Consequently the nursing profession has a very low status and career structure.

The following table gives a small comparison of number of nurses in other countries. These numbers come from the World Health Organisation.

Country	Number of nurses per 100.000 population	Year
Netherlands	902	1991
Belgium	1075	1996
United states of America	972	1996
Australia	830	1998
India	45	1992
Bangladesh	11	1997

 Table 1: Number of nurses per head of the total population of a country (WHOsis-2003)

One simple way to explain what nurses do is that 'nurses care and doctors cure'. Patients are admitted to hospital to receive the care offered by nurses, which includes touch and interaction with patients from all classes of society. However in Bengali society interaction with strangers is "not done" while touching of especially unrelated man even is prohibited in most cases. Interfering with lower class persons isn't favoured and definitely not if communication and touch is required (Bryant, Hadley 2003). Bangladesh is a patriarchal and male dominated society. Nurses are on duty in hospitals twentyfour hours a day, seven days a week, every day of the year. That seems quite difficult to arrange, when living in a culture where female employment is restricted outside the household and you can only go out after dark unless accompanied by a male kin.

The family is the breading ground for some of the most persistent discrimination against women, such as sexual subordination, restriction of the mobility of women and different access to resources within the family. As nursing is predominantly a female-dominated profession, family income plays a significant role on the availability of nurse labour. Culturally, the status of workers depends mostly on their income. There still is a widespread and deeply rooted conviction that nursing is "unsavoury" (Hadley, 2003). Most of the nurses therefore have a low self image and a lack of self-respect. A nurse in Bangladesh has to deal with the status and image of women and nursing in this society. It will be difficult trying to convince women that gender inequalities are not natural but a social construction. As long as women's access to health care, education and training remains limited, prospects for improved productivity among the female population stay poor. Summarizing: Several studies (Nurul Islam, 1998; Gonsalves, 1999; Chowdhury, 2002; Bryant, 2003; Hadley et al. 2003; Zaman, 2004) show that nurses in Bangladesh are struggling with strong basic problems because of the many fundamental conflicts between the requirements of nursing and the norms within society.

2.3 Context information on continuing nursing education

In the past there were Junior Nursing Schools for the fewer educated and poorer people. The Government no longer provides any junior nurse training anymore. In order to qualify for Senior Nursing School you must pass class 10 and the national Secondary School certificate Exam. This is quite an expensive school to attend. That is the reason why also "experienced" nurses are working, with only practical education. At the moment there are 45 Nursing institutions in the country, both GO and NGO.

The following table gives a small impression of number of students and teachers in professional education institutions. These numbers come from the Bangladesh Bureau of Educational Information and Statistics (BANBEIS). Note that the figures in the parenthesis indicate the number of females.

	Teachers		Students	
Year	Medical Colleges	Nursing Colleges	Medical Colleges	Nursing Colleges
2000	1778 (328)	254 (176)	15729 (6961)	3914 (3649)
1999	1722 (321)	236 (170)	14800 (6438)	3910 (3653)

Table 2: Number of students and teachers in professional education institutions (BANBEIS 2003)

Quality standards for nursing curricula in Bangladesh are described by the Bangladesh Nursing Council in Dhaka. In their rules relating to the recognition of training they describe syllabus guidelines, rules for examination and requirements for nursing training institutes.

The BNC provides a nursing certificate for the General Nursing, Midwifery and Orthopaedics after graduation and passing. This licence must be renewed every five years. But since there is no obligation towards education at all in order to renew the nursing licence, the quality of the practising nurses is debatable. Furthermore nurses do not get a chance to actually practice all of their nursing skills because of their shortage in number and the overload of doctors on one hand. On the other hand several studies show nurses' behaviour on the ward is deeply influenced by societies' value judgement and most nurses meet with barriers to a patient centred approach (Hadley, 2001; Chowdhury, 2002; Bryant, 2003; Zaman, 2004).

The senior nursing curriculum now consists of three years basic nursing. Practical experience is gained in the training hospital. Unfortunately the educational system and practical appliance don't match at all (Lee, 1995; Hadley, 2003). Mostly the hospitals aren't general hospitals like in the Netherlands, with several specialised wards, but specialised hospitals like a chest hospital, or a children's hospital. This has consequences for the practical or on the job training for the specialised nursing education. Study shows in Bangladesh it is a fifty-fifty match, in comparison with the Dutch situation where it is a 30% theory and 70% practice match (Chowdhury, 2002). Women have a forth year where they train in midwifery tot get a Midwifery Certificate. The men have the option of doing their forth year in Orthopaedic / Surgical training.

While conducting this study there was a project managed by The British Council and NICARE to Strengthening the Role of Nursing (SRN). Several activities were performed, focused on the

basic educational curriculum and the nursing practice. The purpose of SRN was to strengthen the capacity of nursing in Bangladesh by working with the main agencies responsible for nursing in the Country, the DNS and the BNC. The component has focussed in education particularly on:

- Providing sound researched literature on nursing to be used to inform future health and nursing policy making.
- Programme of renovation to provide a better working environment for the DNS office, BNC office and the Nursing Institutes.
- Improving the nursing education of the country by improving the learning environment and writing 6 nursing textbooks in Bangla.
- Providing training and development for newly appointed senior staff nurses.

SRN has taken some concrete steps, particularly for developing new teaching-learning materials, introducing new teaching methodology to make the courses effective in a way the professional development of the nursing takes place. The outcome of this component will be of great importance to the development of the basic nursing education. This is subscribed to by Hadley (2003) who observed that when given supervision and working in a situation where incentives exists cultural barriers can (to some extent) be overcome. Of course this output must be basic to any continuation nursing course relevant to this study.

There is only one place where nurses can get a degree and that is the College of Nursing in Mohakali in Dhaka. The entry requirements are a three years nursing experience. The curriculum provides opportunity for earning an Associate degree/Diploma in Nursing. It takes 2 years of course work, appropriate practicum and received registration with the Bangladesh Nursing Council for practice or employment as a nurse. This two year program provides either a BSC in Nursing or a BSC in Public Health Nursing. Of course this university level education costs a lot of money and is almost inaccessible for anyone without the proper means. But it surely is a great step forwards, in influencing the nursing profession to improve health care.

Career planning and development is an integral part of developing as a professional, wherever one lives and works. Nurses require support in their practice and in their professional development especially in the Bengali society. Nurses should be able to integrate the process of career planning and development into their ongoing professional and personal development. The lack of further education for staff nurses stagnate this growth as well, since in most hospitals in Bangladesh there are many unfulfilled posts on management levels.

The International Council of Nurses (ICN) defines continuing professional development as a lifelong process of maintaining and enhancing the competencies of the nurse. Continuing education refers to those professional learning experiences, designed to enrich the nurse's contributions to quality health care and her/ his pursuit of professional career goals. This advocates for credit rating all forms of post registered education in order to accumulate this towards an academic award. A long term solution for the nursing shortage is the creation of a nursing career ladder which will commensurate with education level and experience (Quinn, 1997; WHO, 1999; AACN, 2002). This way nurses will be able to the full extent of their skills and capabilities developed in different education programs. In keeping with modern trends in professional education, it is inevitable to prepare nurses for such specialisations. Several studies show the importance of incorporating specialised and continuing education in nurse education systems (Adami, Kiger 2005). Consequently specialised nursing courses have to be developed and awards or credentials should be attached to such courses. The only way nurses will develop professionally, is if the educational program has changed (Hogue, 2002; Hadley, 2003). This way the persistent social stigma attached to the nursing profession and resultant inferior status the nurse "enjoy" in their profession will alter.

2.4 Specialised nursing education

Just imagine a patient sought out the best surgeon to undertake a latest procedure that could cure him or her. Than the nurse who works in the operating theatre has to know all about the new instruments, the nurse post operatively has to know what complications to watch out for, and the nurse on the ward has to know the particular follow up care that could be required. For every doctor that learns about a new procedure, there are at least three nurses that have to know all about it too. More doctors and nurses with training in subspecialty fields are required to meet this ever increasing demand. With the expanding population in Bangladesh, specialised fields of health care will be areas of increasing importance in the years to come. As the nursing profession develops in understanding and practice, it naturally develops areas of special knowledge and expertise. According to the Directorate of Nursing Services (2001) nurses require specialised training to cope up with the new ideas of specialised care. Although having adequate knowledge and skills to deal with "normal" cases, these days several specialised units are established where doctors are equipped with new knowledge and skills but nurses are not. The current nursing education concentrates only on the basics and is not very specialised. In this context it is obvious that since the number of specialised doctors increases, the patients need for specialised nursing care also increases. In the past there were several one year specialised nursing courses like paediatric, psychiatric, ophthalmic, orthopaedic, chest disease and intensive care nursing. Especially interesting is the fact how they faded away. The question is whether this was the consequence of an actual decision to discard, or through attrition. Mainly because of the lack of (wo)men power in both teachers and students these courses no longer exists. There was also a lack of specialist nurses to teach the different subjects (Khatun, 1999). Due to fund constraint all courses are postponed, except for the Intensive Care course, which is continuing with the help of Japanese funding. Affiliated to the BNC and to Dhaka University is The Bangladesh Health Professions Institute (BHPI), (website: http://www.crp-bangladesh.org/bhpi.htm) established in order to resolve the problem of the shortage of trained health professionals in Bangladesh to carry out the rehabilitation work. Their one year full time post registration course in rehabilitation nursing gives a Post Registration Diploma in Rehabilitation Nursing. This course aims at senior staff nurses from government, military and private hospitals and clinics who have a keen interest in rehabilitation nursing.

Specialised Nursing Education as defined for this paper is considered a structured post basic learning program combining theory and clinical experience in a specific field of health care. In this perspective it is recommended to adopt the definition of a nursing specialist (ICN) and the definition of specialist nursing education (ENNO). (See definitions)

Theory and practice are always combined in the study-programme, which is based on "the concurrency concept". This means that students must be able to practice their profession as a specialised nurse while they attend the courses. New knowledge, concepts and skills are tested in practice and reflected upon. Practical experience is gained practising in the various hospitals.

There are many specialized areas of nursing such as emergency nursing, operating room nursing, coronary care, and even more deepened intensive care specialties such as trauma, cardiac surgery, respiratory, paediatrics and newborn intensive-care.

3 Theoretical Framework

3.1 Introduction

The aim of this study was to provide the local authorities with sufficient information tot set up a system of specialised nursing education. But what would this contribute over and above that which already exists? Until now no systematic research has been conducted to look at the specific needs in the Bengali context.

The second purpose of this study was to understand the practice, concerns and preferences of nurses and nurse teachers who currently work in the local context. Through introduction of a new curriculum designed for developing student nurses' skills in the specialised fields of nursing care the quality of nursing will improve. Obviously quality of care needs to be related to continuing education meaning: to meet changing health needs, the traditional definition of clinical skills must be broadened. There is a need of greater awareness, knowledge and practical skills among nurses. Accordingly, it was important to consider the environment and context in which these new curricula will be developed. Curriculum development is a broad concept that encompasses all processes involved. The quality of the specialised nursing curriculum was considered around the 'four commonplaces' of education: learner, teacher, curriculum and context. To understand the impact of the needed quality of the specialised nursing curricula the following concepts are discussed: teaching and learning in the nursing profession; curriculum content and sustainable organisation of a continuing nursing educational system.

