Faculty of Community and Development Disciplines
School of Nursing
University of Natal, Durban

AN ANALYSIS OF THE CURRENT BASIC NURSING EDUCATION SYSTEMS OF FRANCOPHONE AFRICAN COUNTRIES OF THE WORLD HEALTH ORGANIZATION AFRO REGION

Thesis submitted in fulfillment of the requirements for the degree of Doctor of Philosophy (Ph.D.) in Nursing.

By

Richard Makombo Ganga-Limando

Supervisor: Prof. N. S. Gwele

January 2001

TABLE OF CONTENTS

Page

LIST OF TABLES v
LIST OF FIGURES vi
LIST OF ABBREVIATION vii
DECLARATION viii
DEDICATION ix
ACKNOWLEDGMENT x
ABSTRACT xi

CHAPTER 1: INTRODUCTION

1.1 Problem Statement 1
1.2 Background 8
1.3 Research Aim and Objectives 15
1.4 Research Questions 16
1.5 Significance of the study 17
1.6 Conceptual definition of key concepts 18

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction 20
2.2 The Development of General Education Systems in Africa 21
2.3 Trends in health care delivery systems in Africa 29
2.4 Trends in the development of Basic Nursing Education in Africa 33
2.5 The International Organizations and Basic Nursing Education systems 38
2.5.1 The WHO and Basic Nursing Education Systems 40
2.5.1.1 Aims and Objectives of Basic Nursing Education 40
2.5.1.2 Structures of the programs 42
2.5.1.2.1 Admission requirements 42
2.5.1.2.2 Theoretical content of the programs 42
2.5.1.2.3 Clinical learning content 43
2.5.1.2.4 Teaching methods and teaching staff 44
2.5.1.3 Administration or control 45
2.5.1.4 Support services and Financing 45

2.5.2 The ICN and Basic Nursing Education Systems 46
2.5.2.1 Aims and Objectives of Basic Nursing Education 46
2.5.2.2 Structures of the programs 47
2.5.2.2.1 Admission requirements 47
2.5.2.2.2 Theoretical content of the programs 47
2.5.2.2.3 Clinical learning content 48
2.5.2.2.4 Teaching Methods 48
2.5.2.3 Administration or control 48
2.5.2.4 Support services and Financing 49
2.5.3 The ILO and Basic Nursing Education Systems 49
2.5.3.1 Aims and Objectives of Basic Nursing Education 49
2.5.3.2 Structures of the Programs 50
2.5.2.3 Administration or Control 50
2.5.2.4 Support services 51
2.6 Decision-making Models 51
2.7 Summary 54
2.8 Conceptual Framework 58
2.8.1 The WHO recommendations 59
2.8.2 Steps in Decision-making Process 59

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction 65
3.2 Phase I: Analysis and description of the current Basic Nursing Education Systems 66
3.2.1 Introduction 66
3.2.2 Research Design 66
3.2.3 Sample and Sampling techniques 67
3.2.4 Instrument 68
3.2.5 Data Collection 70
3.2.6 Data Analysis 70
3.2.7 Ethical consideration 71
3.3. Phase II: Exploration of future orientation of Basic Nursing Education Systems 72
3.3.1 Introduction 72
3.3.2 Research Design 72
3.3.3 Sample and Sampling techniques 73
3.3.4 Instrument 74
3.3.5 Data Collection 76
3.3.6 Data Analysis 76
3.3.7 Ethical Consideration 77

CHAPTER 4: PRESENTATION OF THE MAIN RESULTS OF THE FINDINGS

4.1 Introduction 79
4.2 Description and Analysis of the Current Basic Nursing Education Systems 80
4.2.1 General Aims of the Basic Nursing Education Programs 80
4.2.2 General Objectives of Basic Nursing Education Programs 84
4.2.3 Beginning and last review of Basic Nursing Education Programs 86
4.2.4 Structures of the programs 89
4.2.4.1 Duration and Admission requirements 89
4.2.4.2 General description of the learning experiences 97
4.2.4.3 Theoretical content of the programs 98
4.2.4.4 Clinical Learning content 104
4.2.4.5 Teaching methods and Students Evaluation 105
4.2.5. Administration or control 107
4.2.5.1 Number of Basic Nursing Educational Institutions 107
4.2.5.2 National Controlling Bodies and Academic calendar 107
4.2.5.3 Teaching staff and qualifications of Heads of Nursing Education Institutions 108
4.2.6 Support services and Financing 109
4.2.7 Current basic nursing education systems as Perceived by the participating countries 113
4.2.7.1 Problems facing the current systems 113
4.2.7.2 Factors supporting the needs for changes 115
4.3 Exploration of future orientation of Basic Nursing Education Systems as perceived by stakeholders 120
4.3.1 Introduction 120
4.3.2 Changes required in Basic Nursing Education 120
4.3.2.1 First Round Delphi 120
4.3.2.2 Third Round Delphi 122
4.3.3 Resources required for initiating changes 126
4.3.3.1 First Round Delphi 127
4.3.3.2 Third Round Delphi 128
4.3.4. Steps to be taken to initiate changes 128
4.3.4.1 First Round Delphi 128

4.3.4.2 Third Round Delphi 130

CHAPTER 5: DISCUSION, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction 134
5.2 Description and Analysis of current basic nursing Basic Nursing education systems 135
5.2.1 Basic Nursing Education Institutions 135
5.2.2 Basic Nursing Education Programs 142
5.2.3 Current Basic Nursing Education systems as perceived by the participating countries 148
5.3.1 Problems facing the current systems 148
5.3.3.2 Factors supporting the needs for changes 147
5.3 Exploration of the future orientation of Basic Nursing Education systems as perceived by stakeholders 148
5.3.1 Changes required in Basic Nursing Education 148
5.3.2 Resources required for initiating changes 150
5.3.3 Steps to be taken 152

LIST OF REFERENCES 156
APPENDIXES:
ONE: Request for participation to the study 183
TWO: First phase questionnaire 184
THREE: Second phase questionnaires 197

LIST OF TABLES

Tables	Page
Table 1: Francophone African countries of the WHO Afro Region	14
Table 2: Enrolments and literacy rates in selected colonial African Countries in 1960 as a percentage	2 4
Table 3: History of modern Nursing Education in selected countries	36
Table 4: Beginning and Last Review of Basic Nursing Education programs	90
Table 5: General description of the learning experiences	98
Table 6: Theoretical content of Basic Nursing Education programs	103
Table 7: Summary of the clinical content of Basic Nursing Education programs	105
Table 8: Teaching Methods used in Basic Nursing Education programs	106
Table 9: Support services available to teaching staff and students	110

LIST OF FIGURES

Figures	Page
Figure 1: The 6-6-3-2 General Education System Model within former Belgium colonies	27
Figure 2: The 6-4-3-3-2 General Education System Model within former French colonies	28
Figure 3: WHO recommendations as applied to the study	63
Figure 4: Nine steps decision-making model as applied to the study	64
Figure 5: Research process	78
Figure 6: Summary of the General Aims of the programs	83
Figure 7: Summary of the General Objectives of the programs	87
Figure 8: Pathways to three years Basic Nursing Diploma	92
Figure 9: Pathways to four years Basic Nursing Diploma	94
Figure 10: Pathways to three years Basic Nursing Degree	96
Figure 11a: Framework of the current systems of Basic Nursing Education of the Francophone African Countries of WHO Afro Region	111
Figure 11b: Framework of the current systems of Basic Nursing Education of the Francophone African countries of WHO Afro Region	112
Figure 12: Summary of problems facing the current systems as perceived by the participating countries	118
Figure 13: Factors supporting the need to change as perceived by the participating countries	119
Figure 14: Framework for the future orientation of Basic Nursing Education Systems of the Francophone African countries of WHO Afro Region	132
Figure 15: Framework for change in Basic Nursing Education Systems of Francophone African countries of WHO Afro Region	133

LIST OF ABBREVIATIONS

CBE: Community-Based Education

CSL: Clinical Skills Laboratory

ICN: International Council of Nurses

ILO: International Labour Organization

N: Number

PHC: Primary Health Care

PhD: Doctor of Philosophy

WHA: World Health Assembly

WHO: World Health Organization

%: Percentage

DECLARATION

I declare that this research is my own original work, unless specifically indicated to the contrary in the text.
The sources used have been indicated as reference and/or quotations. This work is being submitted for the degree of Doctor of Philosophy (PhD) in Nursing at the Faculty of Community Development and Disciplines, University of Natal. It has never been submitted before for any degree or examination in any other university.

I am solely responsible for the opinions, interpretations and conclusions done in this study.

.... January 2001

Richard Makombo Ganga-Limando

DEDICATION

"Si longue que soit la nuit, le jour viendra".

En ce jour qui vient de paraître, je dédie ce travail à:

- Toi, ma charmante épouse, Odette Magbetha Muho Egbasa-Monzia, pour toutes les nuits et journées de solitude que tu as passé durant toute la periode de la redaction de ce travail
- Vous, mes enfants, pour l'affection paternelle dont vous avez manqué durant toute la periode de la redaction de ce travail
- Vous, mes parents, Bavon Makombo Liwoke and Odelline Mopu Abia, pour m'avoir instruit selon la sagesse de Dieu
- Mon frère-ainé, Faustin Robert Makombo Ma-Ebwa, sa famille, mes frères et soeurs pour le role special et irremplaçable que vous avez joué pendant des moments difficiles et critiques de ma vie.

Que la grace et la misericorde de notre Père Celeste abonde dans vos vies. Vous êtes les meilleurs au monde.

ACKNOWLEDGEMENTS

My special gratitude goes to the following persons:

- Professor N,S. Gwele, the research supervisor, for her guidance, time and support
- Professor L.R. Uys, Head of Nursing School at the University of Natal, for the important role she played during the early stage of this research and her commitment to the development of nursing education in the African Region of WHO
- Dr O. Adejumo for his support and advices specifically at the early stage of this research
- My colleagues, at the School of Nursing, University of Natal for the constructive advices, suggestions and support you have given to me during the study
- The members of National Regulatory Bodies for nursing and nursing education and the National Associations of Nurses of the Francophone African countries of WHO Afro Region, for participating in data collection
- Mr and Mrs. Lingandu Mabele for their contribution at the final stage of this research
- Mr and Mrs Kitoko for
- All other persons not named or referred to above who were of assistance to us.

I thank you all, and may God bless you.

ABSTRACT

It is against the background of new developments and initiates taking place in various countries to make basic nursing education systems more responsive and relevant to the ever-changing nature of society that a cross-national study of the current systems of basic nursing education of francophone African countries of WHO Afro Region was undertaken. The aim of the study was to describe and analyze the current systems of basic nursing education in Francophone African countries of WHO Afro Region with a view to providing guidelines for change toward a basic nursing education system that is in line with the recommendations of WHO (1994, 1985, 1984, 1966) and the various countries' health care delivery systems' policies.

In the first phase, data was generated by means of a self-completion mailed questionnaire, administered to the members of the national regulatory bodies of nursing and nursing education from eighteen countries. The design of the above named questionnaire was based on the WHO (1994, 1985, 1984, and 1966) recommendations pertaining to basic nursing education systems. The main results of the findings of this phase showed two major trends. Firstly, more differences than similarities existed between the WHO (1994, 1985, 1984, and 1966) recommendations and the current basic nursing education systems of the countries under study. Secondly, discrepancies existed between the various countries' health care delivery systems' policies and the existing systems of basic nursing education. Finally, all the respondents expressed the views that the current basic nursing education systems are faced with educational and organizational changes and they agreed that there is a need to change the current basic nursing education systems.

In the second phase, data was generated by means of three rounds Delphi questionnaires, administered to the national members of the regulatory bodies of nursing and nursing education as well as the members of national nursing associations from eighteen countries. The design of the first round Delphi questionnaire was based on the results of the first phase of this study, while the preceding round informed the design of the questionnaire of the next round. The main results of the findings showed similarities between the future orientation of the basic nursing education systems and the recommendations of the WHO as well as the global trends in the development of the basic nursing education. The stakeholders expressed the view that the national governments, the National Associations of Nurses and the Regional Office of WHO Afro Region need to play an active role in the transformation and the development of the basic nursing education systems in the Region. They suggested that the systems of educating nurses should move toward meeting the demands of the health care services and the global trends in the development of nursing and nursing education.

CHAPTER ONE

INTRODUCTION

1. 1. PROBLEM STATEMENT

It is against the background of new developments and initiatives taking place in various countries to make basic nursing education system more responsive to the ever-changing nature of the society, such as the expanding knowledge in nursing, advances in technology and medical sciences, epidemiological and demographic factors, the demands of the health care delivery system, the political and economic climate and the international trend that this study was undertaken. The main assumption is that the quality of basic nursing education will determine whether nursing will be able to adequately meet the challenges created by the needs of ever-changing society and overcome the limitations placed on the profession by factors within the society.

The literature supports the notion that the education of nurses should move with the technological advancements; the health care delivery system; the expanding knowledge of the profession and medical sciences; the health needs and demands of the people; and the current political and economic trends of the country and the world in general. It is further emphasized that the ever growing changes within the society magnify the challenges in regard to the relevance of the nursing education system which has a key role in facilitating the professional and personal development of students and thereby keeping nursing practice relevant to the health needs and expectations of the society (ICN, 1997; Mellish & Brink, 1990; Pendleton & Myles, 1993; Salvage, 1993; WHO, 1985). Within the above context, the major focus of this study is to

determine the extent to which changes have been introduced to basic nursing education in Francophone African countries of the World Health Organisation (WHO) and to determine which direction might be taken for the future.

The exploration of literature on nursing and nursing education in Francophone Africa yielded limited results. There is almost nothing written on nursing and nursing education trends in Francophone Africa. From the existing literature (Osei-Boateng, 1992; Uys, 1999; WHO, 1994) and the results of a 1998 survey conducted by the WHO Collaborating Centre for the Development of Basic Nursing and Midwifery Education in Africa, problems facing basic nursing education in Francophone African countries of the WHO Afro region can be summarized as follow:

1. **The current basic nursing education system is not adequately geared towards meeting the needs of the health care delivery systems**. For example, the Primary Health Care (PHC) approach launched by the WHO in 1978 as a strategy to reach "health for all" has become central to the health care delivery system policies in most African countries. In response to the PHC approach, the education of nurses in some African countries (Ghana, Kenya, Nigeria, Uganda, and South Africa) has shifted from the predominantly medical model of diseases and hospital-based care to include the primary health care components with clinical learning taking place in a variety of settings outside the hospitals, thus enabling graduates at the diploma or degree level to render promotive, preventive, curative and rehabilitative care in a variety of settings, including hospitals, clinics and communities. In

Francophone Africa, there are few indications of change in basic nursing education towards PHC (Osei-Boateng, 1992; WHO, 1994).

2. **The education of nurses does not allow the academic preparation of nurses needed to ensure the development of the profession**. The academic preparation is seen as one of the ways to achieve professional development. Stevens (1985) stated that throughout history, very few fields have achieved professional status outside of traditional academic structures and there is no reason to assume that nursing is so powerful or so profound to be any different. Higher or University education for nurses has become a desired goal for many countries for the past decades. This provides good opportunity for professional development of nurses and nursing as a profession. A number of Anglophone African countries (Kenya, Ghana, Namibia, Nigeria, South Africa and Zimbabwe) have developed basic nursing education and a variety of graduate and post-graduate programs at university level with nursing colleges affiliated to universities (ESCACON, 1998; Nursing in the World, 1993; SANC, 1985; White, 1988). The European Union, for example, has recommended that nursing education in all member states should take place at university level in the 21st century (Lanara, 1989; Salvage, 1993). In Latin America, 69% of nursing programs are linked to universities (ICN, 1997). In Francophone Africa, there are few graduate and post- graduate programs as well as clinical specialist programs at the post -diploma or post-graduate level, with a high rate of hospital-based educational institutions and nurse educators having mainly a basic diploma qualification (Uys, 1999). Candidates wanting to progress beyond the basic degree program or undertake advanced programs need to go out of the region. However, it is frequently difficult, if not impossible, for them

to obtain permits to study in other countries or secure finance. They may also first have to learn the medium of instruction used in those countries.

3. **The regulation of the nursing education system does not facilitate the development of basic nursing education toward maintaining or meeting the expected standards**. Such regulation deals with the programs (type, aims and objectives, structure of education, financing, the facilities, human resources, etc), the qualifications, functions and principles of practice. The standards of nursing education and nursing practice provide criteria for evaluating the quality of nursing education and the effectiveness of nursing practice (Creasia & Parker, 1991). Thus Affara and Styles (1993) argue that the regulation of nursing education ensures that standards for the preparation of nurses are being maintained. In addition, the education and practice standards should be comparable, and the regulatory process complementary to that of other professions. Except for the Republic of Cameroon and Seychelles, which have nursing regulatory bodies, the rest of the Francophone countries of the WHO Afro Region do not have such a body. Some Francophone African countries do have nurses' associations, which act as professional regulatory bodies, although membership to these associations is not compulsory (ICN, 1986; Nursing in the world, 1993). Nursing leaders (Ellis & Hartley, 1984; Cole, 1996) agree on the fact that a lack of a nursing regulatory body may result in lower quality of patient care; the retardation of the development of the profession as a whole because the public cannot differentiate between those without an appropriate education and standard of practice and those who are qualified; lower economic status of professionals because those without good education

and registration tend to work for lower salaries, and consequently holding down the salaries of those with registration; and the proliferation of non approved nursing education institutions with varied education standards.

4. **The current basic nursing education offers few mobility opportunities for students within the educational institutions of the region and the exchange of resources, as well as limited career opportunities for the graduates.** Advances in technology brought nations into closer proximity with one another, facilitated networking and human movement. It resulted in regional co-operation, professional networking and harmonization of professional practice and education. For example, nurse educators in Anglophone Africa have come together at regional and continental level with a vision of unifying their nursing education and networking. The West African College of Nursing (WACN) is an example of a regional organisation seeking harmonization of basic nursing education within the Anglophone countries in West Africa (Adedoyin, 1988); and the East, Central and Southern African College of Nursing is another professional body of nurses with a vision of unifying basic nursing education and networking with nurses of the Commonwealth in the African continent (ECSACON, 1997). Nurses in the European Community have also come together to share ideas and seek a common vision of nursing and nursing education among the thirty-two member states of the region (Salvage, 1993). However, there is no sign of such an initiative taking place in the Francophone African region. The Federation of Nurses' Associations of Francophone Africa is still fighting to strengthen the national nurses' associations and the establishment of

professional regulatory bodies in the member countries (International Nursing Review, 1994).

5. **The current basic nursing education systems do not provide graduates with enough research skills and nurse educators in the region do not have adequate support to engage in research activities for the development of the profession and the practice of nursing.** Research activities are part of the basic activities which facilitate the development of any profession (Leddy & Pepper, 1985). For the past several decades, nursing education curricula have increasingly emphasized the research process and use of research findings in planning care (Lindeman, 1995; Moccia, 1993). In some countries, such as Canada, the United States of America and Britain, research based programs have been developed at Masters and Doctoral levels resulting in the development of a research mentality in nurses and an awareness and ability to appreciate research findings to see the relevance of research to nursing practice (Chaska, 1983; Davis & Bernard, 1992). In Africa, some Anglophone countries, such as Namibia, Nigeria, and South Africa, have developed Masters and Doctoral programs for nurses at the university levels (Osei-Boateng, 1992). Based on published literature, it seems that this development has not taken place in Francophone African countries under study.

6. **The current basic nursing education system seems unresponsive to the prevailing economic and social climate of the countries.** Nursing education in every country is shaped by the economic and social climate of the country. The economic exigencies of reduced resources with an increasingly high cost of public and private education and the general movement towards greater public accountability challenge nurse

educators to develop new ways in seeking to accomplish more with less, and design programs which are socially relevant and reflective of the needs and demands of the communities with an emphasis on the outcomes and expected or guaranteed competencies of the graduates (Holmes, 1990; White, 1988). In Anglophone African countries, like Botswana, Ghana, Kenya, Uganda, and South Africa, the basic nursing education programs of registered nurses with four qualifications of general nursing, midwifery, psychiatric and community health nursing have changed from six years to four years comprehensive basic programs that prepare graduates to register for the same four qualifications (SANC, 1985). The distance learning education, open learning, part-time studies, computer self-study packages, etc, are examples of programs based on the economic and social development of the country. There is no sign of such programs in Francophone African countries under study.

The preceding problems suggest that changes in Basic Nursing Education are inevitable. Anglophone African countries of the WHO have responded positively as compared to Francophone African countries. Nurse educators within the Anglophone region of WHO are constantly striving to keep the education systems of nurses relevant to the ever-changing nature of the society, such as the expanding knowledge in nursing, advances in technology and medical sciences, the health care delivery system, the international trend and the socio-economic and political factors. However, based on years of experience of the current researcher with nursing education in the Francophone and Anglophone African countries, there seems to be an understanding that nursing education in the Francophone African countries of the WHO exists outside of the global trends in the education of nurses; nor is it in any

way part of the region' socio-economic and political context. Hence, for years, nursing education in Francophone Africa has remained unaffected by developments and changing perspectives regarding undergraduate education in the health profession. There is the need, therefore, to analyse the current systems of basic nursing education of this large portion of the region in order to understand its current status and to explore the future direction.

1. 2. BACKGROUND

Africa, a vast continent made up of fifty-three countries and their adjacent islands, covers sun-seared desert, temperate highlands, dense jungles and magnificent scenery. It has become customary to refer to the African countries in terms of their position to the Sahara desert or to their international language of affiliation (Malan, 1997). About 88,7% (n=47) of the African countries are situated on the South of the Sahara and 11,3% (n=6) to the North of the Sahara. According to their international language of affiliation, 45,3% (n=24) are Francophone or French speaking; 43,3% (n=23) are Anglophone or English speaking; 9,4% (n=5) are Lusophone or Portuguese speaking and 2,0% (n=1) are Hispano phone or Spanish speaking. About 642 million people, or an estimated 12,0% of the total population of the world, live in Africa. This population is predominantly rural, with less than a third living in towns or cities (World Bank Report, 1997).

Forty-six of the fifty-three African countries are members of the World Health Organization (WHO) Afro Region and seven are members of the Mediterranean Region of WHO. Of the forty-six African countries of the WHO Afro Region, twenty-one are Francophone,

nineteen are Anglophone, five are Lusophone and one is a Hispanophone (WHO, 1998). According to the colonial past, three of the Francophone African countries of the WHO Afro Region are former Belgium colonies and the remaining eighteen are former French colonies. The majority (95,0%, n=20) of the Francophone African countries of WHO Afro Region regained independence between 1960 and 1965. Only one country regained independence before 1960 (see Table 1). In terms of geographical positions on the continent, 47,6% (n=10) of the above countries are situated in the Western Africa Region, 33,3% (n=7) in the Central Africa Region, 14,3% (n=3) in the Western Indian Ocean Region and 4,8% (n=1) in the Northern Africa Region (see Table 1).

The health care of the African population of the WHO Region depends largely on nurses. It is estimated that nurses and midwives represent 60-75% of the workforce in national health care in the Region (WHO, 1998). This means that the education of nurses should equip them with a variety of skills and knowledge, which will enable them to meet effectively the health needs and demands of the population. Nevertheless, in Africa, there are known problems of episodes of drought and famine, poverty, political and social instabilities, war, over population and refugees. These problems are already too familiar as they provide the background for most of the scenario in the health of the people and the education of the health professionals in Africa. In addition, the high morbidity and mortality rates resulting from communicable diseases, such as cholera, malaria, tuberculosis and HIV/ AIDS; the increased levels of unemployment and low cash flows at households level and a young population which will double in about twenty years, all pose a major challenge to the nursing profession and the

system of the education of nurses. Countries trying to meet these old and new demands are short of money and often lack up-to-date knowledge and skills (Butterworth, 1995; ESCACON, 1997; ICN, 1997; World Bank Report, 1997).

The nurse educators of the continent agree on the need for change in the educational system of nurses of the continent. They suggest that the complex nature of economic, cultural, political and social changes, including the increase in old, new and emerging disease entities, require a reassessment of the education system of nurses. They argue that basic nursing education during the 21st century in Africa should produce nurses who are able to provide nursing and comprehensive health care throughout the life span, modify the impact of disease and illness on clients, assist the clients to participate in their own care, and provide care to clients presenting with diverse health problems and other problems associated with poverty, armed conflict, and unplanned massive population movements (ECSACON, 1998; WHO, 1998).

Basic nursing education in other African countries as well as other parts of the world, has shown signs of development over the past decades as a result of either internal needs and demands within the profession or external pressures from society (Davis, 1995; Hays, 1994; ICN, 1997; Osei-Boateng, 1992; Salvage, 1993; WHO, 1994; WHO; 1993). Some indicators of developments in basic nursing education in some countries in Africa and other parts of the world include:

1. A move to university or higher education for nurses with significant increases in the numbers of advanced nurse practitioners prepared to provide quality health care to individuals, families, groups and communities in a variety of settings and function effectively in inter-

disciplinary and inter-sectorial teams (Moccia, 1993; WHA, 1992).

2. A shift from the traditional approaches, such as content-based education, to innovative approaches, such as problem-based education; case-based curriculum; community-based education; and outcomes -based education, which focus on both the process of learning and the content. These approaches prepare the graduates to function competently in a health delivery system where the individual and the family have primary responsibility for health care decisions (Barrows & Tamblyn, 1980; Hurst, 1985; Sefton, 1997).

3. An increase in the utilisation of community settings, such as homes, schools, work places, clinics, long-term care facilities and shelters, as clinical learning sites for students as opposed to the predominantly hospital-based settings (Bunn, 1995; WHA, 1992).

4. A shift from teaching methods, such as lecturing and tutoring, which focus on the teacher's role as transmitter of subject matter or provider of knowledge, to approaches, such as action learning, self-directed learning and learning teams, which focus on the student and on more natural ways of learning with the teacher playing the roles of professional consultant, confidant, learner and facilitator of learning (Brigdes, 1992; Kaufman, 1985; Sadlo, 1995).

5. An increased emphasis toward more research in nursing as a theoretical foundation for nursing education and practice; and an increase in the number of nurse educators with Masters and Ph.D. in different fields of nursing (Chaska, 1983; Ellis & Hartley, 1984).

6. A new emphasis on the traditional relationships between teaching, research, and community service. The mission of nursing education is turning more and more towards not only the promotion of quality care

through teaching but also to the creation of linkages that allow the educational projects of students and teaching staff to actually provide service to the community (McIntyre, 1997; Moccia, 1993).

7. An increased number of programs and approaches designed to meet the needs of students, such as distance education, part-time studies, bridging, and continuing education programs. These approaches take educational programs to students rather than requiring students to come to the educational institutions. The part-time studies allow students to work while attending school. The bridging and continuing education programs assist students to further their education or to equip practitioners with new knowledge and skills (Abatt & Majia, 1988; Osler, 1994).

The slow development of nursing education in Francophone African countries might be due to many factors, such as the functioning of the basic nursing education institutions outside the main stream of the education system. Gwele (1995) indicated that the development of nursing education system is more problematic in countries where the systems of educating nurses are controlled by the ministries of health than the ministries of education. She argued that the ministry of health does not see the development of nursing education as a priority. Therefore, the educational institutions do not get the resources required to ensure the development of nursing education. The educational institutions are mainly headed by the medical doctors resulting to the medically oriented curricula, lack of opportunities for leadership development for nurses, etc.

Within the 21st century, the economic and political climate will continue to change; innovations will occur in the health care system while

the accessibility to care will continue to be problematic; advances in technology and medical sciences will continue to provide knowledge and technology to improve the health status of the people; countries will move closer and closer, allowing for networking among professionals; and competition will increase, creating the needs for skilled and more qualified professionals (ECSACON, 1998; ICN, 1997; Moccia, 1993; Salvage, 1993; WHO, 1985). Therefore, nursing education systems need to be scrutinized to assure that the education of nurses prepares the graduates appropriately to meet these changes. It also means that nurse educators will need to be responsive to new innovations and incorporate these into teaching methods, and at the same time adjusting to accomplish all the above with reduced resources.

Table 1. Francophone African countries of the WHO Afro Region (n=21)

Countries per geographic position	Year of Independence
Central African Region (33,3%)	
1. Burundi*	1962
2. Cameroon	1960
3. Central African Republic	1960
4. Chad	1960
5. Congo	1960
6. Democratic Republic of Congo*	1960
7. Gabon	1960
8. Rwanda *	1962
Western African Region (47,6%)	
1. Benin	1960
2. Burkina Faso	1960
3. Guinea	1958
4. Ivory Coast	1960
5. Mali	1960
6. Mauritania	1960
7. Niger	1960
8. Senegal	1960
9. Togo	1960
Western Indian Ocean Region (14,3%)	
1. Comoro	1960
2. Madagascar	1960
3. Seychelles	1965
Northern African Region (4,8%)	
1. Algeria	1962

*: Former Belgium colonies.

1. 3. RESEARCH AIM AND OBJECTIVES

The study aims at providing a framework which might be used to initiate educational changes in basic nursing education systems in Francophone Africa of WHO AFRO Region, more specifically the process of harmonisation of the different systems, and networking in the Region by exploring the prospective future direction as perceived by stakeholders from the different countries under study. It also aims at providing a framework that might be used to improve the different systems towards the recommendations of the WHO by describing and analysing their current systems of basic nursing education.

The objectives of the study are twofold:

1. To describe and analyse the current systems of basic nursing education in Francophone African countries of WHO Afro Region, particularly to identify the similarities and differences between countries, to compare the different systems with the WHO recommendations (1994, 1985, 1984, 1966), and to explore the problems facing the current systems as perceived by stakeholders.
2. To explore the future orientation of basic nursing education systems in respective countries as perceived by stakeholders; more specifically, the change required, the resources required to initiate the above change, and the steps needed to implement the suggested changes.

1.4. RESEARCH QUESTIONS

The research attempts to answer the following questions:

1. What are the current systems of basic nursing education in Francophone African countries of WHO Afro Region?
   - i. What are the similarities and differences between countries?
   - ii. How do basic nursing education systems in Francophone African countries of the WHO AFRO Region compare to the recommendations of the WHO (1994, 1985, 1984, 1966)?
   - iii. What are the problems facing the current systems of basic nursing education?
   - iv. Is there a need to initiate changes in the current systems of basic nursing education?
   - v. If so, what are the factors in support of such changes?

2. What is the future orientation of basic nursing education systems in Francophone African countries of the WHO Afro Region as perceived by the stakeholders?
   - i. What changes are required?
   - ii. What resources are required?
   - iii. What steps need to be taken to initiate changes and who should take the steps?

1. 5. SIGNIFICANCE OF THE STUDY

A study of this nature bears a particular interest not only to the size of the Francophone Region but also for the pressing need for change. By analysing and describing current systems of basic nursing education in the region, it is hoped that a framework may be deduced to establish the nature of the current systems. The literature review revealed that a study of this nature has not been reported by anyone in the Region. Therefore, the deduced framework may serve as documentation for future reference and reporting for nurse educators, students, researchers, as well as policy makers. By interpreting the degree to which the various recommendations of WHO have, or have not been accommodated into current systems of basic nursing education, as well as analysing the problems facing the current systems as perceived by the stakeholders, guidelines may be deduced to aid further research with a view to the optimal implementation of the recommendations on the one hand, and to serve for planning of priorities on the other.

By exploring the future orientation of the educational systems of basic nursing education as perceived by the stakeholders, it is hoped that a framework may be established to serve as guidelines for future discussions, further action or policy formulation. This framework may also be used by nurse educators in the Region as a guideline for the development of new programs that are otherwise only available abroad or share resources. Thus cutting down on costs at the time where countries are faced with financial constraints.

1.6. CONCEPTUAL DEFINITION OF KEY CONCEPTS

Basic Nursing Education System: The concept "system" is defined as a set of resources or elements that are organized to function in order to achieve a specific goal. It is also an ongoing process that consists of diverse elements and their relationships to each other. Furthermore, a system is defined as a set of deliberately designed components, which are employed to function in an integrated fashion to attain predetermined goals (Bevis, 1982; Gillies, 1989; Vos & Brits, 1990; Wan, 1995). Authors support that an education system is a social structure with specific qualities and characteristics which gives it a nature and identity unique among the structures of society, and includes certain universal or general components, such as aims and objectives, administration and control, the structure of education, the supporting services, and financing (Dekker & Van Schalkwyk, 1989; Thomas, 1990; Vos & Brits, 1990).

The concept "basic nursing education" is defined as

> "A method whereby students are guided, assisted and provided, with means which enable them to learn the art and science of nursing so that they can apply it to the nursing care of people in need of such care" (Mellish & Brink, 1990:5).

The ICN (1987) defines basic nursing education as a formally recognized program of study, which provides a broad and sound foundation for the practice of nursing and for entrance into post-basic nursing education.

The term "Basic Nursing Education System", in this dissertation refers to a formally recognised program of nursing study that leads to the qualification of basic diploma or basic degree in nursing and

the specific structure that facilitates the provision of basic nursing education. It includes the duration of the programs, the types of programs, the admission requirements, the general aims and objectives of the programs, the content (theoretical and clinical learning components) of the programs, teaching and students assessment methods, administration and control, supporting services and financing. These components were also used for restructuring the recommendations of the WHO.

Francophone Africa: The Concise Oxford dictionary describes the term Francophone as a French speaking person. The Francophone African countries of WHO AFRO Region in this study refer to the African countries who are members of WHO AFRO Region and who adopted French as the official language of communication. They include twenty-one countries listed in Table 1.

CHAPTER TWO

LITERATURE REVIEW

2.1. INTRODUCTION

The literature review looks at the development of general education system in Africa with focus on Francophone Africa. In doing this, specific attention was paid to the following areas: (a) trends in health care delivery system in Africa, (b) trends in the development of basic nursing education systems in Africa, (c) the recommendations pertaining to basic nursing education system by the international Organizations, including the WHO, the ICN and the ILO and the decision-making models. The focus on the above components is based on the literature which argues that modern nursing education of a country is inextricably bound up with factors, such as the level of general education system, the health care delivery system and the extent of social changes (Gray & Pratt, 1992). It is also suggested that an awareness of the historical development of nursing education is basic for the understanding of current nursing education and to the preparation for assuming nursing role in the future; and that an objective planning for the future is a well balanced combination of the knowledge of historical development and the analysis of the present (Bevis, 1982; DeYoung, 1972). A summary of the literature review and the conceptual framework of the study are provided at the end of this chapter.

2. 2. DEVELOPMENT OF GENERAL EDUCATION IN AFRICA

In modern societies, the state plays a dominant role in the development of an education system. It is the duty of the state to facilitate and ensure the existence of required education opportunities, to create such opportunities, if needed, co-ordinate and regulate the interests of various societal relationships with an interest in education (Dekker & Schalkwyk, 1989).

In traditional African communities, the education of the children was the responsibility of all adults. Youth were prepared for various roles of adult life. With the influence of the missionaries and the colonial governments during the European colonial domination, this traditional education was replaced by a form of education known as formal education system (Boahen, 1987; Lowe, 1992; Ruperti, 1976). The formal education system implies formally organised education, centred around the school. This excludes the home education of the child or the youth and his/her upbringing resulting from daily interaction with the community in various aspects such as retail trade, public entertainment, education received through the church, in-service vocational training, military training, etc (Brubacher, 1974; Vos & Brits, 1990).

The above development of formal education system in Africa differed from one country to another, depending on the policies or the philosophy of their founders. The missionary society perceived education as a means of conversion to Christianity. The focus was on general and religious studies rather than vocational or practical courses. They were not especially concerned with education for employment, except for a career in the church or in teaching.

Standards of education and levels of integrity and dedication of the staff were generally high. The colonial governments perceived education in functional terms, as a means of providing literate and numerate clerks for the civic service or commercial houses, though there were differences between the French and British policies (Boahen, 1987; Cramer & Browne, 1965; Eby, 1952).

According to Osler (1994), the British authorities adopted a policy of laissez faire. This meant that British colonial authorities acknowledged the existing institutions and customs, as far as possible, and governed through them. French policies as applied by France and Belgium in their African colonies were based on cultural assimilation and political centralisation. Thus, the education in Francophone African Colonies aimed at bringing about assimilation and control of the indigenous peoples. The philosophy was to have an education system strongly similar to the one in motherland. The emphasis was on primary education and too little concern for developing secondary education, vocational education and tertiary education. Religious studies were the common route to have access to post-primary education.

Watson (1982) compared the French and British educational policies as applied in Africa and concluded that in post-colonial terms, French policies as applied in Africa left the colonies in a far worse situation than did the British policies. Watson argued that:
1. The belief in centralised control destroyed any sense of local initiative. The French restricted entry to secondary education and to the Western type of education. He stated that, not only was there no competition but far fewer educational opportunities were available. The missionary schools that were available did not

receive support from the colonial governments. Access to those schools was limited due to the strict control applied by the missionaries in those schools.

2. The policy of cultural assimilation resulted to a loss of attachment of the educated Africans to their home areas. They almost lost contact with the vernacular languages and with the needs of people in rural areas. Their ability to speak and think in French symbolised their success at schools. They identified themselves with the metropolitan Frenchmen than with their fellow countrymen.

3. The British policy was concerned with developing local schools with local teachers using local skills and crafts, whereas the French insisted on building replicas of academic grades and standards. For successful candidates who wanted to progress to higher education, the only openings were France and Belgium. However, it was frequently difficult, if not impossible, for them to obtain permits to study in France or Belgium.

4. While the female education was greatly supported in British colonies, in French colonies, female education was deliberately discouraged. Facilities that were available were poor and the curriculum was largely concerned with craftwork, domestic science and allied subjects.

The most telling difference of colonial education can be seen in Table 2 which shows the enrolments and literacy rates of selected French and British colonies in 1960 and on the eve of independence of many countries. By 1930s, the elementary education was provided in most of the African countries, but very few secondary schools were available. From the 1940s onwards, universities began

to appear everywhere except in the Portuguese and Belgium colonies (Lowe, 1992; Watson, 1982).

Table 2. Enrolments and literacy rates in selected colonial African countries in 1960 as a percentage.

Countries	Primary Level			Secondary Level	Tertiary Level	Literacy Level
	Total	Male	Female			
French Colonies						
Mali	10	14	6	1	-	3
Chad	16	29	4	-	-	-
Burkina Faso	8	12	5	-	-	2
Niger	5	7	3	-	-	1
Benin	26	38	15	2	-	8
Senegal	27	36	17	3	1	6
Mauritania	8	14	3	-	-	5
British Colonies						
Malawi	63	81	45	1	-	-
Sierra Leone	23	30	15	2	-	-
Tanzania	25	33	18	2	-	10
Uganda	49	65	32	3	-	35
Kenya	47	64	30	2	-	20
Ghana	38	52	25	5	-	27
Zambia	42	51	34	2	-	-

Source: World Bank; World Development Report in Watson, 1982)

Although, the second half of the twenty-first century became one in which the African countries struggled for liberation and regained independence, the education systems continued along the line of the systems established by their formal colonial powers. French, for example, remains the language of the education in Francophone Countries; the curricula and syllabuses used in many former colonial countries remain unchanged in many of their essential ingredients; textbooks and readings are supplied by former colonial powers (Clapham, 1996; Watson, 1982).

In Francophone African Region, two general education systems are currently in place. The 6- 6- 3-2 model found in the former Belgium colonies and the 6 - 4 -3 -3-2 model found in the former French colonies (Boahen, 1987; Lowe, 1992). The 6-6-3 -2 model consists of 6 years of " Ecole Primaire" or primary school, 6 years of " Ecole Secondaire" or secondary school, 3 years of "cycle de graduat" or basic degree programs, and 2 years of" Cycle de Licence" or Masters degree programs (see Figure 1). The minimum age required for entrance to the first level is 6 years. At the end of this level, the successful candidate is issued a " certificat des études primaries" or certificate of primary education which allows her/him to move on to the secondary level. At the end of the secondary level, the candidates write the National Examination or "Examen d'Etat" organised by the ministry of education. The successful candidate is awarded the " Diplome d'Etat des études secondaires" or Senior State Certificate that allows her/him to enter the university or higher education. The first three years of university of higher education leads to the award of bachelor degree or "Diplome de Graduat" to the successful candidate. French is the medium of instruction with English introduced as a second language from the third year of the secondary education.

The 6-4-3-3-2 model consists of 6 years of primary education, 4 years of the "College d'Education Generale" (CEG) meaning College for General Education. At the end of this four years, students are issued a certificate of general education that allow them to enter the next 3 years of "Lycée". At the end of the third year, students write a national examination, called "baccalaureat", which is equivalent to the "Examen d'Etat" in the former Belgium

colonies or Matric in South Africa. The successful candidate can then proceed to the first 3 years of tertiary education called " Cycle de Licence" which corresponds to the " Cycle de Graduat" in the former Belgium colonies. The last 2 referred to 2 years of " Cycle de Maitrise" which corresponds to the " Cycle de Licence" in former Belgium colonies (see Figure 2).

Vos and Brits (1990) support that there are strong similarities between the African states regarding the control and administration of the general education systems. The state controls the education system through the ministry of education. The minister, as a member of government, has a legislative and political power over the education system. He/she is assisted by permanent administrative organs which continue to function regardless of changes of government. The members of these organs are part of the civil servant of the country. The government designs the curriculum for all the education programs of the country. The financing of private institutions comes mainly from the school fees. While the public institutions are fully financed by the governments.

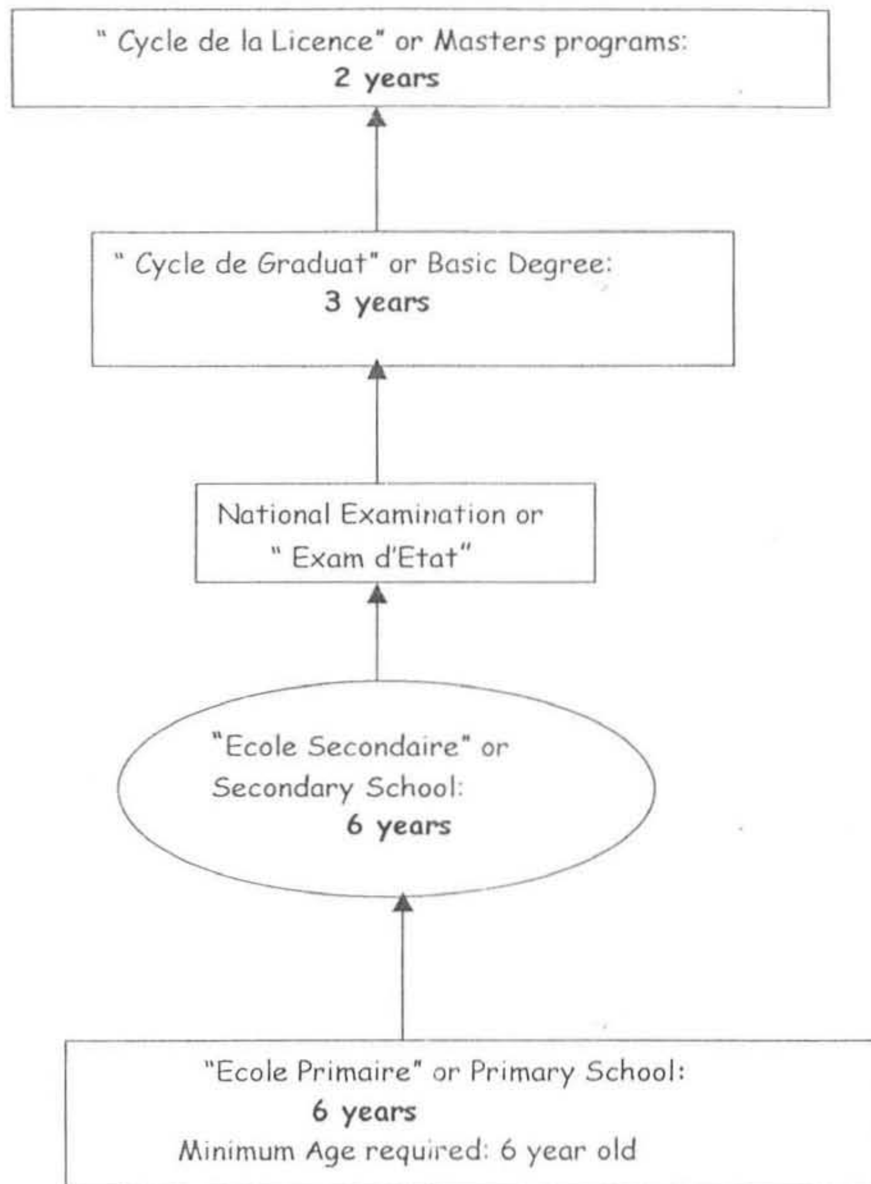

Figure 1: The 6-6-3-2 General Education System Model within former Belgium colonies.

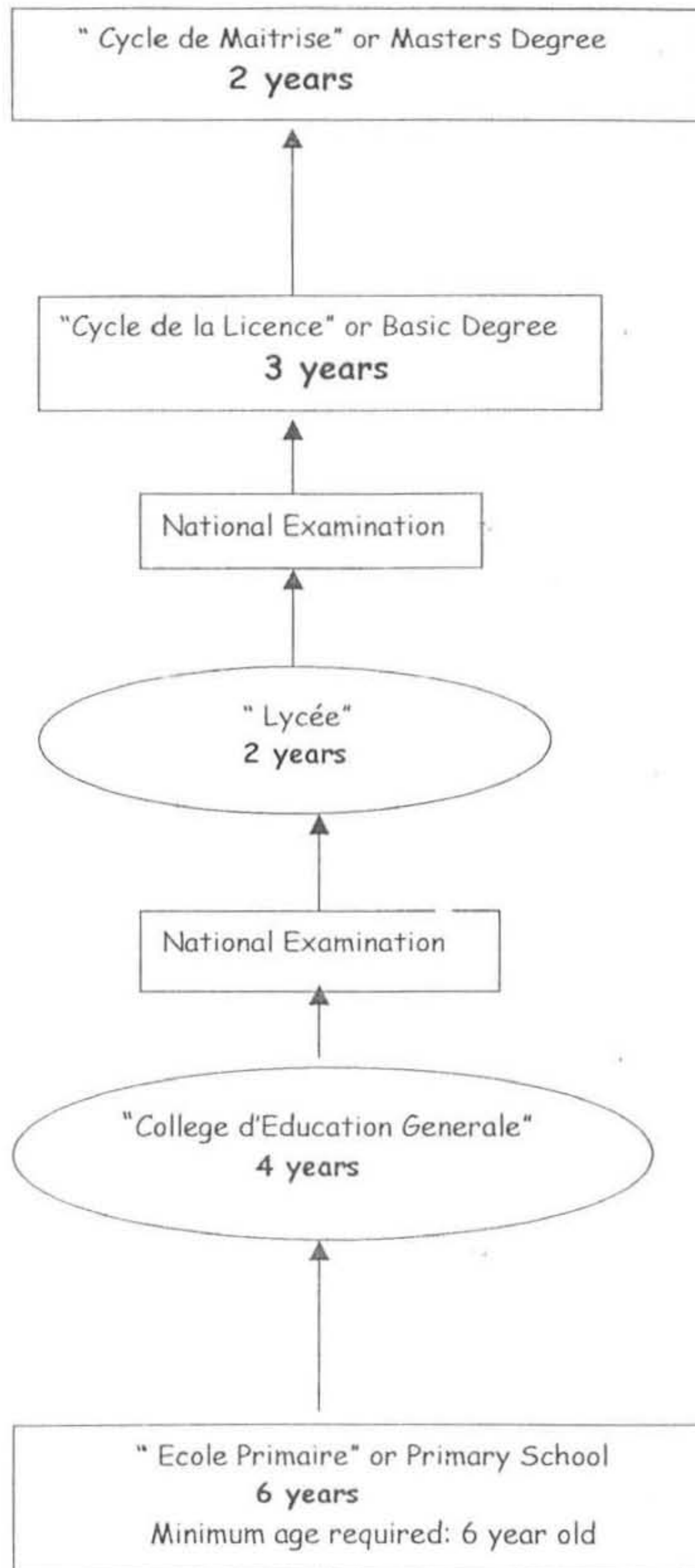

Figure 2. The 6-4-3-3-2 General Education System Model within former French colonies

2.3. TRENDS IN HEALTH CARE DELIVERY SYSTEMS IN AFRICA

Ebrahim and Ranken (1992) describe four main trends in the development of health care systems in countries known as Third World countries. The African countries, similar to most of the Third World countries, inherited a health care system largely intended for the colonial administrators, the military and the civilian elite. Soon after independence, the national governments made commitment to better health for their people. This resulted to the early development in health infrastructures which took place along two paths; (a) the growth of hospitals and centres of excellence along the traditional lines and (b) the building of health centres and their satellite centres including health posts.

This early development encountered three main disparities, namely, the disparity between expenditure and needs, between resource allocation and population distribution and between the rapid population growth and slow growth of services. The disparity between expenditure and needs resulted in a different approach to health care delivery in late sixties, called Basic Health Services. The Basic Health Services (BHS) aimed at providing simple preventive/promotive services, such as under-fives' clinics, antenatal care, immunization, care during labour, etc. In many countries, the health centres and sub-centres continued to provide mainly ambulatory curative care (Ebrahim & Ranken, 1992).

In 1976, the ILO conducted a study that estimated that almost two-thirds of the populations of the developing countries were living in serious poverty and the effects of such deprivation

on the potential for growth and development were described. In response to that study, the ILO advocated a Basic Needs approach to national development. In 1978, the convergence of new thinking in human development and alternative strategies in health planning together with several countries' experience culminated in the development of the Primary Health Care approach (Ebrahim & Ranken, 1992).

In 1978, the WHO / UNICEF International Conference on PH C held in Alma-Ata, recommended that PHC should be the key to the attainment of health for all by the year 2000 (WHO, 1978,1985). The PHC approach addresses the main health problems in the community through the provision of promotive, preventive, curative and rehabilitative services. It is defined by Alma-Ata declaration as:

> "...Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-determination" (WHO, 1985:7).

The PHC approach goes further than the mere amalgamation of the Basic Needs approach with the concept of Basic Health services. It identifies the following main framework for health care services (a) equal distribution, meaning that health care services must be equally accessible to all; (b) community participation whereby individual and community are actively involved in planning and operation of health care services; (c) focus on prevention; (d) appropriate technology, which means that appropriate technology is adapted to local needs and acceptable to

users and to those for whom they are used; and (e) a multi sectorial approach in which both the health care sector and other sectors, such as education, housing and agriculture, are essential for the achievement of well-being (WHO,1985).

The following eight essential activities are identified as the main focus of PHC (WHO, 1985):

1. Education concerning prevailing health problems and methods of preventing and controlling them.
2. Promotion of food supply and proper nutrition.
3. The provision of safe water and basic sanitation.
4. Maternal and child care, including family planning.
5. Immunization against the major infectious diseases.
6. Prevention and control of locally endemic diseases.
7. Appropriate treatment of common diseases and injuries.
8. Provision of essential drugs.

In the African continent, countries and governments reformulated their health policies to embody the principles and philosophy of PHC. They divided their health care delivery systems to district, provincial and national health levels. The WHO sees the District Health System (DHS) as the basis for PHC delivery system. It describes the following five key features of the district health system based on PHC:

1. **People-centred:** Focused on people's health-related behaviour, environment, and their right to shape their own health care with professional help.
2. **Geographically limited:** Based, whenever possible, on discrete geographical area, within clearly delineated boundaries, and includes the population within that area and all health care workers

and facilities up to and including the hospital at the first referral level.

3. **Inclusive**: Not limited exclusively to government systems. May be composed of many elements, including, for example, Non Governmental institutions and traditional healers.

4. **Substantial Managerial Autonomy**: The substantial managerial autonomy is required in order to settle priorities and problems, as far as possible, on a decentralized basis.

5. **Comprehensive**: It incorporates the primary health care approach into all its activities.

The WHO stresses that nurses played and will continue to play a key role in the delivery of health care at the district level in Africa (WHO, 1998). The organization recognised that nurses and midwives represent 60-75% of the workforce in the national health care system in the continent and that appropriately prepared nurses can deliver as much as 80% of the health care and up to 90% of paediatric care currently provided by primary care physicians at the equal or better quality and less cost (WHO, 1998). This key role of nurses in the provision of health care in the continent, the high morbidity and mortality rates, the human resources within the health care delivery system, the technology, the levels of support need to be considered when planning for basic nursing education in Africa.

The literature suggests that in Africa, resources for health services are limited and will stay limited for the foreseeable future; in most settings technology is very limited, access to technology is also limited and maintenance is problematic. Doctors are not always available or are found mainly in urban areas and

private sectors; communication between primary and secondary services is often poor and communities are still depending on the government for the provision of health care (Osei-Boateng, 1992; WHO, 1997, 1992).

2. 4. TRENDS IN THE DEVELOPMENT OF BASIC NURSING EDUCATION IN AFRICA

The development of nursing education or formal education of nurses in Africa is closely interwoven with the historical development of nursing around the world and the development of general education in the continent (Adelowo, 1989; Loots & Vermaak, 1975; Osei-Boateng, 1992; Potgieter, 1992; Searle, 1987). The African people, similar to other people around the world, have known and practised some kind of nursing, such as nurturing infants, caring for children, the sick, the injured, the aged and attending to women through pregnancy and child birth, from the earliest days. However, formal education for nurses in Africa is the product of the nineteenth century (Baly, 1977; Chaska, 1989; Mellish, 1990; Nutting & Dock, 1974; Potgieter, 1992; Searle, 1987).

One of the first notable efforts to train nurses was made in Paris in 1633 when the Sisters of Charity St. Vincent de Paul and its members were taught the essentials of patient care by nuns. Mother Elizabeth Bayley Seton introduced this order in the USA and established the Sisters of Charity of St. Joseph in 1809. Other nursing orders in the church of Ireland and the Protestant Church of England made some training efforts in early 19th century (Brown & Henry, 1995). In 1836, Theodor Freidner, in Germany,

established a training institute for deaconess nurses at Kaiserwerth. This mother house system offered a three year training course for nurses, which included topics, such as pharmacology, theoric and bedside nursing, visiting nursing, religious doctrine, and ethics. The graduates of the institution established similar Mother House program elsewhere in Europe, Asia and USA and set the stage for the emergence of the modern nursing education (Cole, 1996).

Despite a respectable amount of appropriate training of nurses given at that time, nursing by the mid-nineteenth century was still not an independent profession. It was part of a career as a nun, or part of a career as a deaconess, or job for some layman or laywomen. Florence Nightingale, reformer of hospitals, pioneer of public health care, is regarded as the founder of modern nursing (Brown& Henry, 1995). Nightingale's work in the Crimean war (1854-1856) brought public recognition of the role that good nursing by well-trained nurses could play in care of the sick. She transformed the hospitals in the Crimean with her team of 38 nurses through many of the first public health measures, and the deaths dropped from 420 per 1000 to 22 per 1000 (Kruzen, 1993). By 1860, she established the first modern nursing training at St. Thomas' Hospital, in London, which admitted fifteen students (Potgieter, 1992; Searle, 1987). In 1873, the Florence nightingale school of nursing was established in the USA. The first modern nursing education started in France in 1922 and Belgium in 1908 (Nursing in the World, 1993).