3.2 Teaching and learning in the nursing profession

The two main categories are pre-registration and post registration nursing education in a broad variety. Pre-registration courses lead up to entry the register of nurses. Post-registration courses are less constrained by requirements of national regulation. This means curriculum designers can be more flexible and imaginative. Nursing education used to be premised on the belief that 'real' learning takes place in the classroom (where teaching occurs) and is consolidated by practice (where nursing occurs). This situation created a major dilemma for all teachers because the

contradictions between classroom knowledge and experiential clinical knowledge were not officially recognised.

Nowadays the concepts of reflection and reflective practice are increasingly popular themes in the literature about nursing education. Reflective practice has been advocated as a method for overcoming the divergence between nursing theory and practice. Several studies have been conducted on the theory-practice divide in nursing (Landers, 2000; Nicholl & Higgins, 2004). Various reasons are cited for its existence. Changes in education are redefining the role of the nurse teacher. In specialised curricula who have adopted reflection and reflective practice, lecture and group discussion are no longer the dominant teaching methods. Nurse educators should look at new ways to facilitate learning in the clinical area. The theoretical input taught in the classroom and what is practised or experienced on the wards remaining a problem, postulates that theory provides the basis for understanding the reality of nursing. It can be assumed that the content studied in the classroom correlates with what the student experiences on the ward. Integration of theory with clinical instruction should be emphasized for all nursing students. Consequently efforts should be taken for reduction of the gap between theory and practice. It still is debatable what level of clinical competence or credibility a teacher requires. Cave (1994) states teachers need to establish their unique role, which must lie in showing how academic knowledge can be integrated and applied into nursing practice. However, if nurse teachers do not maintain their clinical ability they will not be able to support their claim to do this. This not only will result in an increasing practice-theory dividing line but in the very near future it will be extremely difficult to justify the existence of nurse teachers. In important role in this respect is reserved for the clinical instructor or mentor. A study on mentor support indicated that mentors wished to see lecturers visiting the practice placement areas and providing support, particularly in relation to assessment of students (Duffy et al, 2000). During the practical training it is recommended to use a Summary Practical Training Manual, in which the skills gained by the students are marked. Judgements on practical training should test, among other things, knowledge, gained skills and attitudes, accuracy and good fellowship. This is similar with the current basic curriculum teaching method, in which student nurses work with a nursing skills check-list. To realise a good integration of the theoretical and practical training it is necessary, that attention is given to keeping the theoretical and practical courses on parallel tracks. This also

indicates teachers have to accept the shift of control from themselves to the service providers. Duffy et al (2000) also highlighted the need for more effective communication between placement areas and academic staff.

Several studies have been conducted on effects of specialised nursing courses, but mostly restricted to the field of specialisation. Outcomes show however patients are safer if they have nurses who are experienced, skilled and knowledgeable to care for them. Often is argued the need for clearly specified competencies and an accredited programme of education and training in the local context. (Simsen et al, 1996; Westcott & Dunn, 1998; Stokes, 2000; Adriaansen et al, 2005; Steginga et al, 2005) This means specialised nursing courses can make a significant contribution to nurses providing specialised care.

Specialised nursing teaching methods are based on the idea that specialised nursing care involves critical thinking, technical skills, and high-level decision-making in life and death situations. This means all (specialised) nursing curricula involve students developing critical thinking and problem solving competencies. Principles of adult learning are combined with the mixture of theory and practice. This leads to experiences that can be a rich resource for learning. Students also learn from each other: evaluate, give and receive feedback and reflect about progress. Learning is self-directed which means: teachers are merely facilitators of this learning process. Students take their own responsibility for their learning process and seek for the answers at their questions. This way, students learn how to transfer knowledge and experiences to similar practical situations. Teachers must learn to be facilitators ensuring the nurses participation in the process of learning. Clare (1993) argues that although student-centred learning packages and strategies such as problem-solving, questioning and dialogue may give the impression of student empowerment, it still can leave the authoritarian nature of teacher-student relationships intact. Study showed that attempts to implement self-directed learning in an observable form have led to confusion about its nature. This was founded by teachers and students who experienced some difficulty in articulating an exact definition of self-directed learning (Hewitt-Taylor J., 2002). They only considered it to be of some value when used in conjunction with teacher-led methods of learning. This indicates a variety of different teaching methods should be used including lectures, work-shops and independent study.

The roles of computers need no elaboration in revolutionizing the speed and accuracy in many types of tasks, including nursing. Some of the hospitals and clinics in Bangladesh have also started their services with computer assistance.

Not exaggerating one can say that the nature of work at educational institutions have switched over from paper files to electronic files. Nursing students can get greater access this way to a large number of learning resources. All over the world the utility of computers in learning and in the practice of the specialised nursing profession is used. Computer simulated programs, computer assisted consultations, medical informatics and tele-conferencing are some of the examples incorporated in nursing education related to computer technology today. Because of the character of these instruments computer bases skills and independent study of students is essential.

If the teaching methods are based on critical thinking and problem solving abilities, the examination should not be only content oriented (Lee, 1995; Hadley, 2003). Registration examination demands should be consistent and compatible to the teaching outcomes. Teachers should spark nurses' motivation with clinical correlations rather than relying on the threat of course and licensing examinations. This leads to an important consideration about how far an educational philosophy or approach is congruent with the reality of any given course of study. This opposed to merely focus on observable teaching and learning tools or methods. This learns that to adopt the recommended teaching approach, teachers' commitment is necessary.

3.3 Curriculum content

Most specialised nursing curricula requirements are detailed separately. Most programs include the theoretical and clinical components and the prescribed examination. Details of instruction include subject titles and numbers of hour's instruction in each subject, both theoretical and practical. Assessments are implemented in accordance with the approved curriculum and assessment plan. Teaching personnel is recommended to be specialised registered nurses with fitting nursing and teaching qualifications/experience. Arrangements for clinical experience and participating clinical facilities are frequently approved for the purpose by local Nurses Registration Boards. Mostly the title of the qualification awarded by the organisation on completion of the program is approved by the local Nurses Registration Boards and thus the program in itself. In the Netherlands there is a national regulation for specialised nursing courses, initiated by the national association of hospitals and of academic hospitals, the national nursing alliance and the union of educational institutes for specialised nursing education. These courses are designed to promote an (inter)national exchange of knowledge and experience and to provide students with an opportunity to gain theoretical knowledge and clinical experience. This vision builds upon the ICN definition of post-basic nursing education.

Since nursing is a practice based profession, there needs to be a sensible balance between theoretical and clinical education. Most curricula regulations also give a description of adequate physical facilities such as: classroom facilities; nursing practical / laboratory room(s), equipped appropriately for the skill development required; a library / reading /study area, which is well equipped with appropriate electronic resources and adequate office facilities for staff. Suitable teaching and learning resources are described as classroom and practical rooms, equipped with teaching resources to enable the approved curriculum to be implemented. Mostly hereby is meant the presence of texts and reference books, journals, audio-visual and on-line resources which support teaching and learning in the approved curriculum.

As already stated curriculum development takes careful planning. In this perspective different alternative approaches can be distinguished. The planned curriculum means weighing various options for what is intentioned to carry out in the classroom. The enacted curriculum is how the curriculum will be carried out and the experienced curriculum what some of its results might be (Marsh & Willis, 1999). It must be clear what the planning means in practice, especially to teachers and others involved. It therefore is highly significant to consider the views and needs of service managers and employers. They are the ones to tell what output they require from education and training to fulfil their own service contracts.

To plan a new curriculum several approaches are characterised. All these models apply a rational system of analysis and are designed for school curricula for students. Main difference can be distinguishes in product and process models (Quinn, 1997; Marsh & Willis, 1999). Fullan (2001) is under the impression that simple changes might not make much of a difference as opposed to

complex changes that are more accomplishing, although demanding more effort. This means each curriculum planning should be considered in its own circumstances. Only than one can decide what help is needed and who can best provide it. In this case this implies applying a mixture of approaches, using both models effectively.

3.4 Sustainable organisation of continuing education

Sustainability is a complex idea. It requires understanding, not just of social, environmental, and economic issues, but of their ongoing interrelationship and interdependence. The process of sustainable decision making in this case involves a critical examination of nursing priorities, habits, beliefs, and values. There is a need to consider change in scope of nursing practices keeping in mind the needs of the health care system. Sustainability requires knowledge and understanding of past events as well as the ability to make informed predictions of future events. Central is the idea that today's decisions affect the future. In this case it is essential to find out for what reasons former specialised nursing courses failed in their existence. The (in)capacity of change surely can be developed, but is mostly based on past experiences. The role of staff development in supporting such changes is inevitable. Again the SRN experiences are important issues to be considered for this matter. The aim of sustainability is to make equitable decisions and to conduct activities so that specialised nursing education can be implemented and maintained for several years. However, the scenario for educational programmes in developing countries differs from those in developed countries in many ways. Especially among Bangladeshi communities there are many obstacles like inadequate infrastructure, poor equipment, less availability of technology transfer, and socio-economic constraints (Alamgir, n.y.). One has to deal with "conflicting policies, weak communication networks, shortage of qualified teachers and inadequate textbooks and facilities" (Van Akker, 2003). However, this lack of sophisticated instruments and modern techniques can be compensated by comprehensive theoretical training and practical skills imparted by locally available devices.

The challenge of sustainability is to make it a collaborative process: All stakeholders involved need to agree upon a vision as well as an action plan for the future. This requires collective and conscious decision making. This means it is not a satisfactory solution to simply add a specialised

nursing course. It can be imagined that policy makers will have a very different view on characteristics to maintain than teachers, who have to cope with the complexity of "daily-life" teaching conditions. The government's role is essential if these specialised nursing courses are to be achieved on a large–scale base. The government can create policy statements concerning specialised nursing education. They can set the direction of the special programs. One of their statements already is capacity building and thus providing better clinical services. This requires ensuring sufficient resources and investments. The accreditation body is to provide guidelines to be the template for an evaluation plan. With commitment and involvement from all stakeholders vital to program evaluation, this can result in maintenance and refinement of a quality nursing program (Gard et al, 2004).

Several studies show that the nursing role at the bed side is educational and therefore has to be compatible to the program and skills they are trained for. As already stated the views and needs of service managers and employers should be considered on the required output from education and training. This means hospitals should be prepared for this educational task. This also implies hospital context to get ready for change. Especially those concerned like doctors, managers, nurse teachers and other health care workers. The nursing process approach of care should be practised in the clinical setting (Hadley, 2001; Clarke & Copeland, 2003; Ward, Procter & Wooley, 2004). Clinical learning experiences needed to prepare skilled nurses should be identified. This should lead to partnership with practice organisations. The theoretical education is given by the nursing colleges. The practical training is given by the hospitals. The colleges in co-operation with the hospitals should develop on this basis a formula to judge competencies in practice. Furthermore it would be necessary to release guidelines on how nursing schools can align with hospitals or other facilities to support student learning and faculty development.