Florence Nightingale and her system of nurse training are still strongly associated with the development of modern nursing

education. This recognition was attributed, among other things to: (a) her recognition of the role of the nurse in reducing the incidence of disease and mortality; (b) her refusal to allow nurses to do domestic chores in hospitals, thereby separating the role of a modern nurse from that of the servant class of nurse; (c) the training of the Nightingale's nurses as trainers of other nurses, and to become leaders and pioneers; (d) the maintenance of a holistic approach to health and nursing care; (e) the identification of the need for a systematic approach to nursing process; (f) the publication of her "notes of nursing" in 1859, the first text-book that contained nursing theory and initiated the nursing process; and (g) the stipulation that nursing curriculum should include both theoretical material and practical experience (Ellis & Hartley, 1984:26; ICN, 1990; Searle, 1992).

As founder of modern basic nursing education, Britain played a dominant role in the development of modern nursing education in colonies of her empire. Britain's early pre-eminence in this field, the realism in the approach to the education and training of nurses and midwives, her many schools with a world-wide reputation, the development of nursing and midwifery education in colonies by British nurses, the influence of doctors who studied in Britain and influenced nursing in their home countries on their return are amongst the factors identified by authors as determinants to that influence (Mellish & Brink, 1990; Potgieter, 1992; Searle, 1987). This might also explain the advance of nursing education in Anglophone African countries as compared to the Francophone countries.

Although the formal nursing training started in America thirteen years after Great Britain (see Table 3), American nurses also made a great contribution to the development of nursing in the latter half of the 20th century. Factors, such as the extensive funding of overseas nursing projects and the funding of students from other countries to study in the USA, the calibre of nurse consultants sent to developing countries, the availability of resources, the extensive and thought-provoking nursing literature published, the quality of nurse leaders in the international scene, the role of the research in American nursing and innovative approach to problems by American nurses, influenced the development of nursing education throughout the world (Searle, 1987).

Table 3. History of modern nursing education in selected countries.

Country	Beginning of formal Nursing Education	Current Highest Education Program
USA	1873	Doctorate
Canada	1874	Doctorate
Great Britain	1860	Doctorate
France*	1922	Master*
Belgium*	1908	Master*
South Africa	1877	Doctorate
Nigeria	1930	Doctorate
Ghana	1899	Master
Morocco*	1963	Diploma*
Burundi *	1968	Diploma*
Cameroon*	1930	Diploma*

Source: Nursing in the World third edition, 1993. *Francophone countries.

In Africa South of Sahara, modern basic nursing education was introduced early by Britain in Anglophone colonies. In February 1877, Sister Henrietta Stockdale from Britain set up the first professional nursing training in South Africa (Potgieter, 1992). In 1899, another British sister opened a nursing school in Ghana, and in 1930, formal nursing training started in Nigeria (Adelowo, 1989). Based on the

available information on formal nursing training in France and Belgium, one can assume that formal nursing education in Francophone African countries started after the Second World War (seeTable3).

Osei-Boateng (1992) supports that nursing in many of the African countries South of Sahara, excluding South Africa and Liberia, started primarily as a male dominated occupation. The colonial medical officers recruited young men and trained them on the job to carry out specific tasks, such as dressing, feeding, bathing of patients and administration of drugs. After the second world war, the real training started with the aim of training girls with secondary education but as there were not enough of such girls, provisions were made to include middle school leavers, as well as girls with few years of secondary education. The training schools were, as a rule, attached to hospitals. Soon after independence, the need to raise the standard of nursing care and nursing education in newly independent countries was realised, and higher nursing education became desired goals. The above literature supports that the development of basic nursing education in Africa followed the political history of the continent. Basic nursing education was introduced in Anglophone African countries long before the Francophone African countries. This might have had an impact on the current systems of basic nursing education in Francophone Africa.

2.5. INTERNATIONAL ORGANIZATIONS AND BASIC NURSING EDUCATION SYSTEMS

This section of the literature review focuses on the recommendations of the WHO, the ICN and the ILO on basic nursing education systems. The objective of the WHO as stated in Article One of its Constitution is the attainment by all people of the highest possible level of health. Although the Constitution of the organization was written in 1948, its twenty-two statements of functions have not changed. However, certain factors, such as the increased understanding of the world's health problems, the changing nature of the member countries and the variety of the social forces operating within the organization, resulted in the formulation of new policies, priorities and programs for the implementation of these functions (Searle, 1987; WHO, 1978).

The ICN, founded in 1899 as an independent, Non Governmental federation of national nursing associations, is a platform in which nursing associations throughout the world collaborate in strengthening and improving nursing service, nursing education and professional ethics (ICN, 1997). One of the objectives set by this organization is to assist the national nursing associations to improve the standards of nursing and the competence of nurses. The ICN acknowledges the diversity in the functions and problems of nurses in different countries, but urges the nursing profession world wide to consider health as a social asset and health for all as a global objective and a common point of departure when looking for the future. The organization urges nursing profession, world wide, to strive towards this goal through influencing and responding to changing health needs and priorities; and developing the fullest potential of the profession

(ICN, 1985). It shares, to a large extent, the WHO recommendations and policies regarding nursing and nursing education. The recent recommendations, policies, guidelines and publications of the organization showed a commitment to the global strategy of "health for all by the year 2000 and beyond".

The ILO, as a specialised agency of the United Nations, which has as its main role to address Labour issues on an international basis, developing social policies related to the right of workers in all spheres of the society, has influenced nursing through its 1976 convention and recommendations relating to nurses (ILO, 1976; Potgieter, 1992; Searle, 1987). These recommendations (ILO, 1976) on employment and conditions of work and life of nursing personnel expressed the general view on the aim and objectives, administration and control, duration and admission requirements; and continuing education.

The three above organizations have influenced the development of nursing and nursing education through their various recommendations, as well as through various activities, such as workshops, short courses, financing conferences, financial support to students, etc (Hibberd, 1994; ICN, 1997; Reid, 1993). These recommendations are reviewed and structured according to the universal components of an education system described in chapter one.

2.5.1. The WHO and Basic Nursing Education Systems

2.5.1.1. Aims and Objectives of Basic Nursing Education

Dekker and Schalkwyk (1989) refer to educational aims as general educational objectives that represent the ideals that are targeted by all community. They refer to objectives as specific behaviours or outcomes that students should display in order to achieve the educational aims. They explained that the educational aims and objectives of an educational institution represent the direction it wishes to go and the expected outcomes it wishes to reach with its students. In nursing, educational aims are frequently related to the educational, professional, and occupational development of the student; the intentions and purposes of nursing, nursing education and the school of nursing (Greaves, 1987).

Since the adoption of PHC in 1978 as a strategy to reach "health for all ", the WHO has indicated that all basic nursing education should be reoriented towards community-based education with the ultimate aim of " enabling nurses to meet ever-changing situations, to acquire ways of using data, to identify and solve problems of working and living, and to be responsive to the language and the cultural needs of the people" (WHO, 1985:14). The organisation's recommendations stressed that the objectives of basic nursing education should:

1. Be clearly defined to allow the assessment of learning in order to provide feedback on which to base remedial measures and decisions on promotion and certification.
2. Be based on developing knowledge and skills in community-oriented nursing.
3. Focus on providing skills, such as the ability to: (a) analyse the causes and distribution of the common health problems of the

individuals, groups, communities in their countries; (b) adapt their nursing roles and functions to the health policies and priorities they have identified; (c) identify the under served and high-risk groups and extend health services to them; (d) train and utilize heath workers; and (e) organize and participate in team efforts to improve the health status of the community.

4. Be directed at problem solving in community-based nursing through the process of assessment, implementation, and evaluation to secure greater relevance of nursing practice to health care needs.

5. Include a broad range of general knowledge as foundation for the practice of nursing and the continued development of the nurse in areas, such as: an understanding of human behaviour; an alert, questioning and critical mind; powers of observation, imagination and creativity; insight and foresight with the ability to arrive at sound judgements and decisions; the ability to anticipate health needs and apply relevant nursing measures; and willingness to grow professionally.

6. Focus on health care to which special attention is given to: (a) promoting health by considering the physical and social environmental factors; (b) administering holistic care to the community, the family and individual; (c) encouraging the clients to be active participants in the process of recovery and rehabilitation, as well as encouraging them to take responsibility for achieving positive health; and (d) understanding the major problems occurring from time to time in their respective community, environment and country (WHO,1994, 1985, 1984).

2.5.1.2. Structures of the programs

The structures of the education system include the various possibilities of learning, which exist within an education system. It combines the various types of teaching and learning situations and establish their relationship to each other. It includes also the educational institutions, links, teaching units, input and output facilities and possibilities of channeling created by the education system (Bondesio & Berkhout in Van Zyl, 1992). The WHO made various recommendations related to the admission requirements, the theoretical content, the clinical content, and the teaching methods.

2.5.1.2.1. Admission requirements

The WHO (1994) recommendations support that,

1. The admission standards to a basic nursing education program should be (a) consistent with the education standard of the country concerned; (b) similar to that required for entry into the other type of similar professional programs.
2. Teaching staff from the educational institutions must select the candidates to basic nursing education (WHO, 1994).

2.5.1.2.2. Theoretical content of the programs

The WHO (1994, 1985) recommends that the content of basic nursing education should:

1. Be based on sound theory and focused on the needs of the students, community, and the country.
2. Integrate midwifery and general nursing.
3. Include theoretical and clinical instruction in medical and surgical nursing, obstetrics, communicable diseases, maternal &

child health, family planning, community nursing and psychiatric nursing.

4. Include the nutritional, social, health, environmental, mental health aspects of nursing as well as social-economic problems related to nursing.

5. Provide the knowledge of social science including subjects such as sociology, anthropology, and psychology added to physical and biological sciences, which were the traditional foundation on which nursing education was built.

2.5. 1.2.3. Clinical learning content

The WHO (1985, 1966) recommendations support that the clinical learning should:

1. Take place within student's real environment and meet the learning needs of the student, the community and the objectives of the educational institution.

2. Take place in well-developed services, community with sufficient learning opportunities to enable sound learning experiences for the students.

3. Be based on sound nursing education principles as opposed to the provision of patients care in the hospital as main purpose. Although the student should render care to patients in the hospitals, the organisation argues that their service assignments must be based on their educational needs and not on the needs of the hospital.

2.5.1.2.4. Teaching methods and teaching staff

The WHO (1985) recommendations stress that the subject/ teacher-centred method of teaching should be shifted to student-centred approach with learning organized around the whole range of tasks students are expected to practise in their communities. The organization stipulates that qualified nurse educators, who had completed post basic courses in nursing field, undertake the teaching of nursing subjects and clinical supervision of student nurses. It recommends also that nurse educators should be members of professional organization, and be given opportunity for personal development (WHO, 1984).

2.5.1.3. Administration or Control

Administration or Control refers to the educational management, and includes the executive organs and their functions. In the context of nursing education, it is a process that enables nursing education to be undertaken (Mellish & Brink, 1990). The WHO made recommendations related to the place of basic nursing education programs, the governing body, and the qualifications of teaching staff.

The organization recommendations stipulate that nursing educational institutions should:

1. Develop under the main stream of the country's education system, preferably as part of university or other higher educational institution.
2. Be approved by either the official national agency or the nursing education section of the national association of nurses; and suitable legislation defining the responsibility of nursing educational institution must be developed as well.

3. Focus primarily on education and the institution must be organised in such a way that the attainment of this aim becomes possible.

4. Be managed by a board or committee whose primary concern should be education.

5. Be directed by a qualified nurse educator with the qualification beyond the level of first degree (WHO, 1984, 1966).

2.5.1.4. Support Services and Financing

The support services are specialised services within the educational institutions that provide support to students and teaching staff in order to reach the desired educational goals. These services, which include libraries, health services, continuing education for teachers, transport, accommodation, bursaries can be accurately used to measure the level of development of a country's education system (Dekker and Schalkwyk, 1989).

The WHO (1994) recommendations support that nursing educational institutions should:

1. Provide counselling services, health services, housing, recreational facilities as well as financial support to student nurses.

2. Have adequate and well-equipped classrooms, laboratories, and libraries for students and teaching staff.

3. Provide opportunity for continuing education, updating and upgrading of skills for teaching staff.

4. Be financed by the government or private sectors in the same way others types of professional education are financed. In cases where nursing education is still functioning under the hospital, the

organisation recommends that the budget of nursing school should be separated from the nursing services budget (WHO, 1984).

2.5.2. The ICN and Basic Nursing Education Systems

2.5.2.1. Aims and Objectives of Basic Nursing Education

The ICN believes that basic nursing education should aim at:

1. Educating the whole person (including the physical, emotional, intellectual, social, and moral aspects) and also in professional commitment, participation in civic life and recognition of professional ethics.
2. Preparing the student to understand the need of the changing society, the need of an autonomous and responsible professional body as well as to recognise her/his degree of responsibility in whatever practice area of functions.
3. Educating the student nurse to think critically and creatively within her/his field and within a society in which change is inevitable.
4. Preparing the nurse to understand the need for continuing education, which is seen by the organisation as essential for safe practice and for the career development of the nurse in the context of PHC (ICN, 1985, 1986; Mcclostees & Grace, 1990).

The objectives of basic nursing education as perceived by the organisation should be clearly defined and prepare the nurse in:

1. Dealing with the existing and anticipated health problems.
2. Functioning as a change agent responding to the changing needs of individuals, families and communities.
3. Rendering comprehensive health care with enthusiasm and a sense of responsibility that will ensure on-going proficiency in the knowledge and skills required for practice (ICN, 1986, 1997).

2.5.2.2. Structures of the programs

2.5.2.2.1. Admission requirements

The organization supports that:

1. A candidate for the basic nursing education program should have an educational background that will enable her/him to cope with the program and the demands of her/his future role.
2. The minimum education required should be a successful completion of secondary education or a minimum of 12 years general education.
3. The entrance requirements should be similar to that of the other comparable professional educational institutions.
4. The teaching staff from the nursing education institution should select suitable candidates (ICN, 1997, 1985).

2.5.2.2.2. Theoretical content

The ICN's (1997, 1986, 1985) recommendations suggest that the theoretical content of basic nursing education should:

1. Be relevant to the objectives of nursing school, the registering body as well as the health needs of the country in which the courses are offered.
2. Take into account the community resources.
3. Include (a) General & Social science subjects: chemistry; physics; general cultural subjects; statistics; communication skills with focus on intra professional, interdisciplinary, nurse-patient, and nurse-nurse aspects; sociology; anthropology; psychology; (b) Medical and Other health related subjects: anatomy and physiology; microbiology; epidemiology; pharmacology; nutrition and dietetics; and (c) Nursing subjects: general nursing with all specialities; community health nursing; mental health nursing;

history of nursing; trends in nursing; ethics; and legal responsibility of the nurse.

2.5.2.2.3. Clinical learning content

The clinical learning of student nurses needs to be planned by the teaching staff of the educational institution and be integrated in every activity performed by the nurse on the basis of sound theory. Learning activities should incorporate a variety of settings, including PHC, community, and hospital (ICN, 1987, 1986).

2.5.2.2.4. Teaching methods

The organization believes that teaching methods should:

1. Take into account the learning needs of the students; the educational goals; the student's ability, needs, interests, and background; the teaching aids and clinical resources available; the principle underlying the learning process and number of teaching staff, their particular area of specialisation; the resources available in the community and the community health fields.
2. Shift from the teacher-centred teaching approaches to innovative approaches that emphasize self-directed learning.

2.5.2.3. Administration or Control

The ICN's (ICN, 1997, 1986) recommendations stressed that nursing educational institutions should:

1. Be part of higher or tertiary education, preferably the university.
2. Be governed according to sound educational principles and be managed by a qualified nurse educator with a qualification beyond the level of first degree.
3. Be controlled by the ministry of education.

4. Ensure that all nursing subjects including theory and practice are taught by competent, knowledgeable and well motivated nurse educators who preferably hold a qualification beyond the level of first degree.

2.5.2.4. Support Services and Financing

The organization (ICN, 1986, 1985) stressed that:

1. The student nurse should have access to the best possible education in theory and practice within the established programs.
2. Government should make provision for financial support to the student nurse.
3. Counselling services, organised health services, accommodation, and recreational facilities should be provided.
4. Adequate and well-equipped classrooms, laboratory, libraries should be available to students.
5. Basic nursing educational institutions should be supported financially by the government or private sector, in the same way other similar professional educational institutions are financed.

2. 5. 3. The ILO and Basic Nursing Education Systems

2.5.3.1. Aims and Objectives of Basic Nursing Education

The organisation (ILO, 1976) believes that basic nursing education programs should:

1. Be based on recognised needs of the community and the resources available in the country.
2. Be comprehensive and prepare the nurse theoretically and clinically to provide promotive, preventive, curative and rehabilitative services to individuals, families, groups and the community.

3. Be relevant to the official education philosophy and policy of the country.

2.5.3.2. Structures of the programs

The organization stressed that, students accepted to the advanced level programs should have the general educational level required for entry into the university or higher education; and an advanced level of secondary education for the less advanced nursing programs (ILO, 1976).

2.5.3.3. Administration or Control

The organization stated that:

1. Competent authority or competent and recognised bodies should prescribe the basic requirements regarding nursing education, and provide for the supervision of such education.
2. Where appropriate, basic nursing education should take place within the main stream of the education system of the country.
3. Basic nursing education institutions should provide for two levels of education programs; (a) an advanced level designed to train professional nurses having sufficiently wide and specialised skills; (b) a less advanced level designed to train auxiliary nurses able to provide general nursing care which is less complex but which requires technical skills and aptitude for personal relations.
4. Programs of higher nursing education should be available to prepare nursing personnel for responsibilities in nursing care, in the administration of nursing services, in teaching and in research.
5. Programs of continuing education should be relevant to the appropriate functions of nurses (ILO, 1976).

2.5.3.4. Support Services

The ILO's (1976) recommendations support that:

1. Counselling services should be available within the institutions to provide necessary information and guidance on the nursing profession to persons wishing to take up nursing as a career.
2. Program of continuing education should be an integral part of the education systems and be available to all so as to ensure the updating and upgrading of skills and to enable nursing personnel to acquire and apply new ideas and techniques in the field of nursing and related sciences.

2.6. DECISION-MAKING MODELS

Decision-making is a deliberate, cognitive process consisting of sequential steps that can be analysed, refined, and integrated to yield greater precision and accuracy in solving problems and initiating action. It is a process by which an attempt is made to move a situation or event from a present undesirable state to a future preferred state (Gillies, 1989). According to Crous decision-making is an unavoidable, rational process by which a specific plan is chosen to solve a particular problem or save a situation, taking into consideration the established principles of the institution and the expected effect of the decision on the institution (Crous, 1994).

Authors (Booysens, 1998; Crous, 1994; Gillies, 1994) agree that decision-making is a process with a decision as the last steps of that process. This process consists of conscious and voluntary activity, with a significant underlay of unconscious attitudes that govern the speed and direction of cognition and is influenced by a number of elements.

These elements include, among others, the current problem or situation, the abilities and personality of the decision-maker, the process leading to the decision and factors within the environment. Several decision-making models and steps are described in the literature, but for the purpose of this study, the normative decision-making model; the descriptive decision-making model; the branch approach to decision-making were reviewed.

The normative decision-making model is an analytical model based on the assumption that in any given situation where a decision has to be taken, all the possible choices, consequences, and political outcomes are known, and that the decision will involve choosing the alternative that will ensure the greatest measure of satisfaction. Within this model, the decision-maker starts with the fundamental issues, such as the institutional goals and priorities, the problem analysis, solution criteria and decision theory, each time a decision is taken, using the past experience to illustrate the theoretical constructs employed in the decision process (Crous, 1994; Gillies, 1989). According to Crous, the normative decision-making model is a dynamic and on-going process which does not end with the implementation of the decision, but allows for follow-up, feedback and adjustments regarding the elimination of possible problems in the future decision-making (Crous, 1994). However, Booyens argues that the model views the decision-maker as a completely rational, all-knowing, ethical hedonistic calculator who approaches any problem in a chronological series of steps to find the desired goal (Booyens, 1998).

The descriptive decision-making model is based on the assumption that real-life decisions are not often taken under conditions of clarity and certainty due to the facts that one can never be fully aware of the causes and effect of a complex phenomenon or of all the possible problem solutions or all immediate and long-term effects of each solution (Gillies, 1989; Lancaster & Lancaster, 1982). It is further argued that the descriptive decision-making model reveals how decision-making is carried out rather than how it should be carried out. The decision-maker is seen as a person who solves a problem logically on the basis of known or easily obtainable information. He/ she seeks an optimal solution, establishes a set of minimal objectives that he/she considers acceptable alternatives and which he/she can accomplish (Gillies, 1989).

The branch approach to decision-making is based on the assumption that policy decisions are not taken in a final once-and-for-all fashion, but small-scale decisions are made one at a time. The outcomes of each small decision are used to guide the next decision. The decision-maker, after perceiving the threat or challenge, ignores the institutional goals, solution criteria and scientific theories and develops her/his decision by building out from the current situation step by step in a succession of small, incremental changes (Booyens, 1998; Gillies, 1994, 1989). It is believed that this approach to decision-making reduces the need for facts since, at each decision point, the decision-maker only needs to consider those facts that relate to the present small intended changes; and that this approach can be followed by a decision-maker who is cautious about taking big changes on a once-and-for-all basis (Booyens, 1998; Gillies, 1989).

2.7. SUMMARY OF THE LITERATURE REVIEW

The second chapter covered aspects of the literature deemed relevant to the research topic. More precisely, the development of general education system in Africa with special reference to Francophone African countries, trends in health care delivery system in Africa, trends in the development of nursing education systems in Africa, the recommendations of three international organizations (WHO, ICN, and ILO) pertaining to basic nursing education systems and the decision-making models.

The section of the literature review on the development of general education systems in Africa established the difference between formal and traditional education systems, highlighted the trends in the early development of formal general education system in Africa and some characteristics of formal general education system in post-colonial Africa, with specific reference to Francophone African countries. As indicated in the literature review, the formal education system implies formally organized education centred on the school. The traditional education system, on the other hand, refers to the home education of the child or the youth and his/her upbringing resulting from the daily interaction with the community in various aspects of life. This last form of education was the responsibility of all adults in the traditional African communities and is not the concern for this study. The formal education system as revealed in the literature was introduced in Africa by the missionary and colonial governments during the European colonial domination.

The above educational systems varied according to the policies and philosophy of their founders, being the missionary or the colonial governments. It was suggested that in post-colonial terms, the British educational policies as applied in Africa left the colonies in a far better situation than did the French, Belgium or Portuguese policies. It was also suggested that long after independence in the second half of the twenty-first century, the education systems of African countries continued along the line of the systems established by their formal colonial powers. For example, two models of general education systems exist in Francophone African countries, based on their colonial affiliation: the 6-6-3-2 Model found in former Belgium colonies and the 6-4-3-3-2 Model found in former French colonies. As opposed to the traditional and colonial period where the adults and missionaries played a dominant role in the education of the youth, the literature revealed that in the modern African society, the state plays a dominant role in the education of the people.

The literature also looked at the main trends in the health care delivery systems in Africa; changes in the health care delivery systems in the 70's and the responses of the African countries to those changes; and the potential factors that will influence future health care delivery system in Africa. It was revealed that African countries, like most of the Third World countries, inherited a health care delivery system intended mostly for a small section of the population, leaving the majority of people to turn to the rudimentary form of health care. The newly independent governments engaged in developing health infrastructures following mainly the colonial model. In the late 60's, a different approach to health care system, called

Basic Health Services, was developed in response to the problems encountered by the previous system.

Following the results of a study conducted by the ILO in 1976, Basic Health Services approach was replaced by the Basic Needs approach to health care delivery system. Two years later, the WHO/UNICEF conference on PHC held in Alma-Ata recommended PHC as an approach to health care delivery system. The literature stressed that all African countries under study adopted the PHC principles and philosophy as the driving forces for health care delivery systems of their countries. The literature also revealed that nurses played and will continue to play a key role in the provision of health care in Africa. The future development of heath care delivery system in Africa, as indicated in the literature, should consider the need to train qualified nurses, the illness profile of the continent and the limited resources, among others.

In terms of the trends in the development of nursing education in Africa, the literature reviewed covered some aspects of the beginning and the expansion of formal nursing education of nurses around the world and in Africa. The literature showed that the African people, like other people around the world, have known and practised some kind of nursing, but formal education for nurses is a product of the nineteenth century. It was indicated that the first effort to train nurses started in 1633 in Paris with the Charity of Saint Vincent de Paul. In those early days, various religious orders played a significant role in the development and expansion of nursing education. A significant change occurred in 1860 with Florence Nightingale in Britain. Despite the role played by the religious orders and many others, Florence Nightingale is considered as the pioneer of

modern nursing education. As the founder of modern nursing education, Britain played a significant role in the development of modern nursing education in colonies of her empire. The American nurses also made a great contribution in the development of nursing education in the latter half of the 20th century. In Africa, South of Sahara, modern nursing education was introduced in Anglophone countries long before the Francophone countries. For example, modern nursing education started in South Africa in 1877, even before France (1922) and Belgium (1908).

The recommendations of three international organizations (WHO, ICN, and ILO) pertaining to basic nursing education systems were also reviewed. These recommendations deal with the expected educational and organizational changes in basic nursing education systems. More similarities than differences were found between the views expressed by these three organizations regarding basic nursing education systems. At the educational level, they agreed that basic nursing education should be guided by the principles and philosophy of PHC with the ultimate aim of preparing candidates to provide comprehensive health care in a variety of settings. The three organizations also agreed that basic nursing education should develop under the main stream of the education system of the country and offer opportunities for continuing education. It was also expressed that qualified nurse educators should have control over the management of nursing education institutions, as well as teaching of nursing students.

The decision-making models were reviewed in the light of their meaning, the factors influencing decision-making, and the models of decision-making. The literature reviewed defined decision-making as a

process with the decision being the last step in that process. The process, as revealed in the literature, can be influenced by the number of elements, such as the nature of the problem or the situation at hand, the attitude and abilities of the decision-maker, the process leading to the decision and the factors within the environment. Three decision-making models were reviewed, with the assumption underlying each model, as well as the decision-making process; the decision-maker's role; and the critics related to each model.

2.8. CONCEPTUAL FRAMEWORK

The main problem encountered by the researcher at this stage of the study was to identify a conceptual framework that could be used to analyse basic nursing education systems of the participating countries. In a comparative study of nursing education of the United State of America and the Republic of South Africa, William stated that,

> Whilst the spirit and objectives of nursing are common to nurses in all countries, national and cultural characteristics and the stage of cultural and economic development of the various countries are responsible for a wide divergence in the structure and function of the nursing profession of the world and consequently in the nursing education systems (William, 1977: 1).

To overcome the above problem, two conceptual frameworks were used in this study: the WHO (1994, 1985, 1984 and 1966) recommendations related to basic nursing education systems and the nine steps decision-making process described by Gillies.

2.8.1. The WHO recommendations (1994, 1985, 1984 and 1966)

The WHO (1994, 1985, 1984 and 1966) recommendations related to basic nursing education systems described in point 2.5.1 served two purposes: (a) as part of the literature review and (b) as a framework guiding the type of data to be collected for the analysis of the current basic nursing education systems of the countries under the study (see Figure 3). The choice of the WHO recommendations was mainly based on the facts that: (a) all the African countries under study are members of the WHO and (b) the PHC approach launched by the WHO in 1978 as a strategy for reaching the organisation goal of "health for all" is the main driving philosophy for health care policies, strategies, and plans of actions in all the African countries under study (ICN, 1997; Osei-Boateng, 1992; WHO, 1985).

2.8.2. Steps in decision-making process

Three authors (Booyens, 1998; Crous, 1994; Gillies, 1989) described the decision-making making process and all three differed in he number of steps involved in decision-making process. Despite the differences in the number of steps involved in decision-making process described by the three authors, there were similarities in the activities involved in those steps.

Gillies (1989) described nine steps in decision-making process which include:

1. **Determination of the institutional goals and priorities.** Individual's decisions are based on her/his philosophy and values, which are determined by her/his knowledge and acceptance of the institutional goals.

2. **Perception of a challenge or problem that creates need for a decision.** Unless an individual's attention is caught by disturbing information, she/he will tend to pursue her/his present course and have no need for decision-making.