Continuing education is increasingly recognised as vital for the improvement of health care. No doubt the importance of nursing graduates is relevant but as a part of the workforce only. Specialised nursing courses can be seen as alternative ways to continuing professional development. Systematically teaching should be allowed only in the national educational nursing system (Miyabayashi, 1999). Provision of a system of specialised nursing courses can motivate nurses to continue their education. In this respect it is helpful to make curriculum development "a joint venture among nurse teachers, nurse managers and hospital administrators" (Lee, 1995; Quinn, 1997). The more support teachers receive through organisational conditions and development, the more complete curriculum planning becomes. Cooperation and support from all concerned should be secured (Lee, 1995; Marsh & Willis, 1999; Fullan, 2001; Gould et al, 2004).

4. Methodology

4.1 Introduction

In this section the methodology of this study is discussed. The main question of this study was to find indications for modelling a sustainable system of specialised nursing curricula that best met the educational needs in the Bengali context. Accordingly this study has tried to provide answers on the following research questions:

- 1. How do nurses feel towards participating in a specialised nursing course?
- 2. What is needed to model a sustainable system of specialised nursing education according to the nurses and nurse teachers involved?

As literature review showed there is continuing professional development needed to maintain and enhance the competencies nurses. And specialised nursing education can be one medium to do so. Since context research showed there is no ongoing concept of education, the first question was meant to get a better view of this. General idea was that if the nurses and nursing teachers weren't interested at all, would it be reasonable to think the development of specialised nursing education was feasible? It was also interesting to find out what educational and experimental background nurses had and how they felt towards a system of specialised nursing education. The second question was based on good experiences working with local experts. The expectation was a lot of knowledge and ideas would come up on the possibilities in the local context. Consequently this study used a descriptive, exploratory design and encompassed both qualitative and quantitative methods. The variety of methods and instruments used were: document analysis, questionnaire survey and organising an expert meeting. The aim of this study was to provide the local authorities with sufficient information tot set up a system of specialised nursing education. The second purpose of this study was to understand the practice, concerns and preferences of nurses and nurse teachers who currently work in the local context. This study was set up around the 'four commonplaces' of education: learner, teacher, curriculum and context. This means several methods were used to get insight knowledge of respondents who were teaching and learning in the nursing profession; their beliefs about curriculum content and sustainable organisation of a continuing nursing educational system. The data presented were collected over a 12 month period, from February 2004 to February 2005. *4.2 Approach*

It was really good fortune to be able to use the expertise of the Director of Monowara Hospital Pvt.ltd in Dhaka as local coordinator. To access the population the local coordinator sent a notice to the hospitals and nursing colleges. In this notice they were invited to participate in the study by filling in a questionnaire. It was too optimistic to expect nurses to fill in the questionnaire without any resurrections. Generally the nurses were unwilling to respond. The local team asked for reasons since it might have been sensitivity about the topics. Eventually it turned out the nurses were afraid of where giving the information might lead to. Partly because it was new to them their opinion was interesting, but mostly because it wasn't officially permitted. Then the director of ACADE wrote a letter of recommendation. In this letter the local coordinator was asked to gain permission of the government to perform this study. This finally resulted in access to the nurses and nurse teachers in the surroundings of Dhaka.

4.2.1 Respondents

One cannot avoid all error (variability) because it is rarely possible to obtain responses from the total nursing and nurse teaching population of Bangladesh. Expert advice was sought regarding sample reliability. The pressure on the time schedule of the study because of the delay waiting for government approval became evident. Consequently the sampling was converted into an accidental or a so called convenience sample (Krathwohl, 1998). All respondents were randomly selected by the local coordinator and his staff but only in the hospitals and nursing colleges where government permission was given. As nursing is predominantly a female-dominated profession

plus the unequal position of women in the Bengali culture made female members acting in the local staff evident. The local team visited the selected institutes and arranged workshops to motivate the nurses and nurse teachers plus to explain how to come up with their individual responses. There was a range of considerable bias due to the understanding of the questions by the nurses, and the subjective collected information might be misleading or inaccurate. Due to the circumstances this was also the only way to gather data. The main threat to the validity and reliability of this study was working within the limits, which seemed to be leading. Distance imposed also a limitation on the study, as it was necessary to consult with a local staff. In an attempt to overcome the limitations in communication, due to distance, various means to communicate and contribute to the study were made use of, email or telephone including written submissions and distribution of regular study updates. As for the results of this study data gathered only can be used as an indication and implies further research will be necessary.

4.2.2 Ethical considerations

Since the Government had given permission to gather data the local team visited the hospitals and nursing institutes before spreading the questionnaires. They informed the participants about the purpose of the study and assured confidentiality. Informed consent was obtained from each individual who participated by filling in the questionnaire and was approved (with a stamp) by the hospital authority.

4.3 Instrumentation

The methods and instruments used were: document analysis, questionnaire survey and organising a meeting with experts. To provide validation of results the research method was carefully considered and tested in cooperation with the local coordinator and his staff. The procedure how these methods and instruments were used to gather information will be described below.

4.3.1 Document analyses

A thorough search of literature on the nursing profession was made. It turned out there was little systematic research conducted to look at the specific specialised nursing educational needs in development countries, let alone Bangladesh. The search sought published journal articles,

reports, legislation and unpublished theses. Luckily there were a few recent studies by Nursing College students which gave an indication about the local possibilities. In addition, an extensive search of databases was conducted. This included both professional and Government Internet sites. All abstracts, resulting from the literature search of the databases, were examined to identify that the content was related to specialised nursing, curriculum development on specialised nursing education and continuing nursing education. Following the selection of abstracts, the articles were retrieved electronically or by hand. Further search led to clinical practice guidelines and legislation. These were then scanned for recommendations that had specific implications for specialised nursing education. Program descriptions of all available nursing education in Bangladesh were important in this matter to find out what the actual content was. Interesting in this matter were the SRN reports because they provided an overview of nursing activities and nursing education in the Bengali context.

4.3.2 Questionnaire survey

All respondents were randomly selected by the local coordinator but only in the hospitals where government permission was given. The following table gives an overview of participating institutions. Precise description of number of questionnaires received from each institution is not provided to ensure anonymity of participants.

Name of the institution	Number of questionnaires delivered	
Dhaka Medical College Hospital, Dhaka (DMCH)	Nurse 100	Teacher 20
National Institute of Cardiovascular Diseases Dhaka (NICVD)	Nurse 50	
Pongu Hospital Dhaka (NITOR)	Nurse 50	
Sir Salimullah Medical College and Hospital Dhaka (SSMCH)	Nurse 100	Teacher 10
College of Nursing, Dhaka		Teacher 20
Myemsingh Medical College and Hospital Myemsingh (MMCH)	Nurse 100	Teacher 10

BIRDEM Hospital Dhaka	Nurse 100	Teacher 3
National Institute of Kidney Diseases and Urology (NIKDU)	Nurse 25	
Dhaka		
Holy Family Red Crescent Medical College Hospital Dhaka	Nurse 50	Teacher 5
Mohanagar Shishu Hospital Dhaka (MSH)	Nurse 10	
Dhaka Shishu Hospital Dhaka (DSH)	Nurse 25	
Monowara Hospital (Pvt.) Ltd. Dhaka	Nurse 20	
Infection Control Practitioners countrywide	Nurse 12	
Bangubandhu Sheikh Mujib Medical University Dhaka	Nurse 17	Teacher 2
(BSMMU)		
Total	Nurses 657	Teachers 68

 Table 3: Summary of participating institutions

A local team visited the selected hospitals and arranged workshops to motivate the nurses and nursing teachers and to explain how to come up with their individual responses. In total 657 questionnaires were delivered in different hospitals and nursing colleges. A contact person, mostly the director or the matron was asked to collect the questionnaires. But also Infection Control Practitioners (ICP's) were used as contact persons.

For all respondents a questionnaire (see appendix 2) was used. The decision to actually use questionnaires was based on the need to gather data from as wide a range of participants as possible given the time scale and Bangladesh wide dimension. Additional effect was it the least expensive way to obtain information.

Respondents could fill in the questionnaires at their own time and post them in. The construction of survey was simple, easy to read and free of leading questions. Also a digital version had been made and if computers and internet access were available, respondents could have filled it in on line. The questionnaire for nurses included some general questions to picture the target group.

Specific questions on educational and experimental background were used. Also questions to measure interest in a continuing educational system, including post registration courses and a nursing career ladder. Seven Likert-type items were used to ask about their feelings towards development of specialised nursing education. There was also some space to make additional comments and to fill in name and address, when interested to also attend the expert meeting.

It became apparent that different types of information, from the different sources, were required and that it would be beneficial to design separate questionnaires; one to be completed by individual nurses and one to be completed by individual nurse teachers. For the teachers there was a more elaborate example of a questionnaire to obtain more qualitative data. The questionnaire for nurse teachers also included some general questions to picture the target group. Specific questions on educational and experimental background in curriculum development were used. Also questions to measure interest in a continuing educational system, including post registration courses and a nursing career ladder. Fifteen Likert-type items were used to ask about their feelings towards development of specialised nursing education. Therefore this questionnaire was expanded with space to give more of their opinion and comment. This included more and also some open questions. Again there was space to make additional comments and to fill in name and address, when willing to participate in a possible project to set up specialised nursing education.

The responses to these questionnaires were coded for each variable and data were statistically analyzed and managed using the Statistical Package SS for Windows computer programme version 11.5.0. Data analysis on the multiple choice questions and Likert-scale questions was limited to descriptive statistics and cross tabulations. Answers to the open questions were analysed and categorized in: learner, teacher, curriculum and context.

From the nurses 601 responded which is a percentage of 91%. Considering the context of the research this is a high score. The opportunity to fill in a digital version of the questionnaires hasn't been used by any of the respondents. It was foreseen there were only few people who

actually could have computer access and enough knowledge of the English language, but it was a bit disappointing nobody did make use of it.

In 7 different nursing colleges 68 questionnaires were delivered and 33 teachers responded which is a percentage of 49%. Within the context of research this was slightly unsatisfactory.

4.3.3 Expert meeting

The expert meeting was planned to lead to continuation and expansion of the results that were identified in the questionnaire survey. Consultation was the key element. To access this population a group of 67 interested respondents was made, drawn from the questionnaire survey. This sample was randomly selected based on the availability. They were invited by the local staff. Members of the group were already familiar with the study, because the all filled in the questionnaire.

To streamline the meeting the Nominal Group Technique was used a simpler variant of the Delphi technique. Advantage was that it could be conducted with different groups of ideally six to ten.