3. **Identification of criteria for a successful response to the challenge or solution to the problem.** Establishing criteria for acceptable solution that will allow possible move from the present to the future.

4. **The search for acceptable alternatives of courses of actions.** Generating more alternatives to allow for quality decision.

5. **Weighing the alternatives to see which best meets the criteria for successful handling of the problem.** Evaluating the pros and the cons of the alternatives generated.

6. **The selection of one of the alternatives.** Selecting the most acceptable of the available alternative that provide more advantages than the others.

7. **Deliberation regarding commitment to selected action.** Specific actions are generated on how to carry out the most acceptable alternatives

8. **The implementation of the decision by translating it into action by oneself or assigning it to others.** First level commitment to take action.

9. **Confirmation of the decision or adherence to the selected course of action despite negative feedback.** Decision is taken with commitment to take action.

Booyens (1998) reduced the nine steps decision-making process described by Gillies (1989) to five steps:

1. **Recognizing the problem**. Unless the problem is correctly identified, the decision-maker runs the risk of taking wrong decisions, or offering wrong solutions, or no solutions at all. Therefore, it is necessary to identify the real problem, to state specifically what is the desired outcome so that relevant information can be collected, investigate possible causes and determine the real problem (Lancaster & Lancaster, 1982).

2. **Gathering relevant information**. During this step, all possible information regarding the causes of the problem are identified in order to confirm the actual cause and then to develop alternative solutions.

3. **Developing and evaluating alternative solutions**. Alternative solutions are evaluated using different methods. For example, alternative solutions are compared against each other in terms of the advantages and disadvantages.

4. **Selecting a solution**. The best alternative is selected.

5. **Post-decision activities**. This step is often referred to as implementing decision. Authors (1998; Lancaster & Lancaster, 1992) argued that the necessary follow-up that must be carried out is more than just the implementation of a decision. Several questions need to be asked before the implementation of the selected alternatives, as follows:

1. What must be done?
2. In what sequence should it be done?
3. Who should do it?
4. How can the necessary steps be most effectively accomplished?

Crous (1994) brought the above nine steps to four steps that include the following:

1. **Analysis of the situation**. This step involves the awareness of the problem or situation, identification and definition of the problem or situation, gathering of information, establishing the goal and diagnosing the causes.

2. **Generating alternatives**. This step involves the development of suitable alternatives before the decision can be taken.

3. **Evaluating and selecting the best alternative**. Each alternative is evaluated using different methods and finally the best alternative is selected.

4. **Implementing the decision and follow-up**. This last step involves the application of the decision and monitoring in order to make the necessary adjustment.

The nine steps decision-making process described by Gillies (1989) guided the research the research process (see Figure 4). This nine steps decision-making process was selected because of its comprehensiveness as compared to the other two models.

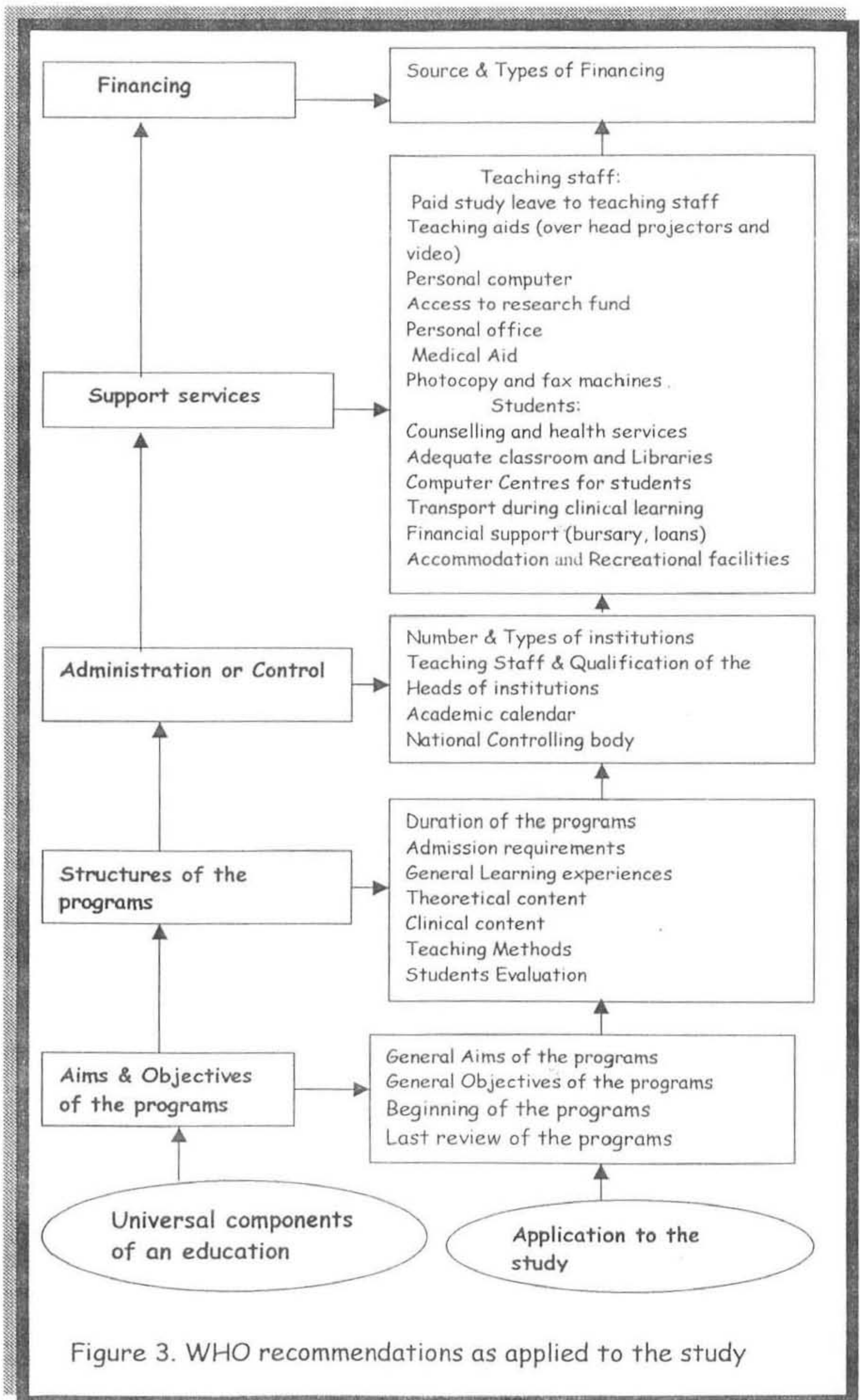

Figure 3. WHO recommendations as applied to the study

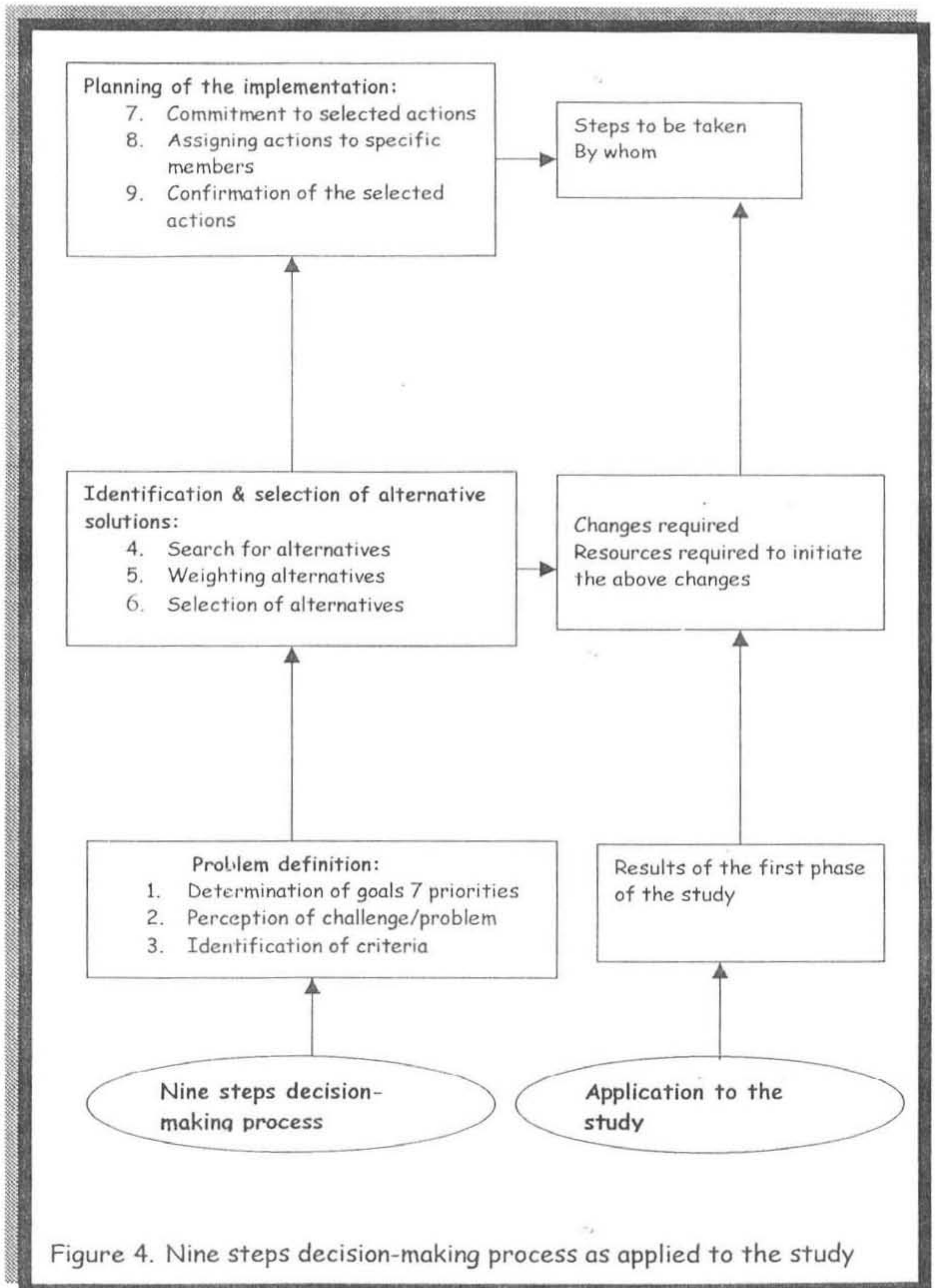

Figure 4. Nine steps decision-making process as applied to the study

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. INTRODUCTION

In order to analyse the basic nursing education systems of Francophone African countries of the WHO AFRO Region, a cross-national study was carried out in two phases. The two phases corresponded to the two objectives of the study. A cross-national study in education allows the researcher to collect data on specific aspects of education from different countries and use them according to the research objectives or purposes. It involves indirect measures of the nature and the rate of changes in education of the countries under study and provides the researcher with data for either a retrospective or a prospective enquiry (Cohen & Manion, 1989).

The cross-national study has the potential to stimulate dialogue and provide a framework for enhancing the accountability of decision-makers by making policy options and their attendant outcomes; increasing the rationality of decision-making by offering a variety of options and anticipated results available to key education officials, and identifying new educational opportunities, new mixes of educational resources and interventions to achieve desired goals (Thomas, 1990).

This chapter on research methodology describes the process followed by the researcher in both phases, and includes the research design, sample & sampling techniques, the instruments, data collection method, data analysis and ethical considerations. The summary of the research process is presented in Figure 5 at the end of the chapter.

3.2. PHASE I: ANALYSIS & DESCRIPTION OF CURRENT BASIC NURSING EDUCATION SYSTEMS

3.2.1. Introduction

The first phase of the study focused on the first main objective of the study, which aimed at describing and analysing the existing systems of basic nursing education of the Francophone African countries of the WHO Afro Region; more specifically to identify the similarities and differences between countries and to see how the different systems compare in terms of the various recommendations of the WHO (1994, 1985, 1984, and 1966). This process was guided by the WHO (1994; 1985; 1984; 1966) recommendations on basic nursing education systems. Figure 3 represents the conceptual framework as applied to the study.

3.2.2. Research Design

A descriptive comparative survey design was used to generate data on the existing basic nursing education systems of the countries under study. The descriptive comparative survey designs are primarily used to examine the relationships between variables, as they exist without manipulation or interference (Brink & Wood, 1993). The survey is the most commonly used descriptive method in educational research. It gathers data at a particular point in time with the intention of describing the nature of existing conditions, identifying standards against which existing conditions can be compared, or determining the relationships that exist between specific events (Cohen & Manion, 1989: 97).

Brink (1998) describes a comparative descriptive survey design as the one, which generates data in order to establish the differences or similarities of some variables between two or more groups of

variables. In planning for any survey design, the researcher needs to specify firstly the exact purpose of the investigation and translate them to specific objectives which will allow him/her to select the most appropriate way of collecting data. Secondly, the researcher needs to specify the population on which the study is going to focus in order to decide on the sampling methods (Cohen & Manion, 1989; Oppenheim, 1992).

3.2.3. Sample and Sampling Techniques

Twenty-one Francophone African countries of the WHO Afro Region were targeted for the first phase of the study. Purposive sampling was carried out to select twenty-one participants (one per country) from the regulatory bodies of nursing and nursing education of the twenty-one Francophone African countries of WHO Afro Region. These regulatory bodies consisted of the Ministries of Health in nineteen countries and the Nursing Councils in two countries. The experience of the researcher shows that members of the regulatory bodies for nursing and nursing education play an important role in shaping nursing education system of their countries. They shape basic nursing education system through policy formulation, administration, control and licensing. Therefore, they are in a better position to provide the researcher with the specific required data for the study.

The literature supports that the sample size in a survey design depends upon the nature of the data to be collected and the type of statistical tests the researcher wishes to conduct (Oppenheim, 1992). It is also suggested that purposive sampling is based on the judgement of the researcher regarding the characteristics of a representative sample. The researcher selects those subjects who know the most about the phenomenon and who are able to articulate and explain

nuances to the researcher. In this way, she/he builds up a sample that is satisfactory to his/her specific needs (Bless & Higson-Smith, 1995; Brink, 1998; Burns & Grove, 1987; Cohen & Manion, 1989).

3.2.4. Instrument

A Self-completion questionnaire was designed by the researcher based on the conceptual framework as applied to the study. The questionnaire was first designed in English and then translated into French by the researcher. The above questionnaire included three main parts: the general information, the description of the current basic nursing education system and the exploration of the current system as perceived by stakeholders. The general information included the name of the country, the position of respondent and his/her complete address. The second and third parts of the questionnaire consisted of (a) open-ended questions, (b) closed -ended questions and (c) objective type questions dealing with the aims and objectives of the programs; the structures of the programs; the administration or control; the support services; the financing; and the current systems as perceived by the stakeholders (see Appendixes 1and 2). A space was left at the end of the questionnaire requesting the respondent to write any remarks or suggestions regarding the questionnaire or the study. In addition, a definition of basic nursing education, as applied in the study, was included in the instrument as well as definitions of the universal components of an education system and the instructions on how to answer the questions.

The content validity of the instrument was ensured by including the definitions of all key concepts as used in the research in order to avoid respondents' own interpretation and to increase the validity of data collection. In addition, the questions were carefully formulated to

include every single component of the conceptual framework of the research. Further more, the instrument, together with the research questions and the objectives was given to two experts (one French speaking and one English speaking) in nursing education within the School of Nursing, University of Natal, for item analysis. Both of them expressed their satisfaction with the instrument. The literature suggests that the content validity of a new instrument can be achieved by referring to literature pertaining to the research topic or by calling the experts in the content area to examine the items to see if they represent adequately the hypothetical content universe in the correct proportions. They argue that if the researcher can demonstrate that an instrument measures all the different components of the variables in question, he/she might be confident that the instrument has a high content validity (Bless & Higson-Smith, 1995; Polit & Hungler, 1983).

Statistical test of reliability was not under taken. However, the researcher was satisfied with the fact that data generated from the instrument reflected what the instrument intended to measure. Polit and Hunger (1983) suggest that an instrument can be seen as being reliable if the generated data accurately reflect the variables under investigation.

3.2.5. Data Collection Method

Data was collected by means of mailed questionnaires. Each country received one set of self-completion questionnaires. The self-completion mailed questionnaire is the best form of data collection for a survey design when the respondents live at widely dispersed addresses or abroad; is the cheapest way of data collection; offers anonymity and the respondents can complete the questionnaire when it is convenient and check personal records if necessary (Neuman, 1997).

However, Bless & Hogson-Smith (1995) argue that the mailed questionnaire has a risk of low response rates. To enhance the response rates, the questionnaire was mailed together with a return envelope with the address of the researcher and an international coupon attached to it. Another set of twenty-one questionnaires was mailed to the same institutions within three weeks interval with the instruction not to return them if they had already done so. This was done with the view of overcoming the potential problem of deficiencies in the mail systems between various countries and the researcher.

3.2.6. Data Analysis

Each returned questionnaire was scrutinized by the researcher and compared against each other to see the response patterns and any abnormality in the completion of the questionnaire by the respondents. The respondents were consistent in the completion of the various items and no questionnaire was discarded. Thereafter, each questionnaire was assigned a number and the answers were translated into English and captured with the assigned number into an English questionnaire.

Data from the closed-ended and objective type questions respectively were coded and analysed by obtaining frequencies and percentages of the responses using the Statistical Package for Social Sciences (SPSS). The responses to the open-ended questions were analysed using the content analysis. Firstly, all the responses were scrutinized to establish the main ideas or themes. Thereafter, these themes were categorised according to their characteristics and the information from the literature.

3.2.7. Ethical Consideration

A covering letter was attached to each questionnaire explaining the aim and objectives of the study and requesting participation in the study. The participants were also informed that the return of the completed questionnaire would be considered as giving consent to participate in the study. They were also informed that the general information included in the questionnaire would be used only for correspondence purposes and that the presentation of the results of findings will not contain the specific name of any country. Finally, the returned questionnaires were treated with confidentiality and anonymity by the researcher.

3.3. PHASE II: EXPLORATION OF THE FUTURE ORIENTATION OF BASIC NURSING EDUCATION SYSTEMS AS PERCEIVED BY STAKEHOLDERS

3.3.1. Introduction

The second phase focused on the investigation of the future orientation of basic nursing education systems of Francophone African countries of the WHO AFRO Region as perceived by the stakeholders; more specifically the changes required, the resources required to implement the needed changes and the steps to be taken to implement the suggested changes. Figure 4 represents the nine steps decision - making process as applied in the study.

3.3.2. Research Design

The Delphi approach was used to generate data on future orientation of basic nursing education systems in the targeted countries. The Policy Delphi consists of three rounds of self-completion mailed questionnaires. It has been suggested that the Delphi technique is one of the best methods of decision-making techniques. It consists of a series of rounds during which a group of individuals is presented with information, usually in the form of statements, and asked to make judgements or supply comments on items presented without these individuals coming into direct personal interaction with one another. Consensus occurs because the views of the participants converge through a process of informed decision-making (Duffield, 1993; Crous, 1994; Gillies, 1994).

3.3.4. Sample and Sampling Technique

Eighteen Francophone African countries of WHO Afro Region were considered for the second phase of the study. The eighteen countries were those who returned the questionnaires for the first phase of the study. Purposive sampling was carried out to select the members of the National Regulatory Bodies of Nursing & Nursing Education and the members of National Nurses Associations of the above countries. The total sample consisted of 36 participants in terms of 2 per country (one from the Regulatory Body of Nursing & Nursing Education, and one from the National Nursing Association).

The decision to include them was based on the assumption that as leaders and experts of nursing education and nursing profession within their countries, they could trigger or facilitate change in the educational system of nursing in those countries. The National Nurses Associations in Francophone African countries represent the interest of all nurses and advocate for the improvement of the educational conditions of nurses, as well as the profession in their countries. The literature supports that the choice of the participants is crucial in Delphi design. While the Delphi Technique seeks consensus among homogeneous groups of experts, it is also wise that participants should be representative of their profession or professional organization, and these unlikely to be challenged as experts in their field and have power to implement the findings, should they wish to (Booyens, 1998; Fink, Kosecoff, Chassin, and Brook, 1984).

3.3.5. Instruments

Self-completion questionnaires designed by the researcher were used during the second phase of the study. The questionnaires were first designed in English and translated into French by the researcher. The design of the first round questionnaire was inspired by the results of the first phase of the study, more specifically the results of the participating countries' perceptions on the current basic nursing education systems. This section included three main open-ended questions related to the changes required; the resources required to initiate the changes; the steps to be taken and by whom? A summary of the results of the first phase of the study was included in the introduction to inform the respondents on the existing systems in the Region.

The second round of Delphi questionnaire included statements derived from the results of the first round of Delphi. These statements needed to be evaluated by the respondents using a four point Likert-scale, ranging from strongly agree, agree, disagree and strongly disagree. A summary of the results of the first round was included in the introduction of the questionnaire.

The third round questionnaire included statements, which were perceived by more than 70% of the respondents as describing the changes required; the resources required to initiate the changes needed; and the steps to be taken. These statements needed to be prioritised by the respondents using a four point Likert-scale, ranging from most important, important, less important and not important. A summary of the results of the second phase was also included in the introduction of the questionnaire.

The literature suggests that the Delphi approach originally tends to deal with technical topics and seeks consensus among homogeneous groups of experts by pre-formulating the obvious issues; feeding the list with an initial range of options but allowing for the respondents to add to the lists; asking for positions on an item and underlying assumptions (Linstone & Turoff, 1975). It is believed that in a Delphi approach, statements need to be supported by rating scales in order to establish some means of evaluating the ideas expressed by respondents on each item. It is further suggested that providing a summary of comments from the previous round elicits more reasoned responses, decreases the time taken to complete a Delphi round, and ensures that consensus is reached more quickly by two, or at most three rounds. The exclusion of neutral answer forces the respondents to think the issue through to a point where she/he can take a non -neutral stance (Turoff, 1975; Young & Hogben, 1978).

Pre-test of the instruments was undertaken each time, using two nursing academics within the School of Nursing, University of Natal, who looked at each item in relation to others and the general presentation of the instruments. Both agreed that the items were unambiguous and had face validity. The literature supports that item analysis is one of the methods used by social scientists to establish the internal consistency of an instrument. It assists the researcher to identify the items, which are confusing or are not providing useful information about the study within an instrument. On the other hand, the face validity is more concerned with the way an instrument appears to the participants (Bless & Higson-Smith, 1995).

No statistical testing of the reliability of the instruments was under taken. However, the results showed that the respondents were consistent throughout the three rounds of Delphi. Similarities were found in the ways respondents answered the different items included in the questionnaires. The literature suggests that the reliability of an instrument can be seen in the degree of consistency with which it measures the variable it is intended to measures (Polit & Hunger, 1983).

3.3.6. Data Collection Method

Self-completion questionnaires were mailed to the participants together with a return envelope containing the address of the researcher and an international coupon. The electronic mailing was also used to collect data for the second and third rounds. In total, 108 questionnaires were sent out, thirty-six questionnaires per round.

3.3.7. Data Analysis

Each returned questionnaire was scrutinized by the researcher to examine the response patterns and identify abnormality in the completion of the questionnaire by the respondents. The exercise showed that the respondents were consistent in the completion of the various items and no questionnaire was discarded. Thereafter, each questionnaire was assigned a number and the responses were translated into English and captured with the assigned number into an English questionnaire. The analysis proceeded according to the types of data generated.

The content analysis was performed to examine data generated from the open-ended questions of the first round. The captured items on the English questionnaires were examined to deduce the main themes or ideas. The themes or ideas generated were categorized according to their common characteristics. These main categories formed the basis for the second round questionnaire. The captured data from the Likert-

scale of the second and third rounds were analysed with the SPSS, using summary statistics. These items were firstly encoded and then analysed using the frequencies and percentages of responses. Consensus for each item included in the second round questionnaire was reached, if at least 70% of the respondent strongly agreed, or agreed, or disagreed, or strongly disagreed on that particular statement. In the second round questionnaire, consensus was reached if at least 70% of the respondent rated the particular item as more important, or important, or less important, or not important.

3.3.8. Ethical Consideration

A covering letter was attached to each round of the questionnaire requesting participation in the study and stating that the return of the completed questionnaire would be regarded as consent to participate in the study. The participants were also informed that the general information included in the questionnaire would be used only for correspondence purposes and that the presentation of the results of findings would not contain the specific name of any country. The returned questionnaires were treated with confidentiality and anonymity by the researcher.

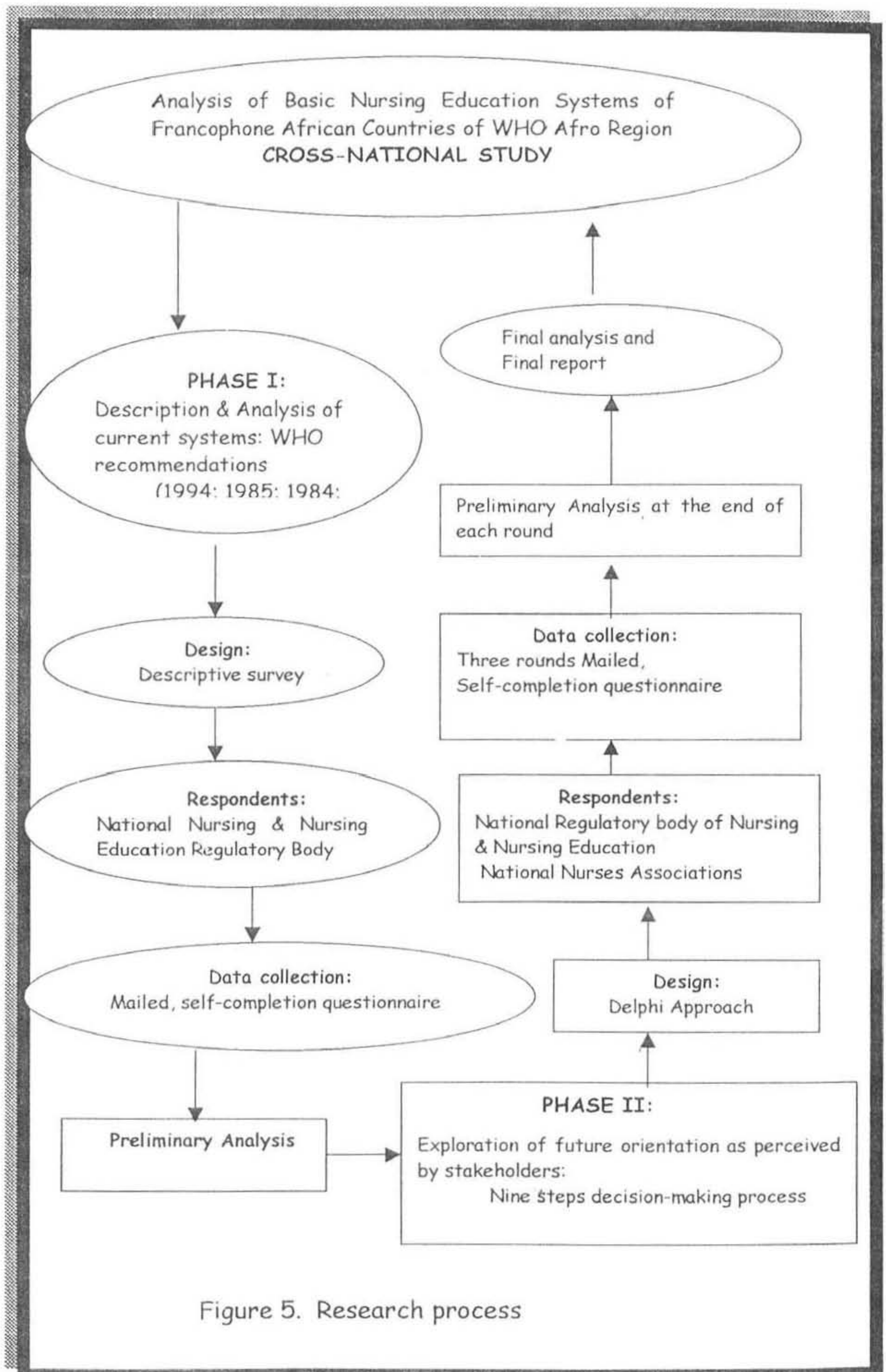

Figure 5. Research process

CHAPTER FOUR

PRESENTATION OF THE MAIN RESULTS OF THE FINDINGS

4.1. INTRODUCTION

The majority (85,7%, n=18) of the countries returned the survey questionnaire for the first phase of the study, which looked at the current basic nursing education systems. Seventeen of these questionnaires were completed by the directors in charge of nursing services and nursing education at the Ministry of Health and one by the president of Nursing Council. All the above 18 (100%) countries participated in the second phase of the study. A total of 108 Delphi questionnaires (in terms of 36 per round) were received from the members of the governing bodies and the National Nursing Associations of the eighteen countries. Among the 18 countries, 15 (83,3%) were former French colonies and 3(16,7%) former Belgium colonies. According to the geographical position, 7 (38,9%) of these countries were from the Western African Region; 7 (38,9%) from the Central African Region; 3(16,7%) from the Western Indian Ocean Region; and 1 (5,6%) from the Northern African Region.