A four stage process was suggested:

- 1. Each member of the group first worked alone to respond to the stimulus question;
- 2. All responses were recorded on a master sheet, written up for all to see;
- 3. Each item was discussed briefly and clarified. Where it was agreed that items were similar, they were grouped together;
- 4. Each participant then selected a limited number (in this case five) of the items from the complete list which he/she perceived as most important, and ranked those items. Rank scores were then collected, and areas of consensus were agreed.

The ranking of priorities were not specifically supported by the establishment of criteria which should help focus opinions, since consultation was the key element.

Each group worked on the main issue to generate ideas how to make a plan for specialised nursing curricula, from on different levels of planning:

Authorities- What is needed from the Government, DNS and BNC to make a plan?Local hospitals- What is needed from the local hospitals to make a plan?

Local nursing college	s - What is needed from the local Nursing Colleges to make a plan?
Teachers	- What can teachers contribute to the planning?
Nurses	- What can nurses contribute to the planning?
The community	- What can the community contribute to the planning?

At the end of the expert meeting, all present were invited to state what they had learned from this meeting. The transcript of the groups were analysed by the researcher and an interim report was sent to the DNS.

5. Results

In this section the findings are presented from the questionnaire survey and the expert meeting. The results are categorized around the following themes: learner (in this case nurses), teacher, curriculum and context. Context in this case is not only considered the local situation, but the organization of specialised nursing courses, including roles of stakeholders.

5.1 Questionnaire survey

5.1.1 Nurses

As indicated in the methodology a total of 657 questionnaires were delivered in different hospitals and nursing colleges. Non response contributes to bias. From the nurses 601 responded which is a response rate of 91%. Considering the context of the research this is a high score.

The responses indicated a wide range of years of experience among nurses. It diverted from those working as a nurse for more than 8 years to those working less than 4 years. Most respondents worked more than 8 years. This reflects the age structure of the nursing workforce since 44 % was aged in between 30-39. As for the sexes 4,3% male nurses respond and 95,7 % female nurses. This supports the fact that nursing predominantly is a female profession.

The nurses (n 601) who responded 50% nominated their education as basic (n 312). Almost 27% (n 162) were academically trained and about 20 % (n 118) had additional education.

Since the hospitals represent the public and the private sector, it was interesting to see if the nurses working in the different settings had a comparable education. For this reason a cross tabulation was used to cross type of organisation with type of education.

The following figure shows this spread.

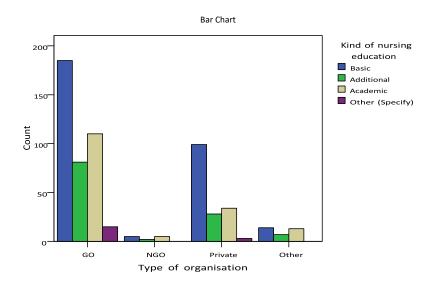


Figure 1: Educational spread of nurses in different types of organisation

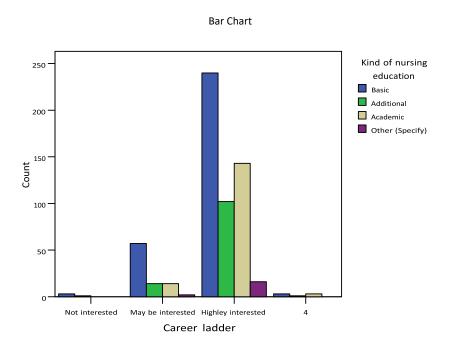
This figure shows that in Governmental organisations the number of nurses with an academic background is relatively higher than in other types of organisation. This is probably caused by the fact most governmental hospitals included are connected to a Medical College or Nursing College.

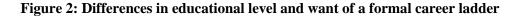
Really overwhelming was the response if a formal system of post registration courses as part of a concept of continuing nursing education should be set up. Almost a 100% of the respondents said yes to a formal system. And if asked whether in areas of speciality it should be formalised that

nurses can update their knowledge and skills only 1% disagreed. When asked if assessment of nurses should be based on specific competencies, relevant to the speciality 92% agreed. The majority named the following arguments as reasons why nurses do want more education:

In Bangladeshi nursing education is backdated. Our skill, knowledge and attitude are not eligible for the new nation and future time. So continue education programme must be added in nursing service time. Additional comments from several nurses

Additionally the next question was whether nurses were interested in the creation of a nursing career ladder matching education level and experience. Interesting in this aspect was whether the level of education would make a difference in wanting a formal career ladder. Again a cross tabulation was executed. The findings are shown in the next figure.





To find out if this difference was significant a chi-square test was performed (Chi sq) P < .05). The outcome showed there was not. So a Kruskal-Wallis test was done to check on significant differences between groups of education and the interest in creation of a nursing career ladder. The outcome was quite surprising because the group with only basic education scored significant lower (P .011 (= < .05). This meant that the group who already made a jump on the career ladder and was more educated were more interested in further education than the group with only basic education.

5.1.2 Teachers

A total of 34 nurse teachers responded. They were also asked to indicate age, gender and kind of nursing education. Most respondents worked more than 8 years. The age distribution reflected a curve as was to be expected, since 47 % was aged in between 40-49. There were only females represented (n 34).

As already stated the hospitals represented the public and the private sector, it was interesting to see if the nurse teachers working in the different settings also had a comparable teaching education. For this reason a cross tabulation was used to cross type of organisation with type of education to become a nursing teacher. The following figure shows this spread.

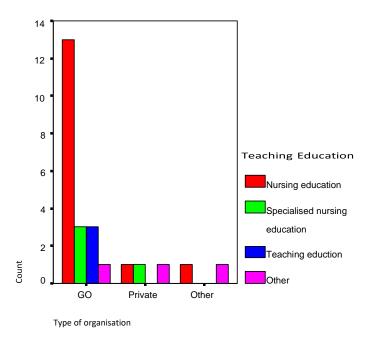


Figure 3: Educational spread of nurse teachers in different types of organisation

Specialised nursing education was not further specified but other education was often specified as an academic education in either nursing or public health.

Again almost a 100% of the respondents said yes to a formal system of post registration courses as part of a concept of continuing nursing education should be set up. Only 3 % of the teachers disagreed on formalising updating nurses' knowledge and skills in areas of speciality.

As opposed to the nurses 73% of the teachers agreed that specialised nursing education should be accessible to all nurses. Nevertheless all teachers responded agreeing with the need of a proper orientation for nurses to the specialised area of placement.

When asked if teachers were experienced in curriculum development 85% said yes. The following table gives an insight in whether teachers are experienced in curriculum development and how this is related to their own educational background. Again cross tabulation is used.

Percentage	Teachers education	Experience in curriculum development
56,7%	Nursing Education	60%
16,7%	Specialised Nursing Education	16%
13,3%	Teaching Education	12%
13,3%	Other	12%

Table 4: Level of education and experience in curriculum development

Interested in participating in a project team to set up specialised nursing education was almost 82%. This was a very joyful result. Furthermore the rate of teachers who have a specialised nursing education and is interested could be expected but nevertheless a full score is a very promising result. The following table gives an overview of the connection between educational background and interest in participating in a project team.

Teachers education	Not very	May be	Very
	interested in	interested in	interested in
	participation	participation	participation
Nursing education	6,7%		93,3%

Specialised Nursing education		100,0%
Teaching education	33,3%	66,7%
Other	33,3%	66,7%

Table 5: Interest in participating in a	a project team and level of education
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5.1.3 Curriculum

In an open question teachers were asked what was needed to develop curricula for different specialised nursing educational programs, according to them.

To be able to weigh the answers against the former they were distinguished into the same rubrics that were used to describing factors of sustainability (see table 7).

Needed (wo)manpower was specified as:

- Formed curricula committee;
- Expert, Qualified and competent personnel;
- Educated & experienced teachers;
- Experts in special subjects and Clinical instructors/mentors.

For input in curriculum adjustments the following essentials were scored.

- New technology and new instrument for advanced care in specialised areas must be added in curriculum
- Current curriculum is traditional
- Based on current situation and modern concept
- Need assessment & priority setup
- Identify the role of specialised nurses
- Select contents essential to prepare nurse as competent in playing the identifying roles
- Develop curricular system
- Develop curriculum and teaching system
- Review of existing curriculum

- Accessibility of the curriculum, cruden(?), tiality(?) & reliable
- Curriculum should be prepared in order to meet national and international need
- Curriculum should be well defined and not too big
- Hour/day, t/l guide, evaluation method
- It must be changed harmoniously with the new technology and advanced care by application of new instruments in specialised areas
- Identify hours that should be long enough for the course

These should of course be taken into consideration when there will be a go for development of specialised nursing education.

Several times specialised hospitals for clinical placements were referred to. Infrastructure was described only once and means as relevant books and journals in special subjects were brought up. Fund was mentioned as need for sufficient budget. Government & authority should take initiative to make specialised nurses for quality care in a special area.

Needs assessment was named to be important to identify the needed specialised nursing care (education) in special area, or also described as: To identify what specialised nursing education is most important (need) in our country.

And last but not least training for teachers was pointed out, preferably to be arranged in workshops.

In order to get some view on what specialised courses are most needed, the teachers were asked to sit on the chair of the policymaker and make their top 5 list. In the following table the findings are presented. The highest scores are marked in yellow.

	Intensive care	Medical Nursing Coronary care	5	Oncology	Other	Paediatrics	Surgical Nursing	Urology
Score	Valid	Valid	Valid	Valid	Valid	Valid	Valid	Valid
	Per ent	Percent	Per ^{ent}	Percent	Percent	Percent	Percent	Percent
1,0	<mark>67,7</mark>	15,4	3,8		33,3	10,7	5,3	12,5
2,0	9,7	26,9	7,7	<mark>40,0</mark>	33,3	28,6	31,6	

3,0	9,7	19,2	<mark>34,6</mark>		33,3	25,0	26,3	25,0
4,0	3,2	26,9	30, 8	<mark>40,0</mark>		21,4	21,1	12,5
5,0	9,7	11,5	23, 1	20,0		14,3	15,8	<mark>50,0</mark>
Total percentage	100	100	100	100	100	100	100	100

Table 6: Top 5 list of most needed specialised courses according to the teachers

Without any doubt number one is preferred to be a specialised course on Intensive care. Of course it needs to be explored further what the exact contents of the curriculum should be.

5.1.4 Context

Nobody thinks about specialised nursing is most important to provide special competent nursing care, even physician. So they ignore this side. But people demands increase day by day according to advancement of medical science and technology, so they go outside of the hospitals & country for better care. The speciality course regarding nursing is obviously very good step. But it must be accredited through the BNC.

Select some courageous nurse who really interested to learn and use the knowledge and skill in the clinical practice area efficiently and effectively with the stakeholders' satisfaction Additional comments of two participating nurse teachers

Almost 96% of the nurses thought their own hospital should make specialised nursing education more accessible but only 3% of the teachers did. Where as 70% of the teachers thought any hospital should offer practical experience, 38% disagreed when asked if only a limited number of

clinical facilities should provide the level of experience required. Apparently nurses considered their own hospital providing the necessary experience, while teachers thought the opposite. Whether there should be a choice between part-time or fulltime courses more than 73 % of the nurse agreed and over 81 % of the teachers did.