The results of the findings are presented in this chapter according to the two conceptual frameworks, which guided the study. The first section of the chapter dealt with the presentation of the main results of the findings on current basic nursing education systems and the second section dealt with the main results of the findings on future orientation of basic nursing education systems as perceived by stakeholders.

4.2. DESCRIPTION & ANALYSIS OF CURRENT BASIC NURSING EDUCATION SYSTEMS

The results of the findings showed that 16(88,9%) participating countries (fifteen former French colonies and one former Belgium colony) offered only basic nursing diploma programs. The remaining 2(11,1%) participating countries (Two former Belgium colonies) offered basic nursing diploma and basic nursing degree programs. The main results of the findings of the two programs are presented according to the universal components of an education system as described in chapter three. Figures 11a and 11b represent the framework of the current basic nursing education systems of the Region.

4.2.1. General Aims of Basic Nursing Education programs

The content analysis of the data suggested that basic nursing education programs (diploma and degree) aim at preparing a competent state registered nurse able to function as an independent professional in the practice of nursing at the PHC and hospital levels. She/he is expected to function effectively as a unit manager, as a member of multi disciplinary and inter sectoral teams, as well as to think critically and use problem solving approach in all aspects of nursing care. However, competence in conducting research and /or using the research-based information was clearly articulated by the former Belgium colonies. Emerging categories from the content analysis included: the practice of nursing, types and /or levels of care, management and/or collaboration, and process of nursing.

The following section is a presentation of the results according to each category, as well as the relevant themes and statements. Figure 6 represents a summary of the general aims of basic nursing education programs.

The practice of nursing: Generally, regarding the category related to the practice of nursing, the programs aim at preparing nurses who are able to assess, diagnose, treat, plan, implement and evaluate consequences of care given. The central themes delineated from this category included: competence in individual, group and community assessments, competence in individual care, treatment of diseases, health promotion and prevention. The most common statements related to this category included the following:

Competence in individual, group and community assessments: Prepare nurses who are able to:

1. Conduct a comprehensive assessment of individual patients admitted in a health care unit and formulate nursing diagnosis
2. Assess the health needs, including the nutritional needs of the high risk group
3. Identify the most common health problems and diseases of the communities
4. Diagnose the most common diseases presented by patients in a health care unit.

Competence in the care of individuals, groups and communities: Prepare nurses who are able to:

1. Treat and/or administer the prescribed treatment and monitor patients' progress
2. Provide basic and advanced nursing care to individual patients
3. Act as a medical assistant in the absence of the medical doctor
4. Competent in the management of patients from admission to the hospital, up to the discharge from hospital
5. Able to provide basic and advanced nursing care to individual patients within the professional ethic and the legislation of the country

Competence in health promotion and prevention: prepare professionals who are able to:

1. Promote health and prevent the most common health problems and diseases of the communities
2. Formulate programs to address the health needs, including the nutritional needs of high-risk groups.

Types and/or Levels of care: As regards the types and/or levels of care, the programs aim at preparing nurses who are able to provide PHC and Hospital-based care. Emerging themes included PHC and hospital-based care. The following two statements were repeatedly mentioned. Basic nursing education programs aim at preparing professionals who are able to:

1. Provide comprehensive care to clients in a variety of settings
2. Function effectively at the primary, secondary, and tertiary health care levels.

Management and/or collaboration: At the levels of management and collaboration, the graduates of the programs were expected to function independently and effectively as a unit manager, member of multi disciplinary and inter sectoral teams. These were some of the statements in support of the above findings. Basic nursing education programs aim at preparing nurses who are:

1. Able to manage health care units with due consideration to professional ethics and an clear understanding of the legislation of the country
2. Able to function independently as a professional and as an effective member of multidisciplinary team
3. Competent to manage effectively a care unit and train auxiliary personnel
4. Able to function effectively as members of an inter sectoral team.

The Process of Nursing: In relation to the Process of Nursing, these programs aim at preparing professionals who are able to think critically and use problem solving approach in all aspects of nursing care. Emerging themes included problem solving and critical thinking. It was stated by most of the participating countries that basic nursing diploma programs aim at preparing nurses, who are able to:

1. Think critically and use problem-solving skills in the provision of nursing care
2. Use available data and resources to solve the health problems of the individual clients, groups or communities
3. Conduct health related research and use the findings of the research to improve the quality of care
4. Plan, implement and evaluate nursing care for individual patients, groups or community

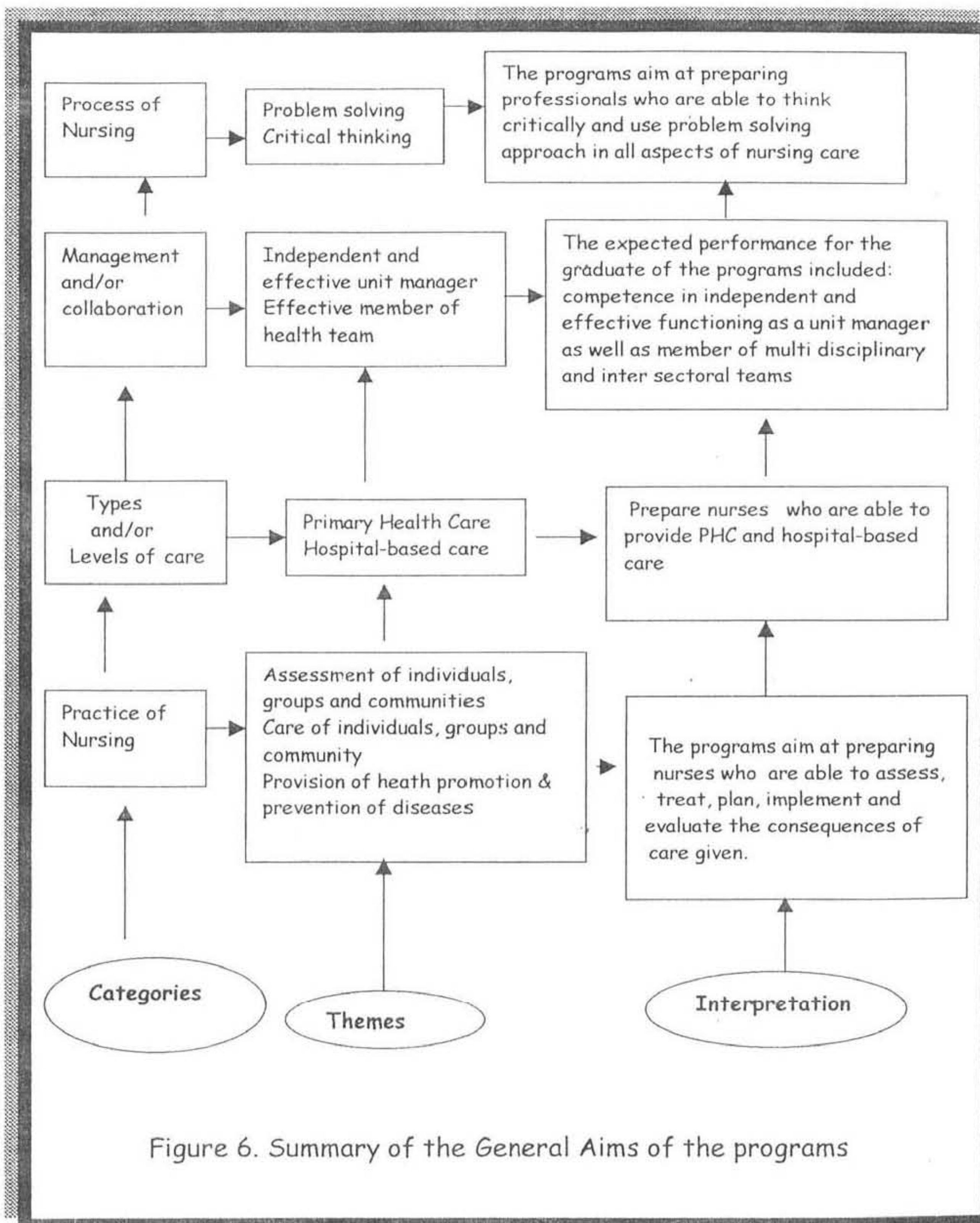

Figure 6. Summary of the General Aims of the programs

4.2.2. General Objectives of Basic Nursing Education programs

Four main categories of general objectives were derived from the content analysis of the basic nursing education programs. These categories were related to the categories of the general aims of the programs. There were no differences between countries, as well as between the two programs, except for the general objectives related to the research activities. The most frequently made statements for each category are given below under the specific themes. Figure 7 includes a summary of the specific general objectives as related to the specific category of the general aims of basic nursing education programs.

The practice of nursing: The graduates were expected to demonstrate knowledge and skills in individual, group and community assessments, in the care of individuals, groups and communities, as well as competence in health promotion and prevention. These objectives were included in the basic nursing diploma and degree programs of all the participating countries. Some of these general objectives were formulated as follow: At the end of the programs, the graduates should be able to demonstrate knowledge and skills in:

The assessments of individual, groups and communities:

1. Assessment of nursing care needs of patients
2. Clinical assessment of individual patients
3. Assessment of medical emergencies with adequate referral
4. Identification of the health problems of the community as well as the health needs of the high risk groups
5. Analyse the health needs, including the nutritional needs of individuals, group, and communities with their participation
6. Formulating nursing diagnosis and primary medical diagnosis

The care of individuals, groups and communities:

1. Prescribing relevant medication
2. Providing specialized nursing care to individual patients in health care units
3. Administering medication as prescribed and monitor patients' response to the prescribed medication
4. Working as medical assistant in the absence of the medical doctor.

Health promotion and prevention:

1. Working effectively with communities to promote self-care and prevent the most common diseases of the communities
2. Designing relevant programs to address the health needs, including the nutritional needs of the community and the high risk groups

Types and/or Levels of care: Basically, the graduates were expected to demonstrate knowledge and skills in providing PHC and hospital-based care. It was stated more often that at the end of the programs, the graduates should be able to demonstrate knowledge and skills in:

1. Providing comprehensive care to clients admitted in health care institutions
2. Working independently at the primary, secondary and tertiary care levels

Management and/or collaboration: As regards the general aims of the programs, the expected quality of performance for the graduates of the programs included knowledge and skills in independent and effective functioning as a unit manager, as a member of multi disciplinary and inter sectoral teams. It was stated more often that at the end of the programs, the graduates should demonstrate knowledge and skills in:

1. The management of a nursing care unit, and nursing services
2. Record keeping and resources utilization
3. Working within the legal framework and the legislation of the country
4. Working within a multi-disciplinary team, providing training and supervision to the auxiliary health personnel
5. The co-ordination of a multi-disciplinary team

The Process of Nursing: The expected level of competence included: knowledge about the nursing profession, research process and willingness to acquire new knowledge. It was repeatedly stated that at the end of the programs, students should demonstrate:

1. An understanding of the research process
2. An understanding of the nursing profession and practice according to the professional ethics
3. The ability to think critically

4. The ability to use available data and resources to solve the health problems of the individual clients, groups or communities
5. Willingness to participate in continuing education and professional development
6. The ability to conduct health related research and use the research findings to improve the quality of care.

The last statement of the above category was mainly made by the former Belgium colonies. However, all the other countries mentioned the understanding of the research process without expecting them to conduct research.

4.2.3. Beginning and Last Review of Basic Nursing Education programs

Data generated from each country was first compared with the year of the independence of that particular country to determine if the program was developed before or after the independence. Thereafter, it was coded and analyzed according to the two following periods: the period before independence or colonial period and the period after independence or post-colonial period. It was found that the majority of the basic nursing education programs started during the post-colonial period. However, the basic nursing diploma programs were established long before the basic nursing degree programs (see Table 4).

During the colonial period, it was shown that the basic nursing diploma programs were established in 5(28%) countries (four French colonies and one Belgium colony). Chronologically, the first program, started in 1930 in one of the French colonies; followed by another one in 1941 in another French colony; then in 1950 in two colonies (one Belgium and one French) and lastly, in 1951 in one of the French colonies.

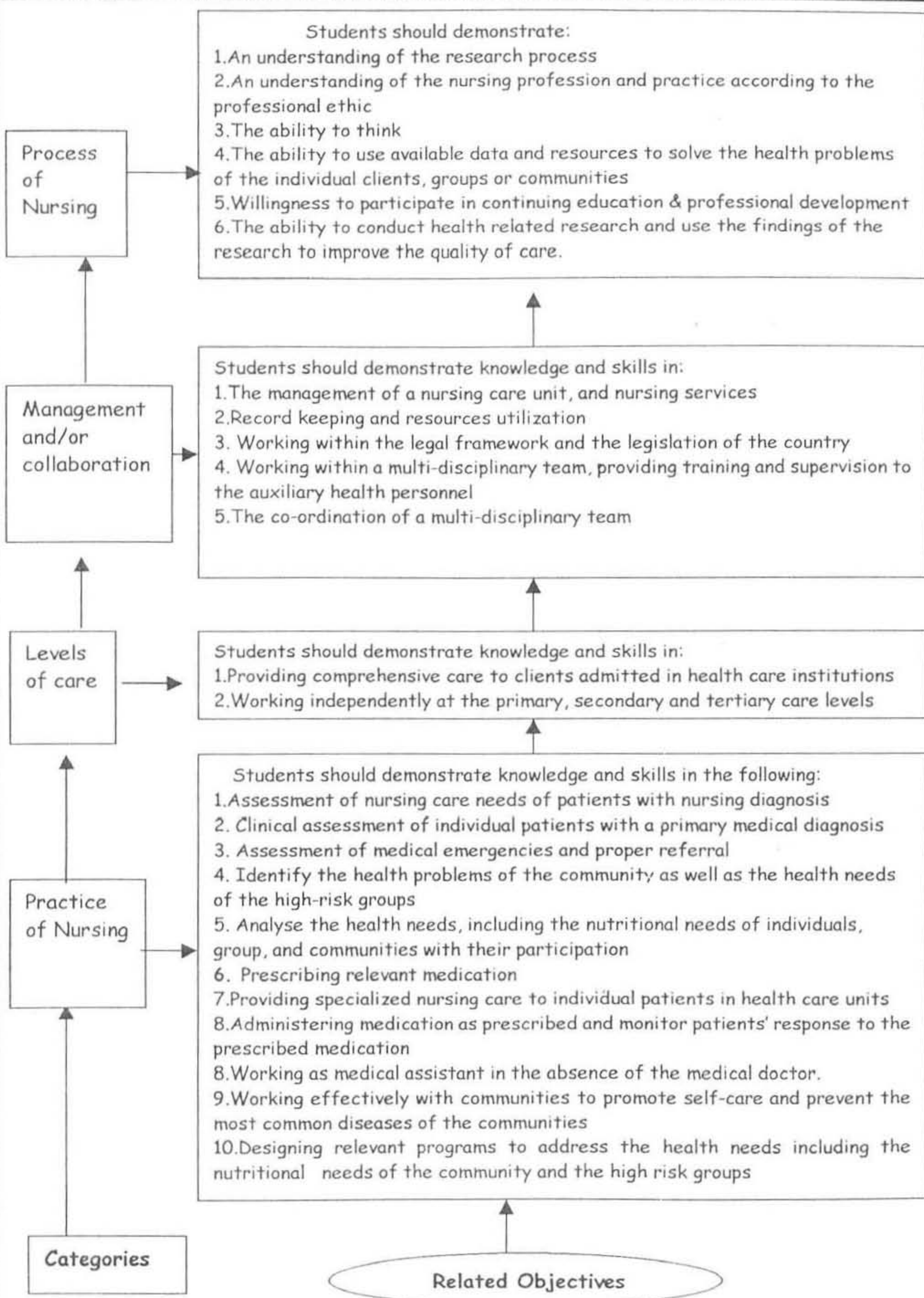

Figure 7. Summary of General Objectives of the programs

During the post-colonial period, basic nursing diploma programs were established in 13(72%) countries and basic nursing degree programs in 2 (100%) countries. Chronologically, basic nursing diploma programs were established between 1960-1965 in 9 (50%) countries (former French colonies), between 1966-1971 in 2 (11,1%) countries (former Belgium colonies), between 1972-1977 in 2 (11,1%) countries (former French colonies). As indicated earlier, it was in 1973 that the first basic nursing degree programme was established in a former Belgium colony. It was in 1997 that the second country (former Belgium colony) started the with the basic nursing degree program.

The results showed that the above programs were last reviewed between 1984-1999 (see Table 9). Chronologically, basic nursing diploma programs were last reviewed between 1984-1989 in 4(22,2%) countries (former French colonies); between 1990-1995 in 6(33,3%) countries (five former French colonies and one former Belgium colony); and between 1996-1999 in 8 (44,4%) countries (six former French and two former Belgium colonies). It was also between 1996-1999 that the basic nursing degree program established in 1973 was last reviewed.

Table 4. Beginning and Last Review of Basic Nursing Education programs

Periods	Beginning of the programs		Last Review of the programs	
	Basic Diploma N=18	Basic Degree N=2	Basic Diploma N=18	Basic Degree N=2
Colonial period:	**5 (27,8%)**	**0 (0%)**	**0 (0%)**	**0 (0%)**
1930-1935	1 (5,6%)			
1936-1941	1 (5,6%)			
1942-1947	0 (0%)			
1948-1953	3 (16,7%)			
1954-1959	0 (0%)			
Post-colonial:	**13 (72,2%)**	**2 (100%)**	**18 (100%)**	**1 (50%)**
1960-1965	9 (50%)	0 (0%)	0 (0%)	0 (0%)
1966-1971	2 (11,1%)	0 (0%)	0 (0%)	0 (0%)
1972-1977	2 (11,1%)	1 (50%)	0 (0%)	0 (0%)
1978-1983	0 (0%)	0 (0%)	0 (0%)	0 (0%)
1984-1989	0 (0%)	0 (0%)	4 (22,2%)	0 (0%)
1990-1995	0 (0%)	0 (0%)	6 (33,3%)	0 (0%)
1996-1999	0 (0%)	1 (50%)	8 (44,4%)	1 (50%)

4.2.4. Structures of the Basic Nursing Education programs

4.2.4.1. Duration and Admission requirements

There were some similarities and differences between countries as regard to the way basic nursing education programs were structured. Basic nursing diploma programs are offered over three years on a full time basis in 15(83,3%) countries (former French colonies) and over four years on a full time basis in 3(16,7%) countries (former Belgium colonies). The above programs lead to basic diploma in either general nursing or midwifery in 15(83,3%) countries (former French colonies) and to basic diploma in nursing sciences in 3(16,7%) countries (former Belgium colonies). Basic nursing degree programs are offered over three years in both countries

and lead to a basic degree in hospital sciences or hospital sciences with a clinical speciality.

It was also found that the programs offered more than one entrance routes to the above diploma or degree. The minimum duration required for the completion of basic nursing diploma programs varies between thirteen and fifteen years in former French colonies and between fourteen and seventeen years in former Belgium colonies, depending on which route the candidate follows. The minimum duration required to complete basic nursing degree programs varies between fifteen and twenty-two years depending also on which entrance route the candidate follows.

The admission requirements to the basic nursing education programs range from educational level, previous working experience, selection examination and individual interviews. All 18(100%) participating countries indicated that candidates for the basic nursing diploma programs were subjected to a selection examination. Only 2(11,1%) countries (former French colonies) indicated that the candidates to basic nursing diploma programs were subjected to individual interviews. The minimum educational level required for entrance to the basic nursing diploma programs varies from senior state certificate, four years of post-primary education to two years of nursing certificate. However, the minimum educational level required for entrance to the basic nursing degree programs varies from senior state certificate to the basic nursing diploma. Previous work experience was mainly required for candidates with nursing certificate entering the basic nursing diploma programs or candidates with basic nursing diploma programs entering the basic nursing degree programs. The minimum educational level required for entrance to the basic nursing education programs, as well as the minimum working experience required

are described in the following sections, according to the three structures of basic nursing education programs.

The three years basic nursing diploma programs: Four entrance routes leading to the above diploma were described by the former French colonies (see Figure 8). The 6-7-3 route (Six years of primary education, seven years of secondary education, and three years of basic nursing diploma education); the 6-2-4-3 route (Six years of primary education, two years of certificate in nursing, four years of working experience, three years of basic nursing diploma programs); the 6-4-3 route (Six years of primary education, 4 years of secondary education and three years of basic nursing diploma education); and the 6-2-3-3 route (Six years of primary education, 2 years of certificate in nursing, three years of working experience, and three years of basic nursing diploma education). However, the first two routes were described by thirteen of the fifteen countries, while the last two routes were described by two of the fifteen countries.

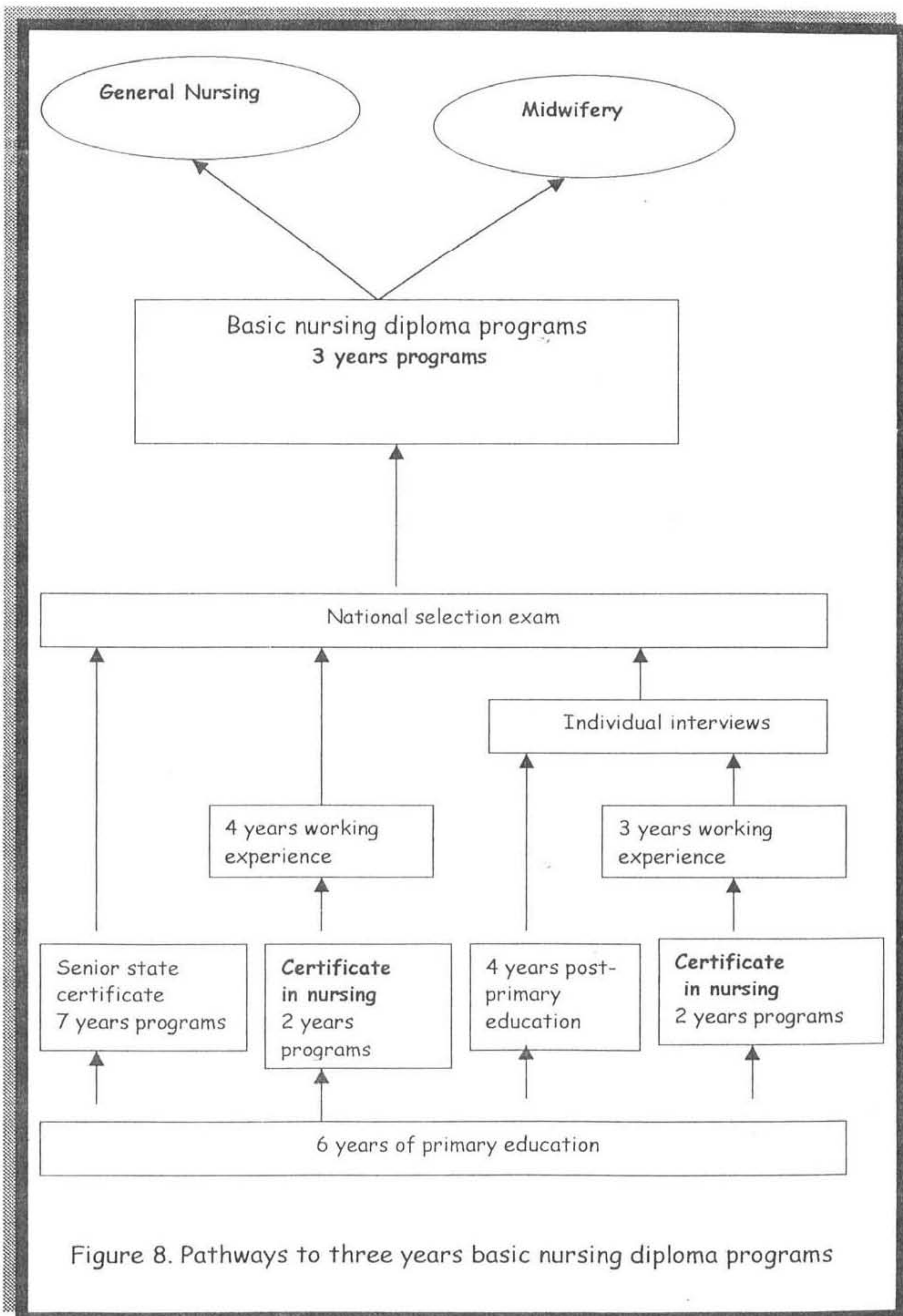

Figure 8. Pathways to three years basic nursing diploma programs

The four years basic nursing diploma education programs: Two entrance routes leading to the four years basic nursing diploma was described by 3(16,7%) former Belgium colonies (see Figure 9). The 6-4-4 route (Six years of primary education, four years of secondary education and four years of basic nursing diploma education programs) and the 6-3-2-2-4 route (Six years of primary education, three years of post-primary education, two years of nursing certificate, two years of working experience, and four years of basic nursing diploma education programs).

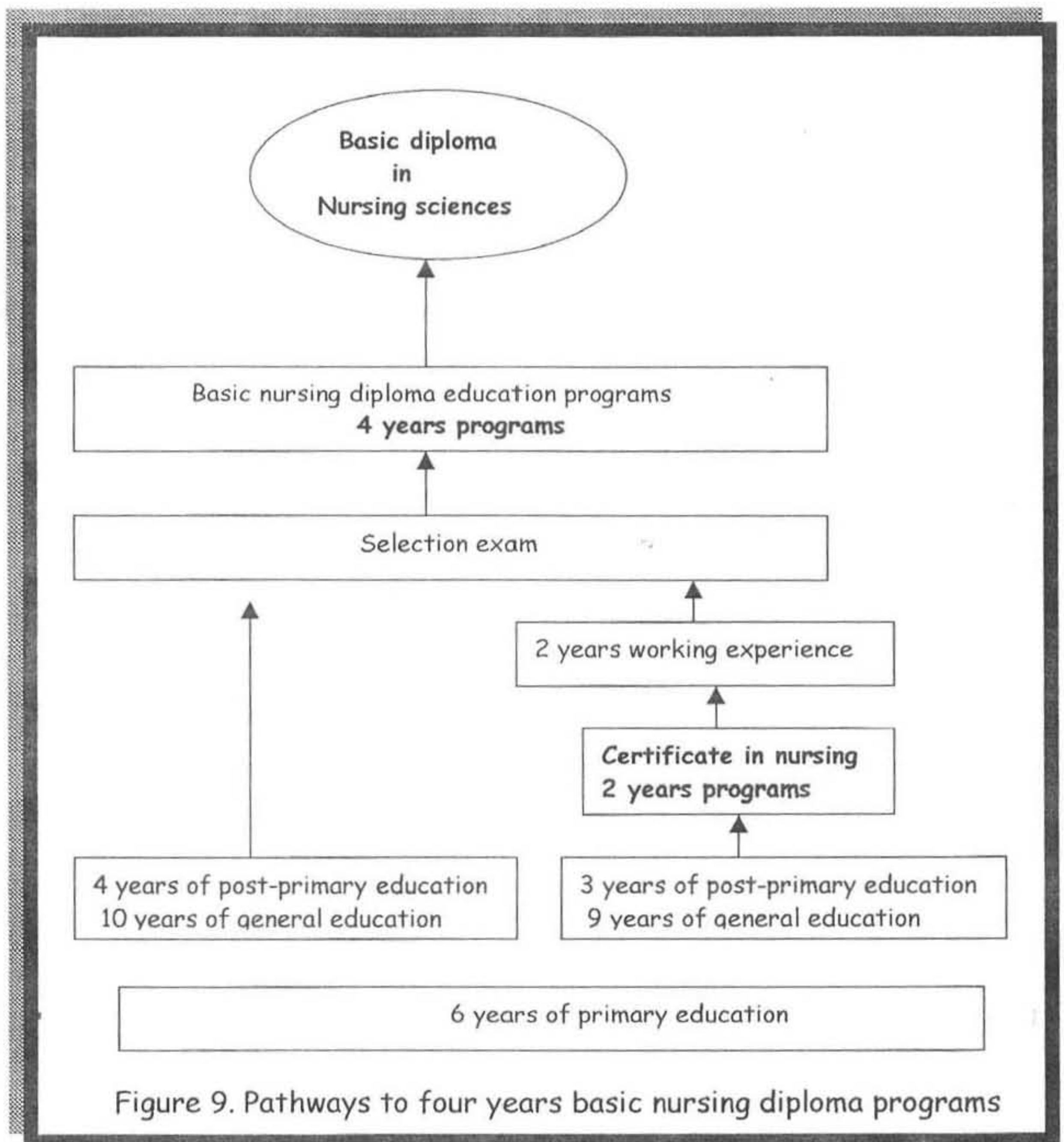

Figure 9. Pathways to four years basic nursing diploma programs

The three years basic nursing degree programs: Two entrance routes (see Figure 10) leading to the above degree were described by the two countries: the 6-6-3 route (Six years of primary education, 6 years of post-primary education and 3 years of basic nursing degree education programs), and the 4-2-3 route (Four years of basic nursing diploma, two years of working experience and three years of basic nursing degree education programs).

It was further shown that the majority (88,9%, n=16) of the participating countries with basic nursing diploma programs (13 former French colonies and 3 former Belgium colonies) stated that the admission requirements to basic diploma programs were similar with the similar professional education programs of their countries. The remaining 2 (11,1%) countries (both former French colonies) indicated some differences in the admission requirements between basic nursing diploma programs and other similar professional education programs of their countries. They stated that the selection exams and the senior state certificate were not required for entrance to the other similar professional education programs. Further more, the two countries with basic nursing degree programs stated that there were no differences between the admission requirements to basic nursing degree programs and other similar professional education programs of their countries.

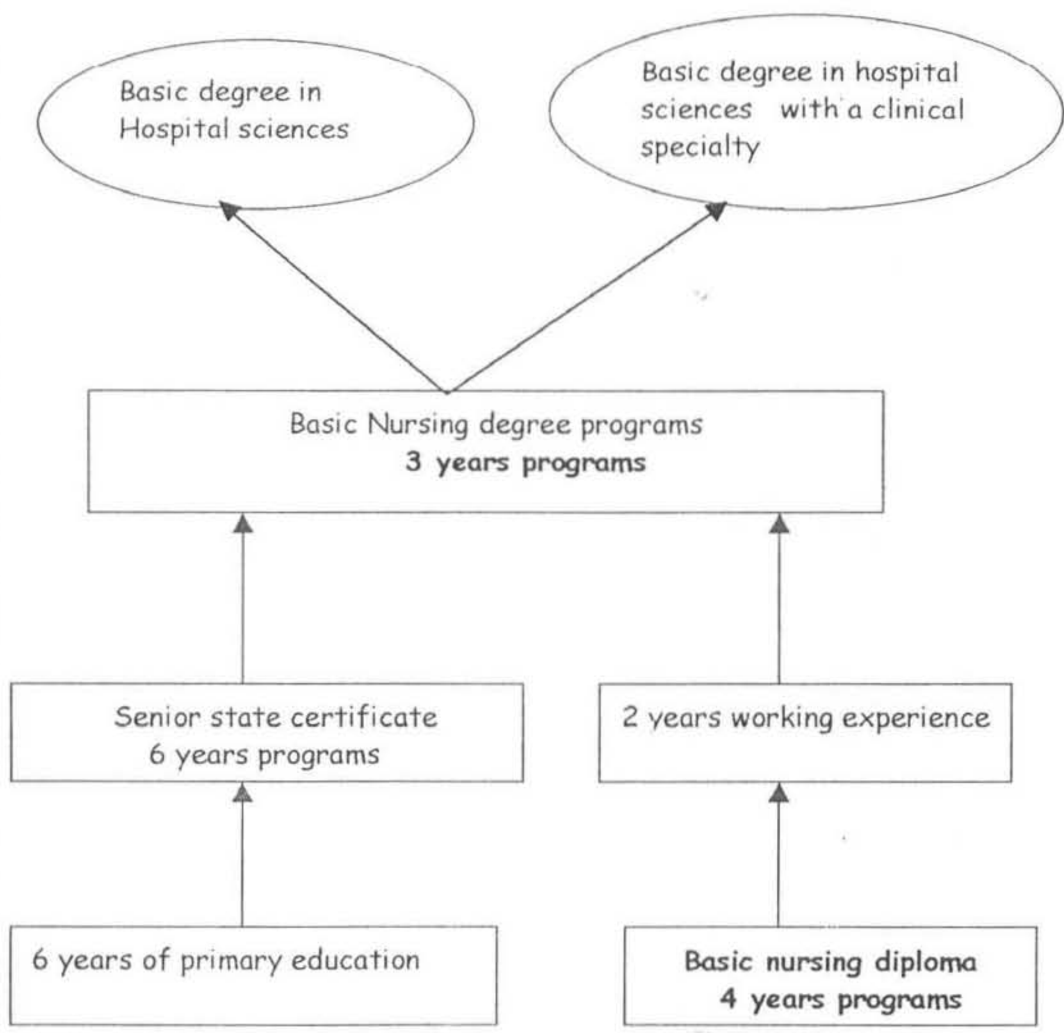

Figure 10. Pathways to three years basic nursing degree programs

4.2.4.2. General description of the learning experiences

The results suggested more similarities than differences between countries as regard to the general content of basic nursing education programs. Generally, the content consisted of theoretical and clinical learning activities. However, it was revealed that the content of basic nursing diploma programs emphasised more on clinical learning activities than theoretical learning activities. In the contrary, the content of basic nursing degree programs emphasised more on theoretical learning activities than clinical learning activities. According to the total number of training hours, the four years programs had the highest number of training hours followed by the three years basic nursing degree programs and the three years basic nursing diploma programs.

Basically, the training of basic nursing diploma nurses of the eighteen participating countries takes on average 3,837 hours of which 56% (2149 hours) was dedicated to clinical learning activities or practical and 44% (1688 hours) to theoretical learning activities or a 1:1,3 ratio theory and practical. While, the training of basic nursing degree nurses of the 2 countries takes about 3,600 hours of which 60% (2,160 hours) was assigned to theoretical learning activities and 40% (1,440 hours) to clinical learning activities or practical. A further distinction was made between the 4 years and 3 years basic nursing diploma programs. It was shown that the training of registered nurses in four years basic diploma education programs takes about 4,591 hours of which 54% (2479 hours) was allocated to clinical learning activities and 46% (2111 hours) to theoretical learning activities. The training of registered nurses in the 3 years basic nursing diploma programs takes on average 3,083 hours, of

which 57% (1757hours) was spent in clinical learning activities or practical; and 43 % (1325) on theoretical learning activities (see Table 5).

Table 5. General description of the learning experiences

Programs	Average percentage and number of hours		
	Total	Practical	Theory
Three years Basic Nursing degree	3,600 hours	40% (1,440 hours)	60% (2,160 hours)
Four years Basic Nursing diploma	4,591 hours	54% (2,479 hours)	46% (2,111 hours)
Three years Basic Nursing diploma	3,083 (hours)	57% (1757 hours)	43% (1325 hours)

4.2.4.3. Theoretical content of basic nursing education programs

The results suggested more similarities than differences between countries as regard to the theoretical content of the programs. In each participating country, the theoretical content included the following three main subjects: (a) nursing subjects, (b) biomedical & other health related subjects and (c) social sciences & general subjects. However, in each country, more than 50% of the theoretical hours of the programs were assigned to biomedical & other health related subjects. It was also shown that the theoretical content of the programs of the participating countries was related to the different categories of the general aims and objectives of the programs. However, more emphasis was placed on courses related to hospital-based care than PHC. Differences emerged also between the three programs (three years basic nursing diploma, four years basic nursing diploma and three years basic nursing degree) as regard to the number of courses included in each main subject as well as the number of hours allocated to the subjects. In the following section, the results of the theoretical content of

the programs are presented according to the three main subjects. A summary of the theoretical content is given in Table 5 at the end of this section.

Three years basic nursing degree programs: In total, the three year basic nursing degree programs of the two countries included thirty courses divided as follows: fifteen biomedical & other health related courses, eight nursing courses and seven social sciences & general courses (see Table 6). It was shown that about 53% (1,140 hours) of the theoretical learning hours of the three year basic nursing degree programs was assigned to the biomedical & other health related courses, 32% (690 hours) to nursing courses and 15% (330 hours) to social sciences & general courses.

Further more, about 60% (680 hours) of the theoretical learning content of the biomedical & other health related courses was allocated to medical sciences related courses (Medical & Surgical pathology; Gynaecology & Obstetrics; Paediatrics & Infants pathology; Communicable & Sexually Transmitted diseases; Special pathology; Physio-pathology; Entomology & Parasithology); 24% (275 hours) to other health related sciences (Clinical Chemistry; Clinical diagnosis; Radio-diagnosis; Nutrition & Dietetics; Physiotherapy and Pharmacology); and 16% (185 hours) to biological sciences related courses (Microbiology, Anatomy & Physiology).

As regard to the nursing courses, about 65% (450 hours) of the theoretical content of the nursing courses was allocated to the traditional hospital-based nursing courses (Fundamental nursing; General nursing which included medical, surgical, pediatric nursing and other nursing specialty; Anesthesiology & Resuscitation); 8,7% (60 hours) to Midwifery

which included gynaecology, obstetrics and neonatal nursing; 8,7% (60 hours) to Public health/Community health nursing; 8,7% (60 hours) to Professional practice & Ethos; 4,3% (30 hours) respectively to Neuro-psychiatric nursing and Nursing Research.

In terms of the social sciences & general courses, it was shown that about 55% (180 hours) of the theoretical content of the social sciences & general courses was assigned to the general courses (Mathematics & Applied Statistics, Biology, Biochemistry, and Citizenship & Development); 32% (105 hours) to language (Technical English; and Logic, oral & written expression); and 13,6% (45 hours) to one social science course (Psychology).

The four years basic nursing diploma programs: The four years basic nursing diploma programs of the three countries included twenty-one courses divided as follows: ten biomedical & other health related courses, six nursing courses, and five social sciences & general courses. However, the programs of one of the three countries included only one social science & general course. About 57% (1,203 hours) of the theoretical learning hours of the four years basic nursing diploma programs was assigned to biomedical & other health related courses; 31% (645 hours) to the nursing courses; and 12% (253 hours) to social sciences & general courses.

In terms of teaching hours' allocation to the biomedical & other health related courses, the results showed that about 80% (960 hours) was allocated to medical sciences related subjects (Medical & Surgical pathology; Gynaecology & Obstetrics; Paediatrics & Infants pathology; Communicable & Sexually Transmitted diseases; Special pathology); 11%

(132 hours) to other health related science courses (Clinical Laboratory; Nutrition & Dietetics; and Pharmacology); and 9% (104 hours) to biological science related courses (Microbiology, Anatomy & Physiology).

In relation to nursing courses, it was found that about 72% (474 hours) of the theoretical content was allocated to the traditional hospital-based nursing courses (Fundamental nursing; General nursing which included medical, surgical, pediatric nursing and other nursing specialty); 14% (90 hours) to Midwifery which included gynaecology, obstetrics and neonatal nursing; 9% (60 hours) to Public health/Community health nursing; 3% (20 hours) to Professional practice & Ethos; 1,5% (10 hours) to Neuro-psychiatric nursing.

In terms of the social sciences & general courses, it was shown that about 53% (133 hours) of the theoretical content of the social sciences & general courses was assigned to the general courses (Mathematics, Applied Statistics, Biology, Moral & Citizenship); 24% (60 hours) to language (French or/and English); and 24 % (60 hours) to the social science course (Psychology or Sociology).

Three years basic nursing diploma programs: The three years basic nursing diploma programs of the fifteen countries included twenty courses as follows: nine biomedical & other health related courses, six nursing courses and five social sciences & general courses. However, the programs of seven countries included five nursing courses while one social science & general course was included in the programs of one country. About 51% (675 hours) of the theoretical learning hours of the three years basic nursing diploma programs was assigned to biomedical & other health related courses; 35% (468 hours) to nursing courses; and 14% (185

hours) to social sciences & general courses.

In terms of teaching hours allocation to the biomedical & other health related courses, the results showed that about 75% (506 hours) was allocated to medical sciences related subjects (Medical & Surgical pathology; Gynaecology & Obstetrics; Paediatrics & Infants pathology; Communicable & Sexually Transmitted diseases; Special pathology); 15,5% (105 hours) to biological science related courses (Microbiology, Anatomy & Physiology); and 9,5% (64 hours) to other health related science courses (Nutrition & Dietetics; and Pharmacology).

In relation to the nursing courses, it was found that about 71% (333 hours) of the theoretical content was allocated to the traditional hospital-based nursing courses (Fundamentals of nursing; General nursing which included medical, surgical, paediatric nursing and other nursing specialties); 19% (90 hours) to Midwifery, which included gynaecology, obstetrics and neonatal nursing; 6% (30 hours) to Public health/Community health nursing; 3% (10 hours) to Professional practice & Ethos; 1% (5 hours) to Neuro-psychiatric nursing.

In terms of the social sciences & general courses, it was shown that about 35% (65 hours) of the theoretical content of the social sciences & general courses was assigned to the general courses (Mathematics, Applied Statistics, Biology, Basic computer skills & Accounting); 32,5% (60 hours) to language (French or/and English); and 32,5% (60 hours) to the social science course (Psychology or Sociology).

Table 6. Theoretical content of basic nursing education programs

Three years Basic Nursing degree (N=2)	Four years Basic Nursing diploma (N=3)	Three years Basic Nursing diploma (N=15)
Nursing subjects: (32%, 690 hours) General nursing Midwifery Community/Public health Fundamental nursing Professional practice Neuro-psychiatric nursing Anaesthesiology-Resuscitation Nursing Research	**Nursing subjects: (31%, 654 hours)** General nursing Midwifery Community/Public health Fundamental nursing Professional practice Neuro-psychiatric nursing	**Nursing subjects: (35%, 468 hours)** General nursing Midwifery Community/Public health Fundamental nursing Professional practice Neuro-psychiatric nursing* (*: Included in 8 countries)
Biomedical & Other health related subjects: (53%, 1140 hours) Medical & Surgical pathology Gynaecology & Obstetrics Paediatrics & Infants pathology Communicable & Sexually Transmitted diseases Pharmacology Special pathology Anatomy & physiology Microbiology Nutrition & Dietetics Entomology & Parasithology Physio-pathology Clinical diagnosis Clinical Chemistry Radio-diagnosis Physiotherapy	**Biomedical & Other health related subjects: (57%, 1203 hours)** Medical & Surgical pathology Gynaecology and Obstetrics Paediatrics & Infants pathology Communicable & Sexually Transmitted diseases Pharmacology Special pathology Anatomy & physiology Microbiology Nutrition & Dietetics Laboratory Analysis	**Biomedical & Other health related subjects: (51%, 468 hours)** Medical & Surgical pathology Gynaecology and Obstetrics Paediatrics & Infants pathology Communicable & Sexually Transmitted diseases Pharmacology Special pathology Anatomy & physiology Microbiology Nutrition & Dietetics
Social sciences & General subjects: (15%, 330 hours) Mathematics & Applied Statistics Biology Biochemistry Citizenship & Development Technical English Logic, oral & written expression Psychology	**Social sciences & General subjects: (12%, 253 hours)** Applied Statistics Language (French /English)* Basic sciences (Biology, Mathematic)* Social Sciences (Psychology or Sociology)* Moral & Citizenship* (*: Except one countries)	**Social sciences & General subjects: (14%, 185 hours)** Applied Statistics Language (French / English) Basic sciences (Biology, Mathematic) Social Sciences (Psychology or Sociology) Accounting & Basic computer Skills* (*: Included in one country)

4.2.4.4. Clinical Learning content of the programs

The results revealed that the clinical learning content of the students takes place in the three following settings: (a) the hospital (secondary and tertiary), (b) the PHC settings (primary health care clinics and/or centres), and (c) Clinical Skills Laboratory (CSL). However, it was found that the hospital settings are used extensively than the PHC and CSL. A minimum of 70% of the clinical learning activities of each program was dedicated to the hospital settings (see Table 7). The above results are related to the theoretical learning content, which showed more emphasis on hospital-based care than PHC care. The main results of the findings are presented in the following section according to the three programs. A summary is provided in Table 7 at the end of the section.

Three years basic nursing degree programs: The two countries in this category have indicated that 85% (1,224 hours) of the clinical learning activities takes place in hospital settings; 10% (144 hours) in CSL, and 5% (72 hours) in PHC settings. The CSL is used extensively in the first year of the study while the hospital and the PHC experiences start from the second year of the study. It was revealed that most of the clinical learning experiences take place during the academic holidays and at the last semester of the third year.

Four years basic nursing diploma programs: The three countries in this group indicated that 76% (1884 hours) of the clinical learning activities takes place in the hospital settings; 16%(344 hours) in the PHC settings; and 8% (172 hours) in the CSL. It was revealed that the clinical learning experiences of the students in all three countries take place throughout the year.

The three years basic nursing diploma programs: The results showed that 70% (1,230 hours) of the clinical learning experiences of the students of fifteen countries takes place in the hospital settings; 20% (351 hours) in the PHC settings; and 10% (176 hours) in the CSL. It was revealed that the clinical learning experiences of the students in three countries takes place throughout the year.

Table 7. Summary of Clinical Learning content of the programs

Programs	Total clinical hours	Hospital settings	PHC settings	Clinical Skills Laboratories
Three years basic degree	1,440 hours	85% (1,224 hours)	5% (72 hours)	10% (144 hours)
Four Basic diploma	2,148 hours	76% (1,884 hours)	16% (344 hours)	8% (172 hours)
Three years diploma	1757 hours	70% (1,230 hours)	20% (351 hours)	10% (176hours)

4.2.4.5. Teaching Methods and Students' Evaluation

The results showed that three of the four following teaching methods were used in each of the three basic nursing education programs: (a) classroom lectures, (b) case study, (c) clinical teaching and (d) self-study. The classroom lectures and clinical teaching were the most common teaching methods used in all three programs. The case study method was used only in the basic nursing diploma programs while the self-study method was used only in the three years basic nursing degree program. However, the classroom lecture method was extensively used than any of the other methods in all the three programs (see Table 8).

In terms of percentage, it was shown that classroom lecture represented 90% of the teaching time of the three years basic nursing

degree programs; 75% of the three years basic nursing diploma programs, and 60% of the four years basic nursing diploma programs. The case study method represented 30% of the teaching time of the four years basic nursing diploma programs and 17,5% of the three years basic nursing diploma programs. The clinical teaching method represented 10% of the teaching time of the four years programs, 7,5% of the three years basic diploma programs, and 5% of the three years basic nursing degree programs while the self-study method represented 5% of the teaching time of the three years basic nursing degree programs.

Table 8. Teaching methods used in basic nursing education programs

Programs	Teaching Methods and Average % allocated			
	Classroom lectures	Case studies	Clinical teaching	Self-study
Four years basic nursing diploma	60%	30%	10%	0%
Three years basic nursing diploma	75%	17,5%	7,5%	0%
Three years basic nursing degree	90%	0%	5%	5%

As regard to students' evaluation methods, the results showed that written examinations, oral examinations, continuing assessment tests, practical/clinical examinations and individual/group projects were used in all the three programs of the participating countries. It was reported that students were required to submit all the projects, attend more than 80% of lectures and complete 100% of clinical hours before writing the examination. To pass from one class to another, 50% of each component was required. In addition to the above requirements, candidates in the

final year of the four years basic nursing diploma programs, as well as the basic nursing degree, were required to submit a research project.

4.2.5. Administration or Control

4.2.5.1. Number of Basic Nursing Education Institutions

It was found that basic nursing education programs of the participating countries were offered in eighty-six educational institutions. The majority of these institutions (89,5%, n=77) offered only basic nursing education programs while the remaining 10,5% (n=9) offered basic nursing degree programs. The number of these institutions per country varied from one to thirty-three. However, the majority of the participating countries (83,3%, n=15) had less than six educational institutions offering basic nursing education programs. The remaining 16,7% (n=3) countries had respectively six, eight and thirty-three educational institutions offering basic nursing education programs.

4.2.5.2. National Controlling Bodies and Academic calendar

The results revealed that basic nursing educational institutions of the participating countries were under the control of either the Ministry of Health or the Ministry of Education. Basically, all the basic nursing educational institutions offering basic nursing diploma programs were controlled by the Ministry of Health while the basic nursing educational institutions offering basic nursing degree programs were controlled by the Ministry of Education.

The academic calendar of all the participating countries consisted of two semesters of twenty-three weeks each. However, the opening and closing dates of an academic year differed between countries. The academic year runs from the 15th of October to the 30th of July in 12

(66,7%) countries and from the first of September to the 30th of June in 6 (33,3%) countries.

4.2.5.3. Teaching staff and qualifications of the Heads of Nursing Education Institutions

The results suggested that the three following categories of teaching staff were involved in the teaching of nursing students: (a) nurse educators, (b) medical doctors and (c) other subject specialists. The nurse educators were in charge of the nursing subjects and clinical supervision of students; the medical doctors were offering the medical and other health related subjects; and other subjects' specialists were offering social sciences & general related subjects.

The qualifications of the heads of nursing education institutions ranged from Doctor of Philosophy degree to the Bachelor of science degrees. However, the majority of the heads of nursing educational institutions did not have nursing qualifications. It was found that out of 86 educational institutions offering basic nursing education programs, 71% (n=61) were headed by medical doctors and 23% (n=20) by nurse educators. As regards to those headed by nurse educators, their qualifications ranged from basic degree in nursing education and administration (14%, n=12) to PhD in nursing (2%, n=2). Others were headed paramedics with bachelor degree in health related disciplines.

4.2.6. Support services and Financing

The results showed that support services to teaching staff and students in most of the countries were very limited and included: financial assistance to students in form of bursary, counselling services and health care services, which were always available in the majority of the countries (see Table 9). As regard to financing, it was shown that basic nursing education institutions were financially supported by one or more of the following sources: (a) the government, (b) the parents, and (c) the private sector. The government fully financed basic nursing education institutions in 10(55,6%) countries; the government and parents in 3 countries (16,7%); the government, private sector and parents in 3 countries (16,7%); and government and private sector in 2 countries (11,1%). All countries have indicated that other professional educational institutions of their countries were also financed in the same way basic nursing education institutions were financed.

Table 9. Support services available to teaching staff and students

Support services	Availability		
	Always	Sometimes	Never
Teaching staff:			
Paid study leave to teaching staff	8 (44,4%)	10 (55,6%)	0 (0%)
Teaching aids (over head projectors & video)	6 (33,3%)	10 (55,6%)	2 (11,1%)
Personal computer	0 (0%)	2 (11,1%)	16 (88,9%)
Access to research fund	0 (0%)	2 (11,1%)	16 (88,9%)
Personal office	10 (55,6%)	0 (0)%)	8 (44,4%)
Medical Aid	14 (77,8%)	10 (55,6%)	4 (22,2%)
Photocopy & fax machines.	14 (77,8%)	2 (11,2%)	2 (11,1%)
Students:			
Counselling & health services	0 (55,6%)	6 (33,3%)	2 (11,1%)
Adequate classroom	5 (27,7%)	3 (16,7%)	9 (50%)
Libraries	6 (33,3%)	8 (44,4%)	4 (22,2%)
Computer Centres for students	0 (0%)	1 (5,6%)	17 (94,4%)
Transport during clinical learning	4 (22,2%)	6 (33,3%)	8 (44,4%)
Financial support (bursary, loans)	18 (100%)	0 (0%)	0 (0%)
Accommodation	5 (27,7%)	0 (0%)	13 (83,3%)
Recreational facilities	8 (44,4%)	6 (33,3%)	4 (22,2%)

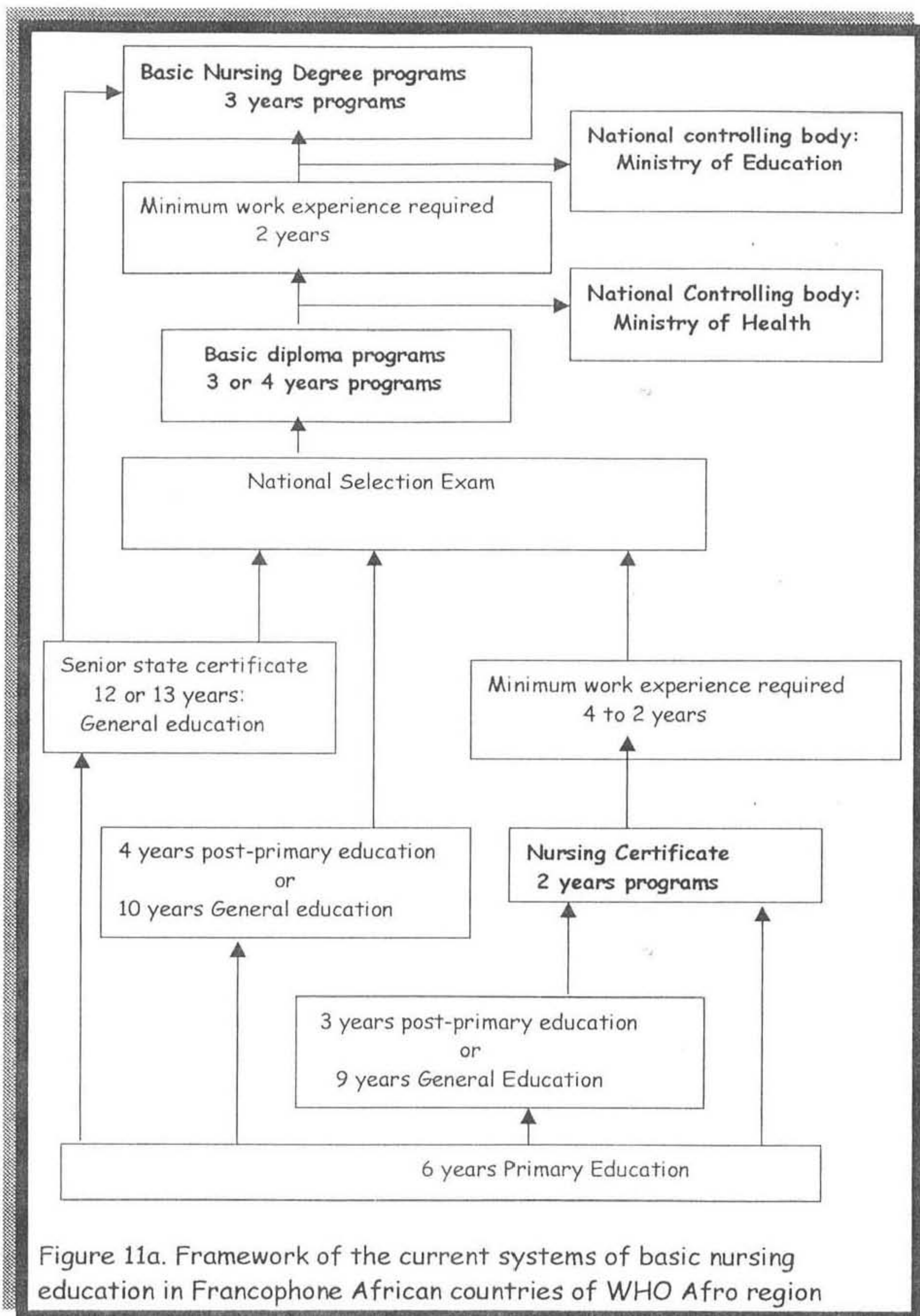

Figure 11a. Framework of the current systems of basic nursing education in Francophone African countries of WHO Afro region