Than of course it became interesting if nurse were willing to pay for their training costs and it appears that 28 % was but only 15% of the teachers thought they should. For not willing to pay especially the non-capability of paying was named as a reason. When asked if the Bangladesh Nursing Council should be the accrediting body, a little over 90 % of both groups agree.

Trying to find an answer to the question which factors in achieving sustainability could play a role at the institutional level, it first was interesting to find out why former specialised nursing courses failed previously. Secondly what important factors teachers thought of now. Comparing these outcomes should give some indication of sustainable factors.

The following table gives an overview of all the factors teachers named. (For a more extensive version see appendix 3) Since the data analysis was limited to descriptive statistics the percentages are frequency percentages.

Percentage	Former	Future	Percentage
55%	(Wo)manp	ower	42%.
42%	Curricul	um	64%
12%	Student relate	18%	
21%	Infrastruc	21%	
42%	Facilities		73%
73%	Budget or Fund		36%
39%	Government		
27%	Policy		12%
21%	Health Care system related causes		
64%	Planning, Coordination, Communication		46%

	Supervision	18%
	Monitoring	42%
18%	Career ladder	61%
18%	Motivation	24%

Table 7: Comparison former and future factors for achieving sustainability at the institutional level

A closer look at the past firstly provided the following information:

Teachers were asked why they thought specialised nursing courses failed previously. In case of (wo)manpower 55% said it was owed to shortage of specialised trainers and lack of specialised nursing expertise. 42% said it had to do with the curriculum and 24% indicated shortage of curriculum as the main reason. It was also related to the students thought 12%. Not only in poor selection of students, but also lack of remuneration and recruiting facilities & impropriate placement. Important was also the accommodation facility (hostel facility). 21% named lack of infrastructure (building, institution, resources, and equipments) as 42% referred to facilities or rather lack of clinical practice facilities.

The highest score was on budget, namely 73%. Additional comments were various, but mostly lack of fund, funds constraints but also improper budgeting and improper utilization resources. 39% thought the authority was an influencing factor. Things as: Government is not motivated or interested, negligence of nursing higher authorities but also wrong placements were brought forwards. It was expected that the government policy level was clear, still 27% said there was no written policy in top level and no vision.

Health system related causes were also specified. The most popular reason (21%) cited was the fact that nursing was a more neglecting job than others in the health sector. Improper nursepatient ratio and conflicts between the nursing and the medical authority were also indicated.

64% considered it all a matter of planning, coordination and communication. Things as improper planning, implementation, evaluation and no follow-up system to the programme were frequently brought forward. Also lack of communication with the senior management and others such as BNC played a role. Only 18% thought it had to do with no possibilities on the career ladder and the same percentage says motivation was the issue.

Secondly what were the results looking at the future. The challenge that is faced is how to achieve sustainability at the institutional level. Teachers thought the following factors to play a role:

(Wo)manpower was named by 42%. There should be well experienced and knowledgeable motivated subject based teachers or trainers who are in possession of competencies for good leadership and interpersonal relationship. Curriculum scored a high percentage, namely 64%. There are a few comments that leapt to the eye: Specialised education will run continuously, there should be a small group of students and BNC has to approve the curriculum in basic education. 18% named especially student related items but most importantly was cited the procedure of using admission criteria.

Infrastructure in itself indicated 21% but facilities scored the highest, namely 73%. Most frequently were mentioned the physical facilities (classrooms, demonstration rooms, library, hostel, etc) and proper clinical practice facilities. Fund was named by 36% and especially was pointed to ensuring budget for the sustainability of the course. Also it appeared to be important to keep the cost of the course within the ability of the student.

The same issues were mentioned regarding the Governments 'policy, but only 12% thought it would be still an issue.

Proper planning, coordination and communication thought 46% to be important and most eminent between specialised hospitals & training institutions. Monitoring (42%) and supervision (18%) were new elements which should involve continuous monitory, mentoring & evaluation of the expected outcome. Special thought was mentioned for setting up a quality committee.

The opinion of the need of a career ladder was shared by 61%. The two most popularly cited additional comments were (a) The requirement or deployment of specially trained nurses should be ensured with a suiting job description according to post and position; and (b) An appraisal system should be introduced with provision of incentives and reward.

Motivation (24%) and especially a positive attitude towards specialised nursing education still were mentioned as an essential. Every respondent agreed upon the fact that specialised nursing education can be an important recruitment arm for hospitals if hospitals are willing to facilitate these courses.

5.2 Expert meeting

The expert meeting was held in December 2004. In total 43 persons were present with representatives from the DNS (n=1), the BNC (n=1), local hospitals management (n=5), physicians (n=3), nurse teachers (n=9) and nurses (n=21). General goal was to generate ideas how to plan specialised nursing curricula. Special terms of interest were the challenges the experts identified, as well as any relevant information related to modelling specialised nursing courses. The original expectation was maybe 20 were able to voluntarily attend this meeting. Therefore the intention was to conduct three or four groups. However the Government thought it probably important to attend this meeting, so all nurses and nurse teachers were present with Governmental approval. First was started with a short briefing on the outcome of the questionnaire survey. Participants then were divided into six mixed groups and worked on ideas on different levels of planning. This mixed grouping promoted in-depth exploration from a variety of perspectives. Starting like this apparently was very unfamiliar and participants tended to sit in their own peer group. It took some time to really make a mix of nurses and nurse teachers and representatives from the Government. At the end of the expert meeting, all present were invited to state what they had learned from this meeting. The transcript of the groups were analysed by the researcher and an interim report was sent to the DNS.

> "Today was very important to me, since I have learned that I also have an important saying in my career and own development, and it makes me proud that my voice can be heard" Statement of one of the participating nurses

5.2.1 Nurses

A nurse was considered a person who provides care from womb to death. In Bangladesh nurses as a whole provide general care. But there was a strong belief that in this scientific era, medical science and technology had advanced so fast and this changing situation was essential for the nurses. The overall conclusion indicated that specialised nursing care only should be organised for those nurses who were interested and willing to work on the clinical side. Priority should be given to nurses who were already working in the specialised hospitals.

Since the situation in Bangladesh is limited in areas for specialised nursing, it was suggested to only decide on some specialised course in priority basis. Important issue that came forward was that nurses themselves should be motivated and be ready to provide specialised service. And that nurses needed to take initiative to motivate other professionals. However, some saw merit in empowerment and securing by the authorities.

Suggestions were provided for selection criteria including the following factors:

- Who are interested and capable person?
- Look for level of student that means knowledge and experience of student
- Physical fitness of student: wellness; drug induce; height; weight; Character; nationality; age bindings and last but not least:
- Pre-test examination.

5.2.2 Teachers

It was suggested teachers should be selected on criteria such as: Educational background; teaching experience and expertise on the specialised area. Teachers should be prepared for the different courses.

If teachers had no expertise, it was suggested they should be send to specialised courses including training skills and science refreshment. It was also recommended to provide training on the teaching practice. In general, items as how to teach and how to use teaching aids were specified. More explicit was mentioned how to make the teaching session fun and how to maintain a teacher-student relationship. Asses to local facilities for proper practice were explained as specific field areas for application of training. Several resources were indicated to adopt change in medical care availability e.g. text books, journals of nursing, articles and magazines.

5.2.3 Curriculum

It was highly recommended to conduct specialised nursing courses only at University level. Universities should conduct curriculum development and review, nursing education and training, and should be responsible for certification. Part of the curriculum planning should also involve the examination process, accreditation and certification. Some saw great merit in obtaining international standard course contents. Others found it more important the curriculum was need based and would fit/ match with the participants' level. Again sufficient information materials were indicated to be present i.e. journals, magazines, books, VCR, computers, etc. It was agreed that education ought to be institute based: theory part in the institute and practical placement in the specialised hospitals. Some recommended pre-testing before development of the final curricula as essential. Each course should at least be provided in one year duration and the total of hours should be accredited. Some said that after completing the diploma course the participants should be selected, according to the need of specialised areas. Everybody shared the opinion that English language, especially in communication was essential. As command of the English language is lacking among Bangladeshi nurses, a side by side English course was considered necessary.

All considered the curriculum should be theoretical & practical based. It was advised to allocate more time for practice rather than theory. Assessment of proper practical places should involve the capacity of clinical personnel to supervise and evaluate the student. Practical areas were to be selected for proving necessary skills and supervisors/ mentors were regarded as necessary to guide during practical work. The content of the course should leave space to have a breakdown of teaching hours: interchange between theoretical; practical; clinical; laboratories; case studies; demonstration and study work. Teaching and learning strategies were indicated as student centred. System development for direct evaluation of the students' performance was supported e.g. preparing rating scales. Monitoring and follow up of course participants was highly recommended.

Participants' recruitment was advised for all specialised courses and a maximum number of participants indicated, namely 20-25. Teacher student ratio was believed to be very important:

suggestions were made as 1: 8 in theory and 1: 4 at the clinical site. There should also be a course coordinator administrative post.

5.2.4 Context

5.2.4.1 Authorities Government of Bangladesh

There was consensus on the fact that it was expected from the Government to plan a policy by looking at the demand of the market nationally and internationally. This would provide a long term sustainable program. Important in this respect was mentioned curriculum development funding. The government should care for provision of premium for participants as well as for resource persons. For sustainability, the concerned authorities should have and demand a budget in future from the Government.

Participants highlighted the creation of several opportunities for deployment. Job specification, placement & on job staff development programme should be ensured. After having concluded the special courses, nurses should be given facilities (salary or incentives) to serve in the proper place. Creating a career ladder should make promotion possible within 2 to 3 year's on to the next phase. Still policy ought to be developed for trained nurses not to move to another department.

Directorate of Nursing Services

DNS was recommended to select or appoint a coordinator for the courses based on qualifications and criteria. DNS should also coordinate to form a committee in the specialised hospitals.

Bangladesh Nursing Council

BNC was suggested as licensing authority. Although accreditation of the courses was felt necessary some argued that the accreditation body and licensing body should be separated. Licensing authority's role of BNC should be separated from the educational role of the university. The majority however agreed on accreditation and regulation under BNC rules and registration. In order to protect the public by ensuring standard practice this should be monitored. If specialised nursing courses were to found feasible, a code of nursing practice /conduct should be produced for each specialisation including indicators of standard practice. BNC should play an important role in the conduct of licensing exams after getting certificate on specialised training. Another point was made to set criteria for all candidates for renewal of registration.

5.2.4.2 Hospitals

All recommended placement in specialised hospitals. One group raised the issue that programmes should be hospital based. All found it much preferable and feasible that all facilities would be available. This was explained as training hospitals should have funding and logistic supply. Opportunities for accommodation, library and demonstration rooms were indicated. Accommodation facilities for students within the hospital compound were pointed out preferable. It was argued that this way training could be based in specialised hospitals and time would be saved by no need for transport. Each training hospital should create posts for clinical instructors. This should lead to proper monitoring and suggestion for on job training. Stimulation of CPED (Continuing professional educational development) would be an important task. Clinical instructors should have had training in particular specialised courses and other teaching competencies. Guided by the hospital coordinator the clinical instructor should be able to perform continuous monitoring and supervision. By observing the practice of nurses indicators of standard practice could be set. Each hospital should have a recruitment policy for the specialities nurses. This should include better job opportunities different from senior staff nurses; increased salary and creation of a post/position.

In order to plan a specialised nursing course training hospitals should install a committee comprising the following members:

- Director of Hospital;
- Nursing superintendent;
- representation from DNS;
- coordinator for the course;
- representative BSC Nursing;
- specialised medical professional;
- nursing supervisor/ clinical instructor in charge of specialised ward

5.2.4.3 Nursing Colleges

It was generally considered that nursing colleges should provide a good environment. This meant availability of teaching aids and proper facilities for teaching. Facilities varied between

accommodation and a teacher's office room, till good salaries to make teaching a more attractive profession. Good teaching environment was also indicated as: not crowded class, well ventilated and quiet or soundless classrooms. Common facilities were mentioned as enough chairs, tables, bookshelves, whiteboards, blackboards, and teachers' desk. But also a well equipped laboratory was mentioned. Resources were indicated being all modernised teaching aids: OSP; slides; computer networking. A good library which should content: books, CD's; a library computer, current texts; journals; articles and newspapers.

5.2.4.4 Community

Nurses should be trained in specialised areas to get ready to serve the community, according to the needs of the community. Planning of specialised nursing course would have more impact in the system if planned through an organisation. Both Government and private were mentioned. Suggested was communication with local leaders or head of the communities to be informed and involved. It was thought of as possible that nurses informed and educated their own community about important changes in the nursing educational system. Areas of community mentioned were family and local area. Highlighted was the important role nurses have in making their own community people aware and assure them about specific services. Also, if needed, nurses could refer to the correct destination to solve health problems. To make this work, three specific inputs were required: manpower, finance and material.

5.2.5 Recommendations from the expert meeting

There was consensus on the following recommendations:

- First prioritize specialised nursing courses to be developed: Identify what nurses need to provide as specific care, efficiently and effectively to satisfactory of the stakeholder or beneficiary;
- 2. Get funding because specialised nursing education and training should be free of cost;
- 3. Although selection criteria for participants should be applied include all nurses who are serving for Bangladesh both in the public and private sector in the selection;
- 4. Provide attractive incentives for specialised nursing;
- 5. Start with a specific specialised course, ensure local, then nationwide;

- 6. Decide on full time duration of the course: either diploma or degree equivalent;
- 7. Curriculum for courses should be defined according to the Bengali context;
- 8. Develop an evaluation process and monitoring tool: Course impact evaluation and summative and formative program evaluation; monitoring and follow up;
- 9. Form a committee in the local college and in the specialised training hospitals, coordinated from DNS;
- 10. Plan a job and career ladder for nurses

It was also suggested to install a periodical assessment committee: a quality assurance team comprised of members from specialised areas. Members were to be selected from BNC, DNS, Nursing Colleges & concerned specialised areas.

6. Discussion

This study was based on an exploration of initiating specialised nursing education in Bangladesh. The aim was to provide the local authorities with sufficient information tot set up a system of specialised nursing education and to understand the practice, concerns and preferences of nurses and nurse teachers who currently work in the local context. Situating the research in Bangladesh provided new perspectives and insights about modelling specialised nursing education in the local context. These findings gave important implications for educational nursing practice and further research. Indications for modelling a sustainable system of specialised nursing curricula that best meet the educational needs in the Bengali context were found. In this section a description is given of discussion and recommendations for future research and practice, again framed around the 'four commonplaces' of education: nurses, nurse teachers, curriculum and context. Also the strengths and weaknesses of the study will be described and this section will end with conclusions on this study.

6.1 Nurses

Globally the nursing profession has stayed predominantly female, as in Bangladesh. Although several studies show the position of women and the nursing activities conflict in the Bengali context, the findings of this study suggest that participants saw potential for expansion to more specialised nursing care to meet the needs of service. The nurses who already made a jump on the career ladder and were more educated showed more interest in further education than the group with only basic education. This could mean nurses are quite happy with their work and position. Still this is also a bit in contradiction with some additional comments, namely arguments why nurses are interested and think specialised nursing education is needed, and suggestions on organisation and accreditation. However it was found that the nursing profession has a very low status and career structure. Apparently the nurse identity is a drawback on further education (Chowdhury, 2002; Hogue, 2002; Hadley, 2003; Zaman, 2004). This could also mean that development of a career ladder and open up opportunities to further (specialised) nursing education would help raising the nursing identity. So on the other hand, this could mean the awareness of the importance of further education still needs to grow within the target group. Provision of a system of specialised nursing courses could motivate nurses to continue their education. This will be a way of strengthening the nursing workforce with the attributes of a specialised level education for clinical practice including leadership, assertiveness, and reflective, critical skills. But it nevertheless means here is a fine challenge of motivating and moving the right group.

Timmins and Kaliszer (2002) indicate that stress exists for students in both the clinical and academic aspects of the programme. Financial constraints and academic-related concerns emerged as the most stressful areas for the students. Since nurses are badly paid, the financial aspect could also be an influential factor why nurses with basic education weren't interested in further education. Since specialised nursing courses are an in-service training, it should be completely paid by the hospitals. In order to encouraging higher proportion of women enrolling themselves both in under graduate and postgraduate nursing courses, free education up to the post-graduate level could be considered, with better salaries and conditions to work.

If hospital pays training costs I think that hospital will be very benefited to get special nursing services through accountability from nurses. Additional comment of a participating nurse

6.2 Teachers

Teachers are considered one of the key stakeholders in curriculum planning (Quinn, 1997; Marsh & Willis, 1999; WHO, 1999; Fullan, 2001). It is an essential step to involve the teachers and give them the opportunity to put in their points of view. They are the most important persons to take account of the specific context of their own communities and schools. They are also the obvious persons to make the necessary adjustments to filter general policies and objectives and conceive of ways of enacting them. The most important step to make the planning process effective would be to involve the local teachers in development of the new curriculum. Results show that the majority of the nurse teachers are experienced in curriculum development. But only the minority has a specific teaching education. One can foresee a fundamental difference from these data in what is intentioned to be carried out in the classroom (planned curriculum) and how it will be carried out (the enacted curriculum) and what some of its results might be (the experienced curriculum). For nursing education in the current basic nursing curriculum a philosophy is formulated to guide educators in the development and implementation of the educational programme. The overall goal is that students will be prepared as competent nurses according to professional standards, within and outside the country. Major change is (a) the emphasis on active learning as opposed to lecturing and (b) on learning in the clinical practice experiences, especially on the hospital wards and with other workers. This has necessitated a shift in orientation from a teacher-led to a client-centred approach to education. The methods in the specialised nursing courses should encourage learners to actively participate and explore information about specific nursing issues. This development ideal is slightly ambitious, aiming to change the nurses from passive to active learners. However the innovation is in line with the intended approaches and outcomes of the new basic nursing curriculum in Bangladesh (2003).

Teachers hold the key to any process of educational change. The most important factor in the delivery of health services is the adequate supply of well-motivated staff that is appropriately experienced, educated and trained. The results of this study shows there is a lot of potential present. Interesting in this regard is that most teachers don't have special training in teaching. Although workshops are mostly suggested as supportive activity, it can be argued that workshops are the most effective way to support the development of skilled specialised nursing teachers.

Any training program should be consistent with the methods used in de specialised nursing courses in order to create awareness of the change in educational approach. Other possibilities like refresher courses or any other kind of peer interaction where teachers can exchange information will give new input. With more resources and training input, experienced nurse teachers can have a leading role in this process. To ensure the planned curriculum will correspond to the enacted one, a specialised teachers training programme is necessary. Firstly to prepare teachers for teaching on specialised nursing subjects. They have to get some guidelines to how specialised nursing skills have to be dealt with in the classroom and beyond. But it is also vital that teachers are aware of their status as role-models to learners and explore their own competencies and reflective practice. Some specific elements for such training should include the use of several methods involving both teachers and students developing critical thinking and problem solving competencies. The utility of computers in learning materials to transfer information effectively should be involved plus theories about the behaviour changes of adolescent learners.

The World Health Organization (1991) stresses that nurse teachers alone cannot bring about the needed change in the schools. For effective planning nurse teachers, nurse managers and clinical nurses should work together in a spirit of mutual support and understanding of the aims of the change. As such, strategies for sustainability need to be implemented from the inception of the planning process. Infrastructure in itself was indicated but also physical classroom facilities and proper clinical practice facilities. This of course also can be the frustration of daily practice but is evident enough for further exploration. There should be appropriate teaching and learning materials as well as continuous assistance and input of professional knowledge.

6.3 Curriculum

The findings have implications for modelling curriculum in a number of ways. To evaluate any curriculum, one should first have an objective on which to base it. Then it is necessary to decide on methods that will lead to this objective. The next step is to decide on the content of the course. One should ask the question whether teaching the different subjects will make a better specialised nurse, and how much of the subject should be taught to achieve this. Studies show that an active

teaching method is more successful in providing basic scientific knowledge to be applied to nursing, better achievement in clinical work, and self-confidence in problem solving. Then not only should the amount of knowledge acquired by the students be assessed, but also skills in clinical practice. Continuing nursing education courses that use intensive mode timetabling, small group learning, and a mix of teaching methods, including didactic and interactive approaches and clinical placements, are effective and have the potential to improve nursing practice. However, the results do suggest that there is a need to clarify curricular content in relation to reflective practice and prepare nurse teachers and clinical instructors for their role in teaching more effectively. This way specialised nursing competencies and medical care could advance and nurses would have a better professional standing.

> Specialised nurse training programs are not designed according to need of the country. Moreover course content and teaching methodology should be updated. Additional comment of a participating teacher

6.4 Context

The endeavour of the Government should be to consolidate the capacities built up, while improving the quality of nursing teaching institutions, rather than merely increasing the number of new institutions. Institutions have to be encouraged to undertake development of new specialised nursing curriculum and improve the quality of teaching, learning and administration. This means initiating programmes for upgrading the nursing curriculum and syllabi in order to respond to new (technological) developments in health care and demands of the market. Greater emphasis should be laid on encouraging closer interaction between hospitals and educational institutions so that both parties may mutually benefit. Besides, this study indicates to create the necessary infrastructure facilities for this.

Studies on training needs analysis in post registration nursing education differ in level of analysis. They either describe training needs of nurses in more than one organisation (macrolevel) as apposed to micro level in a single specific organisation. The greatest potential for influencing service delivery and quality of patient care are the smaller scale analysis (Gould et al, 2004). Apparently nurses thought their own hospital could provide the necessary specialised nursing experience, while teachers thought the opposite as far as this study shows.