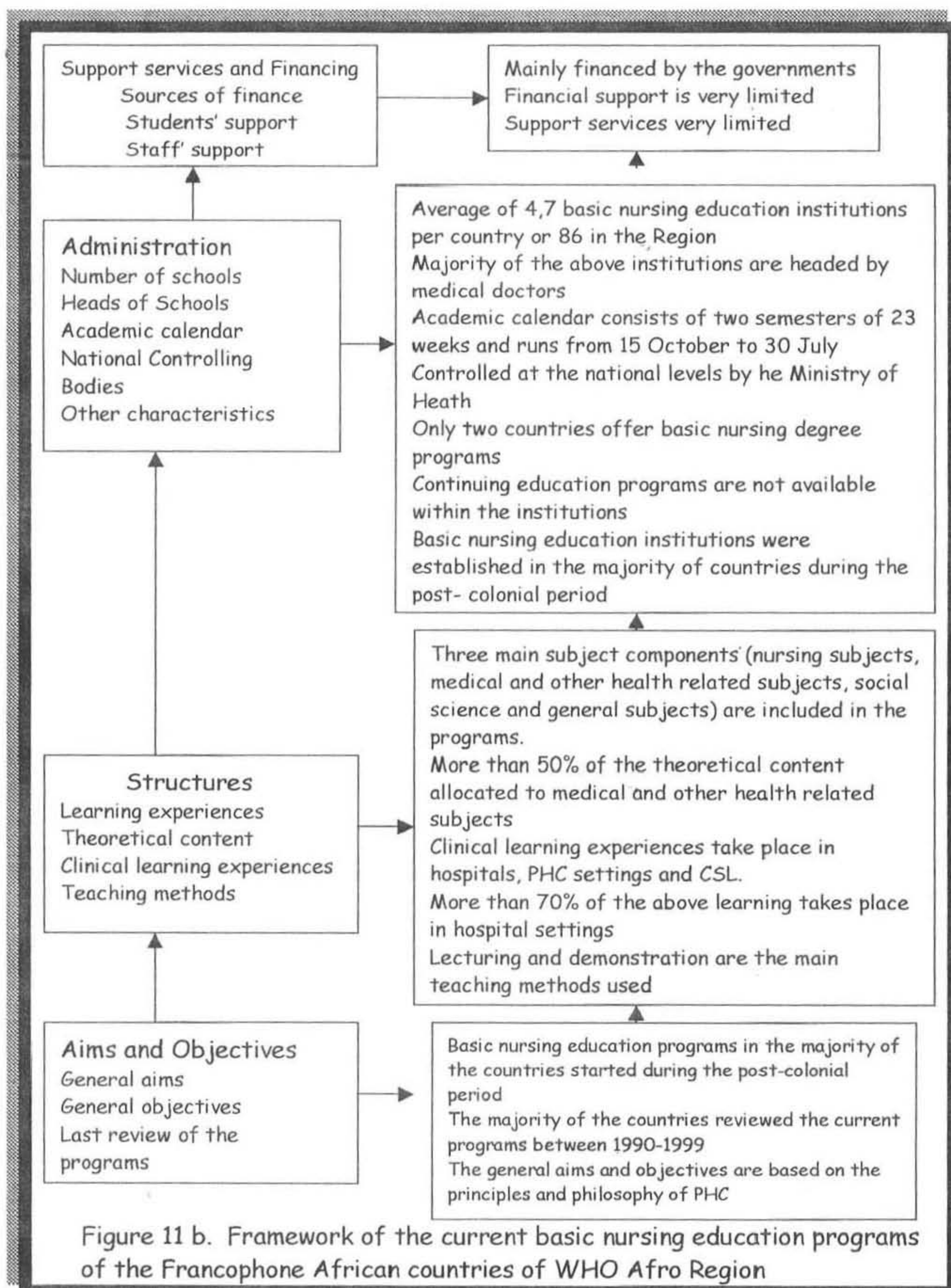

Figure 11 b. Framework of the current basic nursing education programs of the Francophone African countries of WHO Afro Region

4.2.7. Current basic nursing education systems as perceived by the participating countries

4.2.7.1. Problems facing the current Basic Nursing Education Systems

The content analysis of data generated suggested that current basic nursing education systems as perceived by stakeholders were not sufficiently geared toward the expanding knowledge in nursing, medical sciences and technology as well as geared toward meeting the new demands of the social, political and economic situations of the country and the world in general. Two main categories of problems emerged from the data: (a) the educational related problems, and (b) the organizational related problems. The educational related problems, referred mainly to the aims of the programs, the objectives of the programs, the content of the programs, and the teaching methods. The organisational related problems included problems with the admission requirements, the administration of the nursing education institutions, the support services and financing. A summary of the problems facing the current systems of basic nursing education is provided in Figure 12 at the end of this section.

The Educational related problems: At this level, it was perceived that the curricula of the current basic nursing education systems were not adequately responsive to changes and relevant to the new demands of the social, political and economic situations of the countries and the expanding knowledge in nursing, medical sciences and technology. Emerging themes delineated from this category included (a) unresponsiveness to change, and (b) lack of relevance to the new demands.

Some of the outstanding statements reflecting the above two themes were articulated by the participating countries as follow:

Unresponsiveness to changes:

1. The current programs do not adequately prepare the candidates to meet the changing health needs of the country.
2. The current programs do not keep pace with the advances in medical sciences, technology, nursing education and nursing profession.
3. The current systems are not adequately geared toward meeting the demands of the health care delivery systems and the changing profile of the nursing students.

Lack of relevance to the expanding knowledge:

1. The content of the programs are overloaded with non-nursing subjects and focus mainly on curative care.
2. The content of the current programs focus mainly on curative and hospital-based care.
3. The professional practice aspects and nursing research component are poorly covered in the programs.
4. More emphasis is placed on theoretical teaching than clinical learning.
5. The teaching methods are not adapted to the new approaches and the needs of the students.

The Organizational related problems: The current basic nursing education systems as viewed by the participating countries' lack proper legislation that would secure relevant and/or quality education for nurses; do not offer enough opportunity for professional and personal growth; and have very limited resources to support staff as well as students. Three main themes emerged from the data: (a) lack of proper legislation, (b) lack of opportunities for personal and professional development, and (c) scarce resources.

The above three themes were repeatedly articulated by the participating countries in some of the following statements:

Lack of proper Legislation:

1. The level of education required for entrance to the programs does not allow the candidates to cope with the demands of the programs.

2. Medical doctors who do not promote the development of graduate and post-graduate programs for nurses predominantly head nursing education institutions.
3. The current legislation does not promote nursing to be established as an independent profession and secure the development of nursing profession and nursing education.
4. The regulation of the current systems does not facilitate the development of nursing education toward meeting or maintaining the expected standards.

Lack of opportunities for professional and personal development:

1. The current systems offer limited opportunities for continuing education, staff development and networking.
2. The number of qualified nurse educators with masters and doctoral degree in nursing who can serve as role model and ensure quality education for nurses as well as professional development is very limited.
3. The current systems do not allow academic preparation of nurses needed to ensure the development of the profession.

Scarce resources:

1. The teaching aids and support services are problematic.
2. The financial resources are very limited.
3. The infrastructures are poorly developed and some of the classrooms cannot cope with the increased number of students

4.2.7.2. Factors supporting the need to change

On the basis of the above problems facing the current basic nursing education systems, all the 18(100%) countries that participated in the study indicated that there was a need to change the current basic nursing education systems. The participating countries identified a number of factors in support of change in nursing education in the Region. These factors were closely related to the problems they perceived as facing the current systems.

It was suggested that the ever-changing nature of the society, with the expanding knowledge of medical science, technology, nursing and nursing education, requires a constant reassessment of nursing education in order to make it more responsive to external factors from the profession as well as international factors within the profession. External

External Factors: It was argued that external factors from the profession, more specifically the social, political, and economic transformation taking place in the countries as well as the expanding knowledge of medical sciences and advances in technology influence nursing and nursing education. Therefore, nursing education institutions need to respond positively to those changes in order to produce professionals who are able to function effectively within these new environments. Relevance of basic nursing education to changes within the environments was the central theme emerging from this category.

Some of the outstanding statements reflecting the above theme included the following:

1. The advances in technology, more specifically advances in communication technology support the need for change in the current systems.
2. With all the happenings in social, political and economic situations of the country, new methods of educating nurses are badly needed.
3. With the globalisation and advances in technology, the world is growing more and more smaller, and nurses will be called to adapt to these new environments.
4. As members of international organizations, such as the WHO and ILO, nurse educators need to revise the education systems of nurses to accommodate the recommendations of such organisations regarding nursing education.
5. The adoption of PHC as the driving philosophy for health care delivery calls for the need to change the current systems of educating nurses.
6. The decreasing financial support to the educational institutions and the increasing unemployment rate call for a reassessment of the education systems of nurses.

Internal Factors: The participating countries argued that internal factors within the profession, such as the expanding scope of practice of nurses, the expanding knowledge of nursing and new development in the profession, support the need for changes in basic nursing education systems. It was suggested that basic nursing education systems should introduce innovative methods in teaching nurses and adapt to the

emerging needs of the country, the students as well as the profession. The central themes emerging from this category included relevance to nursing practice and nursing profession, as well as relevance to the expanding knowledge of the profession.

The statements reflecting the above themes included the following:

1. The expanding knowledge of medical sciences requires nurse educators to introduce new methods of educating nurses.
2. Nurses, more specifically in rural communities, are being increasingly asked to respond to various health needs of the population. However, the current systems do not prepare nurses to function effectively in such environment.
3. The movement toward regional and continental integration with the increasing population movement creates a constant need to re-look at the education of nurses toward the harmonization of the practice of nursing and of the education of nurses.
4. With the expanding knowledge of nursing sciences, more specifically the development of graduates and research programs, the education of nurses need to change accordingly.
5. Nursing has established itself as a profession with a body of knowledge, which needs to be reflected strongly in the education of nurses.

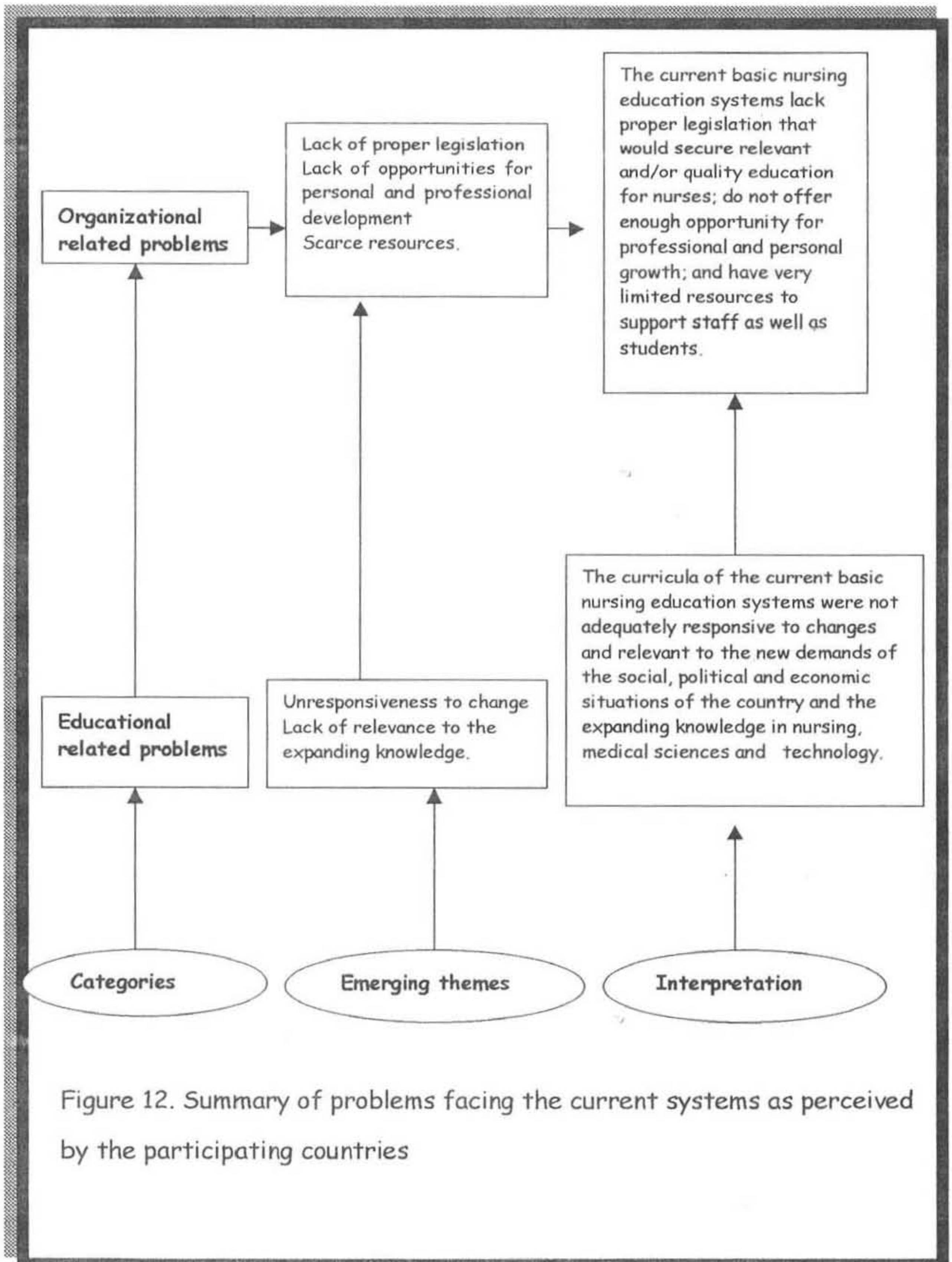

Figure 12. Summary of problems facing the current systems as perceived by the participating countries

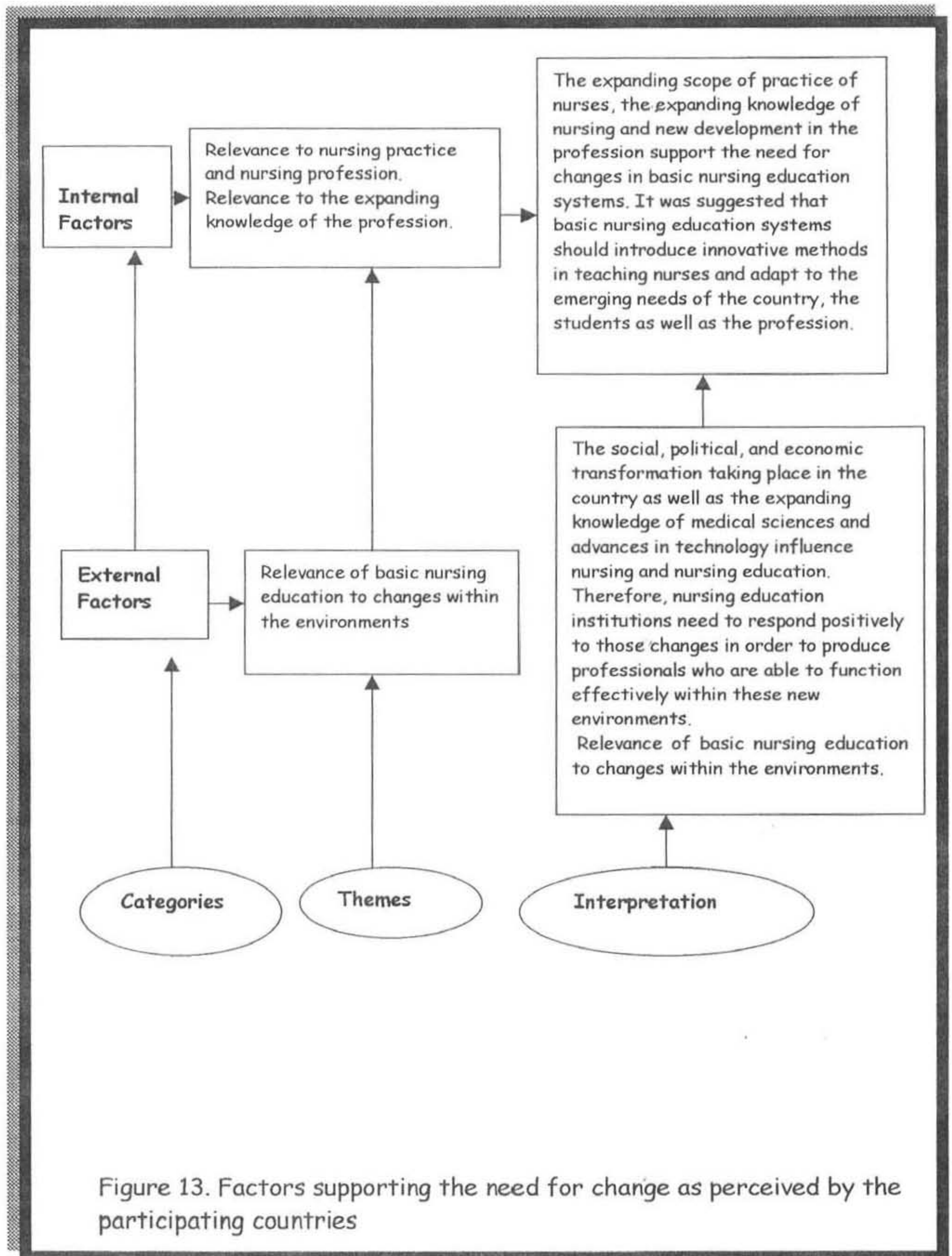

Figure 13. Factors supporting the need for change as perceived by the participating countries

4.3. EXPLORATION OF FUTURE ORIENTATION OF BASIC NURSING EDUCATION SYSTEMS AS PERCEIVED BY STAKEHOLDERS.

4.3.1. Introduction

The results of the survey on future orientation of basic nursing education systems as perceived by stakeholders were related to the problems facing the current basic nursing education systems as perceived by the participating countries as well as the recommendations of the WHO (1994, 1985, 1984 and 1966) regarding basic nursing education systems. Similarities were also found between the results of the second and the third round of Delphi. All statements rated by stakeholders in the second round Delphi which describe the future orientation of the basic nursing education systems by strongly agreeing or agreeing were also rated as very important or important in the third round. Therefore, it was more convenient to report only the findings of the third round Delphi, which reflect the results of the second round Delphi. Figures 14 and 15 respectively represent the deduced framework for the future orientation of basic nursing education systems and the framework for change.

4.3.2. Changes required in the Basic Nursing Education Systems

4.3.2.1. First Round Delphi

The results showed that all changes suggested by stakeholders were related to the problems they perceived as facing the current basic nursing education systems. It was expressed that the future basic nursing education systems should be more responsive to the ever-changing nature of the society and be relevant to the needs of the countries, the profession and the students. Two main categories of changes derived

from the content analysis of data generated: (a) educational changes and (b) organizational changes.

The Educational changes: Stakeholders suggested that future basic nursing education systems of the Region should train a polyvalent nurse who will be able to provide comprehensive nursing care and conduct research. The programs, as perceived by stakeholders, should be community or primary health care oriented with innovative teaching approaches. Emerging themes delineated from the data included: (a) community or primary health care oriented, (b) research, and (c) innovative teaching approaches.

The above themes were clearly articulated in some of the following statements:

1. The future basic nursing education systems should train a polyvalent nurse, able to provide comprehensive nursing care, including health promotion, health prevention, curative and rehabilitative care in a variety of settings.
2. The programs should prepare the graduate to participate and conduct research, to provide quality care with the minimum of technology.
3. The objectives of the programs should move from the predominantly individual and hospital-based care model to the primary health care model.
4. The content of the programs should be reviewed to meet the aims and objectives of the programs as well as provide students with a range of general knowledge as foundation for the practice of nursing.
5. The clinical learning should shift from the predominantly hospital settings to the community settings and the clinical learning hours should be increased.
6. More innovative teaching methods which focus on self-directed learning should replace the traditional classroom lecture teaching method.

The organisational changes: Basically, it was suggested that basic nursing education systems should develop under the university or higher education, be relevant to the social changes, expanding knowledge and technology to ensure quality education and consequently quality nursing care. Emerging themes included graduate education, quality of students

and teaching staff, networking & harmonization, improved infrastructures and financial support. The above themes were reflected in some of the following statements:

1. Basic nursing education should develop within the university or higher institutions.
2. Basic nursing education should move towards harmonisation and networking with the other nursing education institutions in Francophone African Region.
3. The senior state certificate should be the minimum education level required for entrance to basic nursing education programs.
4. Train more qualified nurse educators with masters and doctoral degrees in various nursing disciplines to ensure quality education within the nursing education institutions as well as to take direction of the nursing education institutions.
5. Basic infrastructure, support services and financial support need to be improved.

4.3.2.2. The Third Round Delphi

The results of the last round Delphi suggested that the future basic nursing education systems of the Francophone African countries of WHO Afro Region should be more responsive and relevant to the ever-changing nature of the society, the needs of the countries, the profession as well as the students. Two categories of changes were perceived as necessary for the future of basic nursing education systems of the Region: (a) the educational changes and (b) the organisational changes. All these perceived changes were in line with the WHO recommendations and the new development in basic nursing education in the continent and around the world.

In relation to educational changes: The results showed that the future basic nursing education systems of the Region as perceived by stakeholders should train a polyvalent nurse who will be able to provide comprehensive nursing care and conduct research. The programs should

be community or primary health care oriented with regular introduction of innovative teaching approaches.

More than 70% of the stakeholders expressed the following views:

The aims of basic nursing education programs should:

1. Be clearly defined to allow for the assessment of learning.
2. Be based on the philosophy and principles of PHC.
3. Shift from the predominantly medical model of disease and hospital-based care to community-orientated education with focus on promotive, preventive, curative, and rehabilitative care.
4. Take into account the health policies and priorities of the government.
5. Be similar in the region to facilitate regional co -operation, and networking between staff and students.
6. Reflect the recommendations of WHO pertaining to basic nursing education.

The graduates of basic nursing education programs should be able to:

1. Demonstrate knowledge and skills in community-oriented nursing.
2. Demonstrate a broad range of general knowledge as foundation for the practice of nursing and continued professional development.
3. Provide comprehensive health care (including promotive, preventive, curative, and rehabilitative) to individual, family, group, and community at the primary, secondary and tertiary health settings and community level.
4. Demonstrate the ability to think critically, analytically and creatively and apply scientific approach to nursing.
5. Function as change agents responding to the changing needs of individuals, families and communities.
6. Adapt their nursing roles and functions to the health policies and priorities of the government.
7. Provide comprehensive nursing care, including general, mental health, community and midwifery.
8. Work in partnership with the community and other disciplines.
9. Organize and participate in team efforts to improve the health status of the community in partnership with the community, and other health related sectors.
10. Participate and conduct research.
11. Demonstrate respect for the dignity and uniqueness of the individual in his / her socio-cultural context.
12. Demonstrate competence as professional nurses in affective, cognitive, and psychomotor skills.
13. Willingly participate in continuing education.
14. Develop and retain the knowledge in professional ethics and apply the knowledge to improve the image of the profession.
15. Work at national, regional, continental and international levels.

The theoretical content of the programs should:

1. Be relevant to the objectives of the programs and the legislation of the country.
2. Take into account the needs of students and the resources (staffing, infrastructure) of the education institutions.
3. Be relevant to clinical practice and the future responsibility of the nurse.
4. Include nursing subjects, general subjects, biomedical and other health related subjects.
5. Dedicate more hours to nursing subjects than other subjects.
6. Integrate the pathophysiology of the common diseases of the countries and the treatment thereof with the nursing subjects.
7. Include among the nursing subjects the following courses: fundamental nursing; medical and Surgical nursing; mental health nursing; community health/public health; primary health care; midwifery; nursing history and trends in nursing profession; nursing research; and ethics and legal responsibility of the nurse.
8. Include among the social sciences and general subjects the following courses: statistics; communication and writing skills; social science subjects, such as sociology, anthropology, and psychology; basic computer skills; anatomy; human physiology; pharmacology; microbiology; nutrition & dietetics.

The clinical learning content should:

1. Be planned by the teaching staff of the education institutions.
2. Be relevant to the objectives of the programs and the theoretical content.
3. Take place in a variety of settings, including clinical laboratory; PHC settings (Clinics, Health centres, Polyclinic, Health Post, etc); community (Schools, Residential areas, Industry, Working places), and hospitals (General& specialist).
4. Offer more practice opportunities in PHC settings and communities than hospitals.
5. Ensure the continuity between theory and practice.

Teaching Methods should:

1. Shift from the subject/ teacher -centred approach to student-centred approach.
2. Be innovative with regular introduction of new methods relevant to the needs of students.

In relation to Organisational changes: It was revealed that basic nursing education systems as perceived by stakeholders should develop under the university or higher education, be relevant to the social changes, expanding knowledge and technology to ensure quality education and consequently quality nursing care.

More than 70% of the stakeholders expressed the following views:

Admission requirements:

1. Senior state certificate or equivalent should be the minimum education level required to basic nursing education.
2. Teaching staff should assess candidates for entry into the basic nursing education.
3. Should be consistent with educational standards and legislation of the country as well as similar throughout the Francophone African Region to facilitate students' mobility.

Basic nursing education institutions: Basic nursing education institutions should:

1. Develop under the University or Higher education.
2. Be controlled by the Ministry of Education.
3. Be approved by the government through the Nursing Regulatory Body.
4. Be regulated by the Nursing Regulatory body.
5. Be headed by qualified nurse educators with Masters or Ph.D.
6. Organize part-time and distance education programs to allow nurses to further their education without leaving their jobs and making nursing education available in rural areas as well as in urban areas.

Support services: More than 70% of the stakeholders expressed the views that basic nursing education institutions should provide the following support services:

1. Health and counselling services for students.
2. Adequate classrooms, accommodation & transportation.
3. Financial support to student and staff (bursary, loans, etc).
4. Equipped library.
5. Personal computer for the teaching staff.
6. Clinical laboratory equipments.
7. Teaching aids and teaching material.
8. Research fund for the teaching staff.
9. Computer centres for students and recreational facilities.

Financing of basic nursing education institutions: It was shown that more than 70% of the stakeholders expressed the views that basic nursing education institutions should:

1. Have financial autonomy.
2. Be financed by the government and the private sectors in the same way that other educational institutions are being financed.
3. Be financed by the parents through school fees and special contributions.

4.3.3. Resources required for initiating change

4.3.3.1. First Round Delphi

To initiate changes in the current systems as viewed by the stakeholders, would require a strong transformational leadership, expertise, and collaboration, financial and material support. Three main categories of resources derived from the content analysis of data: (a) human resources, (b) financial resources and (c) material and other resources.

The human resources required: At this level, it was found that transformational leaders within the nursing profession and experts are required to initiate changes. Two main themes derived from this category: (a) transformational leadership and (b) experts. It was frequently stated that to initiate changes, the following human resources are needed:

1. A strong nursing regulatory body with vision of transformation.
2. Nurse leaders with broad vision of the nursing profession and transformation.
3. Experts/consultants from the WHO Collaborating Centres.
4. Qualified nurses with masters and doctoral degree in clinical and non -clinical nursing disciplines.