This indicates teaching to take place in an established hospital, which already teaches nurses and doctors. This hospital should have a range of specialised clinical departments and preferably situated in the capital Dhaka. It has to be well placed to offer courses and to influence practice in other hospitals in the country as well. The hospital should undertake activities to continue with the courses and the teachers after the first courses. This way specialised nursing courses could be piloted in one or more specialised hospitals, but after that spread nationwide. Since it already is observed (Aerts, 2001; Hadley, 2003) changes can be made in the private and NGO sector they are recommended to be the first focal points in cooperation. Nevertheless it should be considered which outcomes are to be expected from specialised nursing courses, according to the context. Naturally the courses should be appropriate to experience and cultural background of the nurses and implicate a variety of teaching/learning methods. The way in which the activities address these outcomes should evidently be checked.

6.5 Conclusions

To complete there are several lessons that can be learned from the results of this study. Firstly the Government of Bangladesh has very strong influence on the nursing teaching and learning process and evidently Government support is most strongly needed. Specialised nursing education will be more effective when and if it is embedded within the nursing educational system. There was a strong belief expressed that government also needs to fund development and implementation (meaning regulation, deployment and legislation) of specialised nursing courses. These findings also reveal that any initiation should be adequately assisted or supported by the Directorate of Nursing Services, the Bangladesh Nursing Council and the Hospital Authorities. A supportive and enabling policy document for programming this is highly recommended. Policies should be developed and implemented in regard to educational management of the organisation of specialised nursing courses. The rights and obligations of the nursing colleges as well as those of the hospitals should be recorded in an agreement with the objective to stimulate the integration between the theoretical and practical training, and to finance and secure continuity of the training program.

If the government plans to widen the opportunities for nursing education, the demand for this profession would continue to grow. An effective means of updating the qualifications of health personnel is to require continuing education as a condition of license renewal. This suggests there also has to be decided on changes in the current system as far as relevant to the career ladder of nurses. Proper placement with job description and a practical clinical environment where an educated nurse can practice her skills is one way to make changes in the system. Further study needs to consider the working environment of nursing staff with the intention of increasing job satisfaction and making nursing a more attractive career choice.

The demand for skilled, qualified nurses is ever present through out the world. As already stated development, career planning and attachment of awards or credentials are strongly related to a specialised nursing course. Further options for a national approach to the credentialing of specialised nurses and the accreditation of related specialised nursing education programs should be explored.

Secondly as already described, working in Bangladesh means careful consideration of the conditions dependent on the system and culture. Local factors stand for the social conditions of change and more important the organisation or setting in which people work. The findings of this study reveal that the curriculum design cannot be carried out on an ad hoc basis with inadequate preparatory work. Inadequate planning in the past probably has left the teachers at that time insufficiently prepared and unable to cope with the demands of the implementation and sustainability. Adequate staff development, practical guidance and advice from people who have expertise and professional knowledge and at the same time understand the context situation, would be a great help towards better planning. It is of great importance there is someone who knows the local system and how to behave and how to react context wise. What works in other countries may or may not work in the Bengali situation. Therefore the involvement of a local partner is indispensable. Consequently it is important to seek contact with local nursing colleges or the university. Although the last option might be desirable it is more important that the status and the content of the education is in line with the national standard. Specialist training institutions can also be considered and thus creating concrete measures to establish high-quality education courses. This defends starting to a small extent with one or two pilots on a small scale

and in the surroundings of Dhaka. Expertise is available and nurses and nurse teachers are motivated to model specialised nursing courses.

Mechanisms for liaison should be installed between the organisation offering the course and the Bangladesh Nursing Council, enabling monitoring of the implementation of the approved curriculum. To support this, development of a structure which enables the organisation to consult and receive advice from relevant authorities and Departments and appropriate professional representatives is needed. As a policy, the Government can encourage every specialised nursing education institution in the country to opt for accreditation either by BNC (National) or by WHO (international). This should be taken into consideration when there will be a go for the development of specialised nursing education.

Thirdly there should be ongoing education in changing of attitude. For effective curriculum planning, nurse teachers, nurse managers and clinical nurses should work together in a spirit of mutual support and understanding. This means hospitals, nursing schools, the government, properly speaking the entire community of health professionals should come together to chart a bold new course for the nursing profession. More in-depth research on the learners' environment is important because learners may not necessarily share the required attitudes regarding a new teaching method. The information is also necessary to establish the most suitable condition at which introduction of new courses would be most effective. The results of such research will have a direct effect on the rest of the curriculum design. Clearly efforts to introduce specialised nursing education must be collective and coordinated. A contribution can be made to raising the quality of specialised nursing through reviewing the present specialised nursing courses. If available, further comparative study is advised of accreditation criteria and curriculum in nurse specialist programs in surrounding countries like India or Nepal.

6.5.1 Strengths and weaknesses of study

By conducting this study, because it was the first on this subject in the country, there will be a base for new research and theory forming. This is a strong point. But there is more to learn about specialised nursing education in development countries and especially in Bangladesh. The limitations of this study included a small sample size and limit the generalisation of the results.

Since the sample was conveniently selected it limited the number of participants. The data were gathered with government permission under supervision of local contacts. Therefore the responses may be biased by pressure felt or socially desired answers.

Because of the limitations of the study external validity couldn't be guaranteed and outcomes can not be generalised across different settings. Further research is needed to substantiate the findings of the study. At present there is insufficient context research on teaching and clinical conditions. Survey of the existing capacity in order to validate and better understand the data gathered is necessary.

Conclusively: The Government can prevent that knowledge and skills don't go to waste. Providing fund to further explore modelling and implementing specialised nursing courses could be an important step in improving health care. However the real challenge is how to sustain and institutionalize new specialised nursing curricula. In most instances, sustainability is not just a matter of obtaining additional funding, but, rather, developing strategies to embed changes into the nursing educational culture. This offers the best hope for a quality health service system, supported by appropriately educationally prepared nurses. To accomplish this, education on different domains of specialised health care must get an impulse and be continued. It is hoped therefore that this study has contributed to that impulse.

> Being a college teacher I have to provide mentorship to my BSC Nursing students in practical field (hospitals) as well. During the (practical) clinical tasks (supervision) it is found that nurses those who work in the specialised area like oncology department, nephrology department, cardiology & I.C.U. there is overwhelming deficiency of knowledge & skill exist in them. It is my heart felt need that very soon the specialised courses should be launched. Because nurses do not feel confident enough to provide necessary service to their clients. But Physicians demand the up-to-date competencies from the nursing personnel. Here nurses are helpless.

Clients do not value nurses as they are not able to satisfy them. For instance recently dengue has posed a serious health problem in Bangladesh. Considerable number of physicians has obtained specialised training courses from abroad but none of the nurses have got this opportunity. Therefore expected outcome of the service has not been achieved. If wish success of every endeavour in this regard. Additional comment participating teacher

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Appendix 1

Context information on the Dutch institution involved

ACADE, Academy for Specialised Health Care Education has been active in Bangladesh since 1995 on invitation by the director of Monowara Hospital (Pvt.) Ltd. in Dhaka. By developing a basic course "Train the trainer on Hospital Hygiene and Infection Control" they have been introducing this relatively new field in health care in the country. This specialised nursing course was scheduled in one year and consisted of one theoretical and two more practical parts. Additional consideration was the emancipator development of the mostly female students. At this moment thirty one students from 26 different hospitals (Government Organisations (GO), Non Government Organisations (NGO), private and the Combined Military hospital have successfully completed this basic course in two batches. The number of Infection Control Practitioners (or Infection Control Nurses) in Bangladesh thus consolidates their position.

The Academy in Specialised Health Care Education is situated in the Northern part of the Netherlands, in Groningen. It has been a professional organisation for more than twenty five years now, with a creditable and respectable experience. On yearly basis about 500-750 students complete courses in all different specialised nursing education.

In the educational system of ACADE 4 main components can be distinguished:

- 1. Basic Higher Vocational Health Care Education: theatre nursing and anaesthetics
- 2. Senior Higher Vocational Health Care Education: mother and child care; paediatrics orthopaedics; intensive care; coronary care; emergency & trauma care, burned patients, hospital hygiene and infection control and chronicle diseases.
- 3. Supplementary Training: e.g. updating courses in nursing
- Contract Activities: e.g. tailor made (in company training) programmes for hospitals or Health Care Projects such as train the trainer courses, mentoring, Basic and Advanced Life Support.

All teachers are qualified and "experts in the field". They are aware of their role as a coach of the learning process of the students. They want to share their knowledge and experience and also expect students to learn from one another how to solve problems in the specific situation in which they practice their profession. There is a close relationship wit participating hospitals who share their expertise in exchanging tutors and clinical experts, including physicians, to develop and stimulate integration of theory in practice and vice versa.

Although core business is higher professional education it has not this status in the Dutch educational system. This means its institutional situation of independence is rather unique in the Netherlands in this field of education. This also implies ACADE is in need for external financial support in fulfilling her role in scientific research.

In order to support a system of specialised nursing education in Bangladesh, ACADE has its partner in NOORDERPOORT COLLEGE (NPC) in Groningen. This is one of the 46 Regional Education Centres (ROC's) in the Netherlands. The ROC's are nationally represented by the Vocational and Adult Education Council (the BVE- Raad). The NPC has a long experience in several fields of health care education and especially as a training college for basic nursing. They can conduct short courses to upgrade the basic nursing skills. NPC has demonstrated both commitment and the capacity to engage successfully in cross border cooperation on a broad front with other educational providers, employers and other organisations.

Appendix 2

Questionnaire for Nurses

Hereby we request your cooperation of this research. We are interested in your opinion on the possibilities to set up a system of specialised nursing education in Bangladesh. It would be very helpful to us if you would fill in this form. It will take about fifteen minutes of your time. Please return your form to Monowara Hospital, Dhaka. Thanking you in advance for your assistance.

Here are some general questions to get a picture of the target audience.

1. What kind of organization do you work in?

GO NGO Private Other

2. For how many years have you been working as a nurse?

Less than 4 4 - 8 More than 8

3. Into which age bracket do you fall?

Under 20 21-29 30-39 40-49 Over 50

4. Gender: Male Female

1 emaie

5. How interested are you in creation of a nursing career ladder which matches with education level and experience?

Not interested May be interested Very interested

6. Do you want a formal system of post registration courses as part of a concept of continuing nursing education?

Yes No 7. What kind of nursing education do you have? Only basic additional University level Other, namely......

The following statements are about how you feel towards participating in a

specialised nursing course. A specialized nursing course is a structured post basic

learning program combining theory and clinical experience in a specific field of health

care. Please circle the degree that best reflects your opinion to this statement.

Example: Agree Agree Strongly agree Neutral Disagree Strongly disagree 8. In areas of speciality it should be formalised that nurses can update their knowledge and skills. Strongly agree Agree Neutral Disagree Strongly disagree 9. There needs to be a choice of full time and part-time programs Strongly agree Agree Neutral Disagree Strongly disagree 10. My hospital should make specialised nursing education more accessible Strongly agree Neutral Disagree Strongly disagree Agree 11. Assessment of nurses should be based on specific competencies relevant to the speciality Strongly agree Agree Neutral Disagree Strongly disagree 12. Specialist competencies should be accredited through the Bangladesh Nursing Council Strongly agree Agree Neutral Disagree Strongly disagree 13. If specialised nursing education is more accessible I am willing to pay the training costs

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
14. Hospitals sh	ould pay the t	training costs		
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

If you want to attend the expert meeting as a part of this research please add your full name, address and telephone number.

15. Additional comments *Ouestionnaire For Teachers*

Hereby we request your cooperation of this research. We are interested in your opinion on the possibilities to set up a system of specialised nursing education in Bangladesh. It would be very helpful to us if you would fill in this form. It will take about fifteen minutes of your time. Please return your form to Monowara Hospital, Dhaka. Thanking you in advance you for your assistance.

Here are some general questions to get a picture of the target audience.

- 1. What kind of organization do you work in?
 - GO NGO Private Other

2. For how many years have you been working as a nurse?

Less than 4 4 - 8 More than 8

3. Into which age bracket do you fall?

- Under 20 21-29 30-39 40-49 Over 50
- 4. Gender: Male Female
- 5. What education did you get to become a nursing teacher? None

Nursing education Specialised nursing education Teaching education Other, namely.....

6. Do you have experience in curriculum development?

Yes No

7. How interested are you in creation of a nursing career ladder which matches with education level and experience?

Not interested May be interested Very interested

- 8. Do you want a formal system of post registration courses as part of a concept of continuing nursing education?
 - Yes No

The following statements are about how you feel towards a system of specialised

nursing education. Specialised nursing education is considered a structured learning

program combining theory and clinical experience in a specific field of health care.

Please circle the degree that best reflects your opinion to this statement.

Example:			
Strongly agree	Agree	Neutral	Disagree
Strongly disagree			

9. In areas of speciality it should be formalised that nurses are provided with the opportunities to update their knowledge and skills.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
10. Every nur	se should bec	come specialised		
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

11. Specialist competencies should be accredited through the Bangladesh Nursing Council

Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
12. Specialised a educators of		ntion course require	the involveme	nt of clinical			
Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
13. Practical ex any hospital		ld be incorporated a	s a componen	t of these courses by			
Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
14. A limited number of clinical facilities should be able tot provide the level of experience required							
Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
15. Specialised nursing education should be paid for by the students themselves							
Strongly agree 16. Students ne	Agree ed to be suppo	Neutral o rted in their own cli	Disagree inical setting	Strongly disagree			
Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
17. Students ne	ed a proper o	rientation to the spec	cialised area o	f placement			
Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
18. Students car relationship	•	pate with a strong pr	eceptor ship o	or mentor			
Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
19. There needs	s to be a choic	e of full time and par	rt-time progra	ams			
Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
20. Specialised	20. Specialised nursing education should be accessible to al nurses						
Strongly agree	Agree	Neutral	Disagree	Strongly disagree			

21. Specialised Nursing educational courses are an important recruitment arm for hospitals if they are willing to facilitate them

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
		opriate budgetar pecialised nursin	y considerations fr g education	om government
Strongly agree	Agree	Neutral	Disagree	Strongly disagree
23. Hospitals should pay the training costs				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

24. If you were the policymaker what specialised nursing education would be on your top 5 list? In the following table you can add a number behind the specialised fields in health care. 1 is what you think most important and 5 is what you think less important. You only can choose 5 subjects at the most.

Surgical Nursing	
Intensive Care	
Medical Nursing Coronary Care	
Paediatrics	
Obstetrics	
Oncology	
Urology	
Pulmonary Care	
Other, namely	
Other, namely	
Other, namely	

The following questions are to find out what is essential to this project to set up specialised nursing education according to you.

- 25. For what reasons do you think former specialised nursing courses failed previously?
- 26. What do you think is needed to develop curricula for different specialised nursing courses?

- 27. What is essential to initiate specialised nursing education according to you?
- 28. Which factors at the institutional level can play a role in achieving sustainability?
- **29.** How interested are you in participating in a project team to set up specialised nursing education?

Not interested Not very interested May be interested Very interested

If you want to be approached to possibly be part of a project team to set up specialised nursing education please add your full name, address and telephone number.

Additional comments

Appendix 3

Table A1: Factors at the institutional level that play a role in achieving sustainability

Former	Future	
(Wo)manpower		
Shortage of specialised trainer Knowledge full	trainer required	
Lack of specialised teachers in relation to subject	Excellent & well experienced & skilled	
Absent of qualified personnel specialised	teachers	
Lack of trained teachers Expert resource persons		
No teacher is done as advanced nursing Well	experienced and knowledgeable motivated	
Specialised guest lecturer for not able to pay	teachers or trainers	
honorarium for the lecturers Needed subject	based teacher	
There is no specialised nursing expertise	Availability of skilled person	
Good leadership and interpersonal		
relationship		
Proper management		
Curriculum		

Due to lack of curricular adjustment Not set up proper curriculum about specialised course Insufficient course contents Shortage of curriculum Improper selection of the course	Specialised education will run continuously Make an appropriate/standard course curriculum Well planned structured program Curriculum is needed according to students level, community based learning is necessary Small group of students Number of students should not be more than limit of institute (e.g. DMCH = 50) To approve the curriculum by BNC in basic education Demandable course
	Course should be rich in new information,
Student rela	attractive participatory with new methodology
Poor selection of students Level of students	
	quality should be high
Lack of remuneration and recruiting facilities & impropriate placement Level of student should at	Admission criteria should be used (changed) least M.S.C. passed
Accommodation facility (hostel facility)	least M.S.C. passed
Infrastr	ucture
Lack of infrastructure (building, institution,	Administrators
resources, equipments) Proper management	
Lack of infrastructural facilities, funds,	Infrastructure
organisational and institutional framework To	run this specialised nursing education at the
	institutional level
Facil	ities
Due to lack of physical facilities	In-service training / on job training
Learning situation not well set up; Due to lack of	Proper clinical practice facilities
practice facilities; Due to lack of clinical practice	Clinical practice in the real situation
facilities;.Nurses could not utilize their	Availability of appropriate specialised hospital
knowledge in their practical field	to develop human resources on regular bases
Teaching & learning in the classroom are not relevant with the real practical field	Health related research
Improper teaching aids, Lack of teaching aids	Physical facilities (classrooms, demonstration
and new technology, Lack of books in special	rooms, library, hostel, etc) Subjective books facilities
subjects, Material required are not available	Recreation facilities
during the actual work	To created (subject based) teacher post
, , , , , , , , , , , , , , , , , , ,	To created (subject bused) teacher post

Former	Future
Budget or Fund	

Due to lack of fund Ensure budget for the	sustainability of the
No fund and resources course	sustainability of the
Lack of budget (for course coordinator) Require	budget
Improper budget (for course coordinator) require	funds & support
Funds constraints systems	runus & support
Lack of Government budget Resources (man,	money, time, materials)
Improper utilization resource Funds, support	system and research facilities
improper utilization resource r unds, support	Sufficient fund & time, teaching
	staffs
	Cost of the course should be within the
	ability of the student
Govern	-
Negligence of nursing higher authorities	Vision
Due to lack of motivation of higher authorities	Good policy makers
Less attention from government, wrong	Continuous support from both govt. and non
placement	government organisations
Because less initiative ness of government Govt.	Need government policy to run the course in
doesn't feel the need of specialised nursing	that institute
education in Bangladesh Government is not	
interested	
Due to lack of iniativeness	
Policy	
No written policy in top level	
No vision and policy	
No policymaker	
There was no (hospital) local & national policy	
according tot the advancement of science &	
technology to meet the need of the people even	
now Lack of national policy	
Lack of national policy Lack of vision (foresight and insight)	
Due to fault of government policy	
Health Care system related causes	
Due to improper nurse-patient ratio	
Conflict between nursing authority and medical authority	
Nursing is neglecting job than other in health	
sector Under or not utilization of trained	
manpower	
Insufficient support from the health managers	
and health care providers	
Lack of incinerators	
Plann	ing
	τ c

Improper planning Not proper utilized to right people in right place Faulty planning and policy Not linkage with various topics No evaluation and there was no system to followup the programme Plan and implementation Improper dissemination about the course	Proper planning, organizing, budgeting and coordinating Initiative part of the teaching staffs
--	--

Former	Future	
Coordin	nation	
Absent of coordination Coordination &	cooperation between	
Poor supervision specialised hospitals & training	institution	
Lack of supervision, assessment & evaluation	Cooperation and intradepartmental	
coordination		
Faulty administration Theory and practice	relationship learning by	
No proper administration doing is very helpful		
Commur		
For set up specialised nursing course lack of	Communication made others specialised area	
communication others such as BNC	Establish good relationship with other related	
Lack of communication with senior management	sectors	
	Good cooperation	
	Discussion should be made with higher	
	authority and concerned persons for further improvement of course	
	Maintain well communication & proper	
	delegation	
	Good communication with various level	
	Supervision	
	Proper supervision	
	Accountability, supervision and follow up	
	Supervision, assessment, evaluation after	
	completion of the course	
	Quality committee should be there	
	Monitoring	
	Monitoring/recording	
	Detail report of the program send to the	
	authority and other agency	
	Continuous monitory, mentoring & evaluation	
	of the expected outcome	
	Proper administration	
	There must be a goal to achieve	
	Essential requisite record and reporting system	
	Evaluate, follow up & reporting about program	
	Responsible person must be there to check and	
	evaluate the achievement	
Career ladder		

Lack of proper deployment There is no special career ladder General nurse & specialised nurse is valued equally, no special facilities Poor incentive There is no accountability and continuity of work. Before achievement of goal-stop Lack of job placement	Must have job description according to post and position After completion of the course, utilization of the employee in proper place Ensuring the requirement or deployment of specially trained nurses Appropriate remuneration & recognition of their job To create specialised nursing post in special
	area Hope of better job, Accountability Provision of reward and punishment, Provision of incentives & reward, Appraisal system Profound career developments

Former	Future	
Motivation		
Lack of willingness & importance of specialised courses, Lack of accountability Nobody thinks about specialised nursing is most important to provide special competent nursing care even physician. So they ignore this side but people demands increase day by day so they go outside of the hospitals & country for better care Failure of showing the rationales of conducting different specialised courses Lack of awareness about the need for specialised nursing courses on the part of the specialised doctors/medical professionals and also of the nursing authorities regarding the scientific advancement of health sciences and technologies.	Motivation and overcome conflict Requirement of will force (desire) Positive attitude towards specialised nursing education Requirement of strong desire ness Support through clients, political vaders Sorend judgement Use of knowledge and skill in effective way	