Financial, material & other resources required: It was expressed that financial support to educational institutions, teaching staff and students should be increased and that the existing infrastructures should be improved. The main themes included the increased financial support and improved infrastructures. The above themes were reflected in some

of the following statements: changes in the current basic nursing education systems will require:

1. An increased financial support for the nursing education institutions and the students.
2. Financial incentive for the teaching staff.
3. International support for the national government to initiate change.
4. The establishment of computer centres within the institutions.
5. Equipped libraries.
6. The supply of teaching material and aids as well as clinical laboratory equipment and transportation.

4.3.3. 2.Third Round Delphi

At this final round, it was clearly expressed by more than 70% of the stakeholders that changes in the current systems of basic nursing education in the Region would require (a) human resources, (b) financial resources, and (c) material and other related resources. These resources should include:

Human Resources:

1. Qualified nurse educators with Masters and PhD in clinical nursing specialities.
2. Qualified nurse educators with Masters and PhD in nursing education.
3. Qualified nurses with Masters and PhD in nursing management and administration.
4. Experts to assist in planning and implementing changes.

Financial Resources:

1. An increased financial support for the nursing education institutions and the students.
2. Financial incentive for the teaching staff.
3. International financial support for the national government to initiate change.

Material and other Resources:

1. The supply of teaching materials and aids.
2. The supply of clinical laboratory equipments.
3. The establishment of computer centres within the educational institutions.
4. Equipped libraries.

4.3.4. Steps to be taken to initiate changes

4.3.4.1. First Round Delphi

It was viewed that actions need to be taken at three levels: (a) the national government, (b) the national associations of nurses, and (c) African Regional Office of the World Health Organisation. These actions ranged from change of policy, commitment, willingness, empowerment, influence, expertise, collaboration, and support. The above actions are described in this section according to the levels at which they are expected to be taken.

The National Government: It was perceived that the national government should formulate new legislation that would facilitate changes, show commitment to the above policy and willingness to act. The emerging themes included: (a) formulation of new policy, (b) commitment to change, and (c) willingness to act.

Policy formulation: It was stated that the national government should formulate new policy that would facilitate:

1. The shift of basic nursing education to university or higher education.
2. The development of post-graduate education for nurses.
3. The establishment of a regulatory body for nursing and nursing education with the power to generate and maintain standard for nursing and nursing education.
4. The transfer of the control and administration of nursing education institutions to qualified nurse educators.

Commitment to change: It was indicated that the national government should commit itself to:

1. The improvement of the working conditions of nurses in order to maintain the highly qualified nurses in the country.
2. Develop basic infrastructure for nursing education institutions.
3. Finance research projects to evaluate the current systems.

Willingness to act: It was stated that the national government should:

1. Establish a commission to review the current system.
2. Provide bursary to nurses to do masters and doctoral degrees in nursing abroad.
3. Provide financial support for the students.

The National Associations of Nurses: Stakeholders suggested that the National Associations of Nurses should empower nurses to lobby for change in basic nursing education systems. Two themes: (a) lobbying and (b) empowerment emerged from the data generated. These were examples of some of the statements reflecting the above two themes. The National Associations of Nurses should:

1. Mobilize nursing education institutions and nursing personnel to lobby governments and non-governmental organizations to initiate changes in nursing education.
2. Educate nurses about career opportunities and development in nursing.
3. Organize regular workshops /seminars / conferences to keep nurses informed on new developments in nursing and nursing education.
4. Seek support from nursing professional organisations and nursing education institutions from within and outside the continent to initiate changes.

The WHO Regional Office: The WHO Afro Region, as perceived by stakeholders, should facilitate and influence changes in basic nursing education systems. Two main themes: (a) facilitation and (b) influence emerged from the analysis. It was frequently stated that the WHO Afro Region should:

1. Initiate and finance changes in basic nursing education systems.
2. Organise and facilitate workshops on the development of nursing education of the Francophone African Region.
3. Bring experts from the Collaborating Centres to assist countries in the transformation of basic nursing education. Pressurise the national governments to engage in the transformation of basic nursing education.

4.3.4.2. Third Round Delphi

At this final round of Delphi, it was found that the stakeholders expected the National government, the National Nurses Associations and the Regional office of WHO to take the lead in initiating changes in the basic nursing education systems of the Region. These roles were complementary in their natures. However, the national government was perceived as playing the most important role in the transformation of nursing education systems than the two others institutions. These findings as described below were related to the findings of the first round Delphi.

More than 70% of stakeholders expressed the views that:

The National Government should take the following steps:

1. **Formulate policy** that would facilitate (a) the shift of basic nursing education to university or higher education, (b) the development of post-graduate education for nurses, (c) the establishment of a regulatory body for nursing and nursing education with the power to generate and to maintain standard for nursing and nursing education, and (d) the transfer of the control and administration of nursing education institutions to qualified nurse educators.
2. **Commitment to** (a) improve the working conditions of nurses in order to retain the highly qualified nurses in the country, (b) finance research project to evaluate the current systems, and (c) develop basic infrastructure for nursing education institutions.
3. **Willingness to** (a) establish commission to review the current programs, (b) provide bursary to nurses to do masters and doctoral degree in nursing abroad, and (c) provide financial support to the students.

The National Associations of Nurses should take the following steps:

1. Mobilization of nursing education institutions and nursing personnel to lobby governments, and non-governmental organizations to initiate changes in nursing education.
2. Education of nurses about the carrier opportunities/development in nursing.
3. Organization of regular workshops /seminars / conferences to keep nurses informed on new developments in nursing and nursing education.
4. Facilitation of the establishment of a regional organisation of nurse educators and researchers of Francophone Africa, which will work towards harmonisation of

nursing education and the development of teaching materials.

5. Seek support from nursing professional organisations and nursing education institutions within and outside the continent to initiate changes.

The Regional African Office of the WHO should:

1. Initiate and finance changes in basic nursing education systems.
2. Organise and facilitate workshops on the development of nursing education of the Francophone African Region.
3. Bring experts from the Collaborating Centres to assist countries in the transformation of basic nursing education.
4. Influence the national governments to engage in the transformation of basic nursing education.

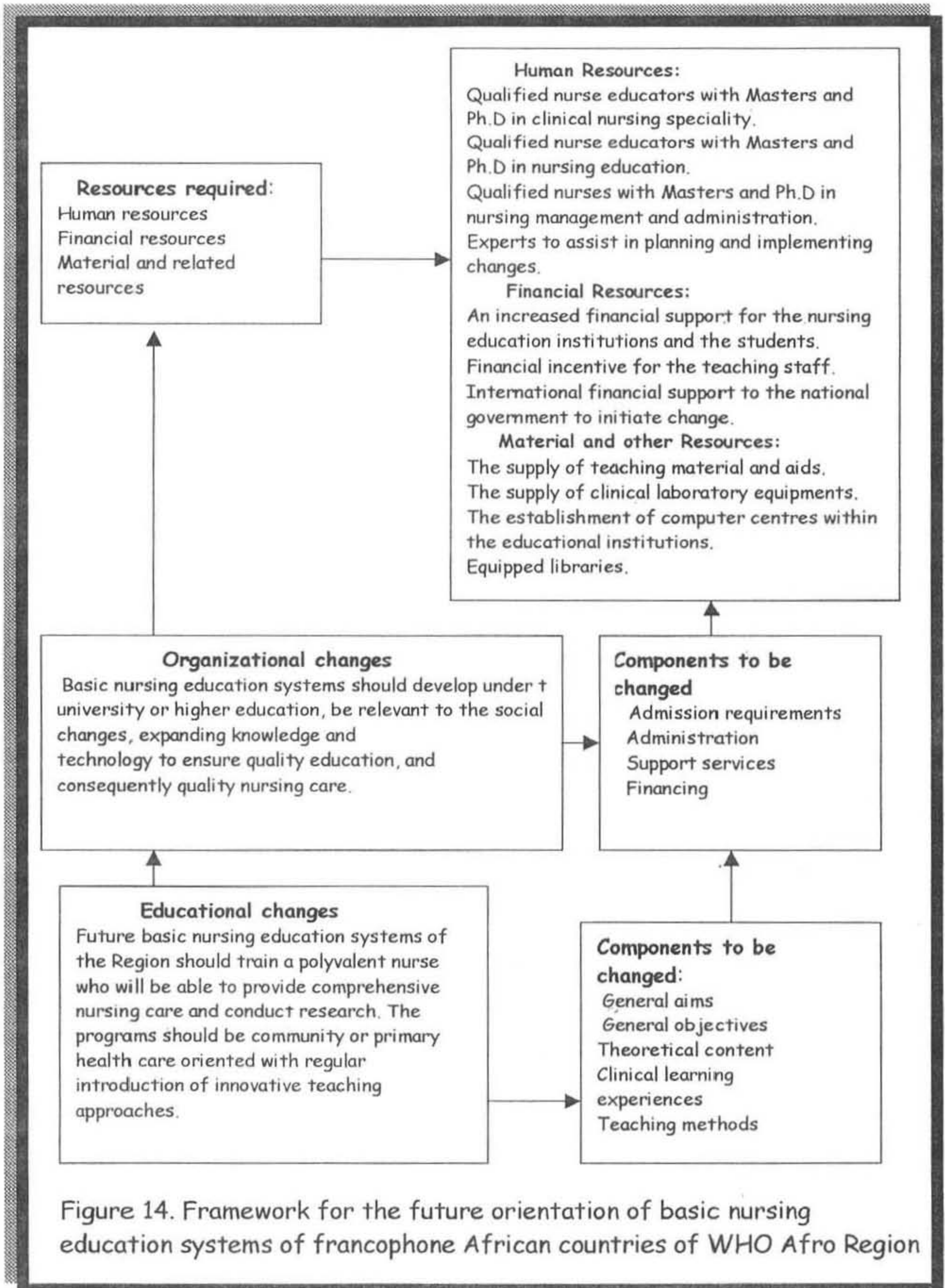

Figure 14. Framework for the future orientation of basic nursing education systems of francophone African countries of WHO Afro Region

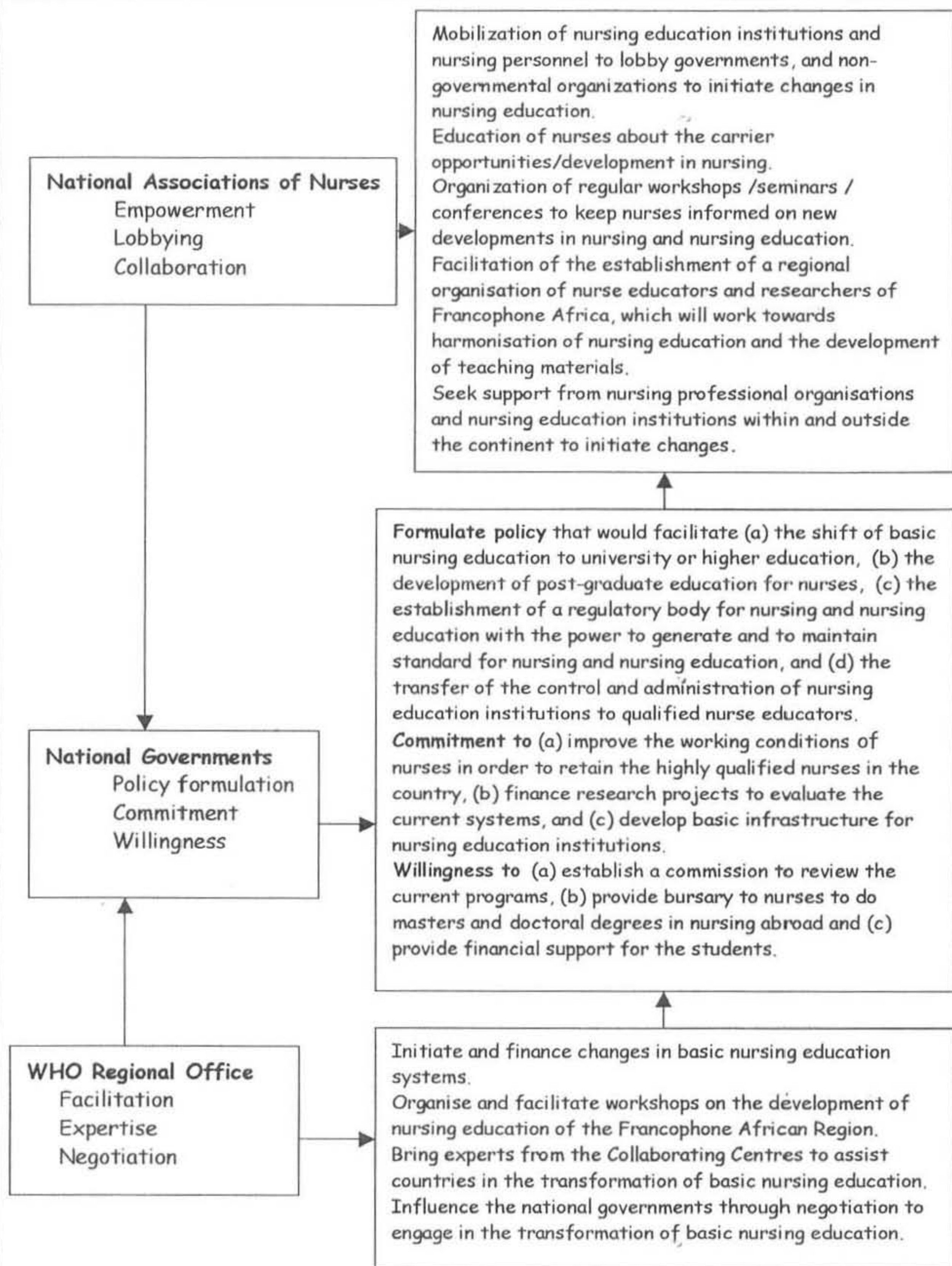

Figure 15. Framework for change in basic nursing education systems

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1. INTRODUCTION

As indicated in chapter four of this study, 18(85,7%) countries out of twenty-one returned the survey questionnaires related to the first objective of this study; and all the 18(100%) countries returned the questionnaires of each round of Delphi related to the second objective of the study. This high return rate may be seen as an indication of the relevance and the significance of the topic for the nursing profession and the education of nurses in the Region. The results of the main findings are discussed under two main sections related to the two objectives of this study: (a) description and analysis of basic nursing education systems, and (b) exploration of future orientation of basic nursing education systems.

The first section is subdivided to three subsections: (a) basic nursing education institutions, referring to the establishment of basic nursing education institutions, the administration of basic nursing education institutions, the support services available and financing; (b) basic nursing education programs, referring to the revision of the programs, the general aims of the programs, the general objectives of the programs and the structures of the programs (general clinical experiences, the theoretical content, the clinical content and the teaching methods); and (c) the current systems as perceived by the stakeholders, with reference to the problems facing the current systems, the need for change and the factors in support of change. The

second section includes three subsections: (a) changes required, (b) resources required and (c) steps to be taken. The chapter ends with the conclusion and the recommendations of the study.

5.2. DESCRIPTION & ANALYSIS OF CURRENT BASIC NURSING EDUCATION SYSTEMS

5.2.1. Basic nursing education institutions

As previously discussed, basic nursing education institutions in the majority of the participating countries were established during the post-colonial period, more specifically during the first ten years (1960-1970) following the independence of most of the participating countries. As opposed to Britain, the above results suggest that Belgium and France did not show commitment to develop professional education for nurses in their colonies. It implies that the number of national professional nurses prepared to provide quality care during and immediately after the colonial era was very limited.

Authors (Osle, 1994; Waston, 1982) are of the view that British policies related to education as applied in their colonies were different from the French policies. They argue that the French policies placed little emphasis on vocational education. It is also recognized that as the founder of modern basic nursing education, Britain played an active role in the development of modern nursing education in colonies of her empire (Mellish & Brink, 1990; Potgieter, 1992; Searle, 1987). This means that former British colonies were in a better position than the

former French colonies. The number of national professional nurses who could take over from the British nurses and continue to develop modern basic nursing education could have been higher than in French colonies. The above situation can partially explain the current discrepancy in the progress of nursing education between the Anglophone African countries and their Francophone counterparts. Based on the knowledge of the historical establishment of modern basic nursing education as presented in this study and the awareness of the current basic nursing education, as well as other relevant literature (Osei-Boateng, 1992), objective steps towards the development of basic nursing education within the Region can be taken.

Discrepancy was revealed between the number of basic nursing education institutions and the needs of the health services. Different reports (WHO, 1997; ICN, 1997; World Health Report, 1997) suggest that the African continent will need more educational institutions preparing health professionals needed to meet the increasing demands and challenges of health care services. These reports support the fact that the health care of the African population depends largely on nurses, who represent 60-75% of the workforce in national health care systems (World Health Report, 1997). The continued increase in the re-emerging disease, the social and political changes in the continent and many other factors serve as a challenge to governments to produce the quality and quantity of health personnel needed to face these challenges.

Therefore, nursing education systems should be able to produce the number and quality of professionals needed to meet the needs of

the health services and the health needs of the population. Unfortunately, the number of basic nursing education institutions as indicated in this study (eighty-six in total or an average of 4,7 basic nursing education institutions per country) is not enough to produce the number of nurses needed to meet the demands of the health care services. The discrepancy between the number of basic nursing education institutions and the demands of health care services may have various negative effects, such as overcrowding of the existing educational institutions, inadequate teaching and learning environments, a proliferation of non accredited nursing education institutions offering poor education, rigid admission criteria to the programs in an attempt to register the number of students the institutions can cope with, staff shortages and consequently poor quality care.

Confusion exits also between nursing education institutions and medical or other health related education institutions. None of the educational institutions offering basic nursing education is precisely referred to as nursing education institutions within the Region and within the same country. They are referred to as "Institute of Medical Education" and "Institute of Medical Technique" in former Belgium colonies, "Schools of Health Sciences" in former French colonies. Is this confusion linked to the historical development of basic nursing education in the Region as described in the literature?

Osei-Boateng (1992) suggests that basic nursing education in Africa, South of Sahara, excluding South Africa and Liberia, was introduced by colonial medical officers who recruited young men and trained them on job site to carry out specific tasks, such as dressing,

feeding, bathing of patients and administration of drugs. This early role played by the medical officers in pioneering what will develop later as nursing education in the Region might have influenced on how nursing is perceived in the Region and consequently the educational institutions training these professionals. The fact that basic nursing education institutions are referred to as medical or other health related disciplines, rather than nursing, might have created a state of confusion with negative consequences. This might have influenced the orientation and emphasis of the programs, the perception of the public and students regarding nursing and nursing education and the future role of the nurse.

The programs may have been designed to reflect the names of the institutions, thereby resulting to an over emphasis on medical and other health related subjects. This assumption is supported by the results of this study, which showed an over emphasis on medical and health related subjects rather than nursing subjects (see Table 5). The students as well as the members of the public may thus perceive nursing education primarily as a medical or other health related education.

The results of this study suggest that basic nursing education systems of the Region exist outside of the current trends in the administration of nursing education systems. As indicated in Chapter Four, all basic nursing education institutions except those offering basic nursing degrees are controlled at the national level, by the Ministry of Health. The above findings differ with most of the relevant information regarding the current trends of the administration of basic nursing education institutions as viewed by the WHO, ICN and ILO.

The international organizations, such as the ICN, the ILO and the WHO recommend that basic nursing education should develop under the main stream of the country' education system, preferably the university; be controlled by the Ministry of Education (ICN, 1997, 1986; ILO, 1976; WHO, 1984, 1966). The detrimental effects of control of nursing education institutions by the Ministry of Health and the advantages of moving basic nursing education institutions under the Ministry of Education or higher institutions of learning are well documented in the literature.

The problems arising in situation where basic nursing education institutions are controlled by the Ministry of Health include among others:(a) the shift of the primary focus of the nursing education institutions from the learning institutions to the service providers;(b) inadequate quality of education offered resulting from the inhibition of the primary aim of the nursing education institutions;(c) inadequate financial resource allocation to the educational institutions resulting in inadequate or poor maintenance of physical facilities, poor libraries, lack of teaching aids, lack of transport for students to engage in clinical learning activities outside of the hospitals and lack of research activities; (d) exclusion of students and teaching staff from the decision-making structures;(e)lack of control by the teaching staff over the curriculum, as well as on how the lecturer organizes his/her work; (f) lack of control of nurses over the education of nurses in favor of medical profession, resulting to problems, such as slow or lack of progress in the nursing education and profession, as well as medically-

oriented and hospital-based curricula (Gwele,1995; ICN,1997; WHO,1994).

The above literature supports that bringing basic nursing education to the main stream of the education system or institutions of higher learning offers some of the following advantages: (a) the graduates will be able to offer efficient and effective practice of the highest possible standard and safety, based on up-to-date research and knowledge; (b) the graduates will be able to meet the health care needs of the people as members of the health team in a cost-effective manner, with the ultimate goal of contributing to the maintenance and/or improvement of quality of life; (c) ensure that all practitioners are broadly educated, become equal members of the health care teams and are mobile; (d) improvement of the status of nursing and enhancement of the social goals, such as increased participation of the women in higher education and society at large.

The results indicate that: (a) basic nursing education institutions are mainly headed by the medical doctors, (b) the support services and financial resources are very limited, and (c) basic nursing education institutions do not offer opportunities for continuing education for nurses. The fact that basic nursing education institutions are mainly headed by medical doctors means that nurses do not have control over their education. This is one of the effects of the national control of nursing education institutions by the Ministry of Health as discussed earlier. The limited support services and financial support to basic nursing education institutions mean that the teaching and learning

environments are not conducive to the attainment of the desired educational goals of the institutions as well as the students.

Dekker and Schalkwyk (1988) maintain that support services as well as financial support within the educational institutions allow the teaching staff and students to reach the desired educational goals. International organizations, such as ICN, ILO and WHO recommend that adequate support services and financial support should be available to nursing students, teaching staff and nursing educational institutions to ensure the attainment of the educational goals (ICN, 1988, 1986, 1985; ILO, 1976; WHO, 1984).

The lack of continuing education for nurses has direct effects on the provision of health care and the profession. Abatt and Majia (1988) maintain that the quality of health care available to the world's population depends to a significant degree on the quality and availability of continuing education for health care personnel. The ICN believes that, within nursing, continuing education encompasses a continuum of education whereby nurses engage in a process of lifelong learning for the benefit of improved patient care and professional development. It is further emphasised by the organisation that continuing education programs should expand in the same way the scope of nursing expands; nurses require ongoing education to meet the demands of the rapidly changing health field (ICN, 1997).

5.2.2. Basic nursing education programs

The results of the study show that three types of basic nursing education programs exist in the Region: (a) the three years basic nursing diploma programs; (b) the four years basic nursing diploma programs; and (c) the three years basic nursing degree programs. It was shown that the above are divided along the lines of the colonial affiliation. The three year basic nursing diploma programs exist in the former French colonies, while the four year basic nursing diploma and three year basic nursing degree exist in the former Belgium colonies. This division implies a lack of harmonisation of basic nursing education in the Region as supported by the literature. It is argued that during the past decades, some Anglophone African countries have made efforts towards the harmonisation of basic nursing education at the national or regional levels. However, there are few indications of such initiatives in the Francophone African countries (ESCACON, 1998; Osei-Boateng; 1992; Uys, 1999).

The harmonisation of basic nursing education within the country and the Region will benefit the educational institutions, the nursing profession and the governments. It offers a good opportunity for the development of the educational institutions and nursing profession. Common standards guiding the education and the practice of nursing can be developed to serve as basis for the development of new programs or rationalisation of the existing ones. It allows networking and sharing of resources within the educational institutions. It gives the students the opportunity to move within the educational institutions as well as increased career opportunity. The governments will be able to save

money through the rationalisation of services and the utilisation of the regional institutions instead of spending money for nurses to study abroad (ESCACON, 1998; Gwele, 1995; ICN, 1997).

It is suggested also that basic nursing education systems in Francophone African countries have not yet progressed beyond the diploma level. As indicated in Chapter Four, only 11,1% (n=2) of the participating countries offer basic nursing degree programs, while the majority (88,9%, n=16) offers only basic nursing diploma programs. The literature (ICN, 1997; Osei-Boateng, 1992; Nursing in the World, 1993; Uys, 1999) supports the fact that few graduate and post-graduate education programs for nurses have been developed in Francophone African countries during the past decades as opposed to Anglophone African countries and other parts of the world.

As discussed earlier in this chapter, the lack of graduate education for nurses in the Region is linked to: (a) the national control of nursing education institutions by the Ministry of Health, and (b) the management at the institutional levels by the medical doctors. It is globally known that the transfer of basic nursing education to the Ministry of Education offers a great opportunity for the development of graduate education for nurses. However, the Ministry of Health may be reluctant to transfer basic nursing education to the relevant ministry in charge of education in anticipation of loosing control of the cheaper labour provided by student nurses as well as the budget allocated to basic nursing education (Gwele, 1995; WHO, 1994).

The medical doctors who happened to be the heads of basic nursing education institutions consider graduate education as an open opportunity for nurses to compete with them in their positions. Therefore, they will resist any attempt of the development of graduate education for nurses. Some authors suggest that graduate education is an opportunity for nursing to achieve professional status. Stevens (1995) maintains that throughout the history, very few fields have achieved professional status outside of traditional academic structure and there is no reason to assume that nursing is so powerful or so profound to be any different.

The results indicate that the current programs were reviewed in the majority of the countries after the adoption of PHC by their respective countries as a driving force for the health care delivery systems (WHO, 1978). The general aims and objectives of these programs as described in Chapter Four embody the principles and philosophy of PHC. This shows the intention of the participating countries to make nursing education relevant to the health care systems in the Region. However, discrepancy was found between the above intention and the general learning experiences, the theoretical and clinical content of the programs.

The learning experiences of students are mainly based on the medical model of disease, which prepares students to render individual hospital-based care. The medical and other health related subjects represent more than 50% of all three types of programs with more than 70% of clinical learning experiences taking place in hospital settings. These problems are common to all medically dominated nursing education

programs and supported by the findings of this study related to the control of nursing education by the Ministry of Health and the management of the nursing educational institutions by the medical doctors.

The teaching methods are mainly based on traditional approaches, such as lecturing or tutoring, demonstration in clinical settings or clinical skills laboratories. This type of teaching is not adequate in the era where the quantity and the quality of information produced are constantly increasing. New innovative teaching learning approaches focussing on teaching students "how to learn what they need to know" are more relevant than teaching them what they need to know. Authors (Barrows & Tamblyn, 1980; Bridges, 1992; Hurst, 1985; Kaufman, 1998; Sadlo, 1995; Sefton, 1997) support that innovative teaching learning approaches, such as problem-based education, community-based education, case-based curricula, outcomes-based education, and self-directed learning, which focus on both the process of learning and the content, prepare the graduates to function competently in a health system where the individual and the family have the primary responsibility for the health care decisions.

While the majority of the participating countries (thirteen countries) require twelve years of general education as the minimum education level for entrance to basic nursing education, few (five countries) countries accept candidates with ten years of general education to basic nursing education programs. Various recommendations of the international organisations stressed the fact that twelve years of general education should be the minimum educational level for entrance

to a basic nursing education (ICN, 1997, 1986, 1985; ILO, 1976; WHO, 1994, 1985, 1966). The ICN argues that ten years of general education does not provide the candidates with enough social sciences and general background knowledge needed to prepare candidates for nursing studies (ICN, 1997).

5.2.3. Current basic nursing education systems as perceived by the participating countries

5.2.3.1. Problems facing the current systems

The problems facing the current basic nursing education systems, as perceived by the participating countries are related to the results discussed in section 5.1.2 of this chapter. The educational problems that emerged from the data are linked to the state of the current basic nursing education programs discussed in subsection 5.1.2.2. The two themes (unresponsiveness to change and lack of relevance to the expanding knowledge) that emerged from the category of the educational problems correspond to the lack of innovative teaching and learning approaches, discrepancies between the general aims & objectives of the programs and the learning experiences, including theoretical and clinical learning experiences, incongruence between the health care delivery system and the learning experiences.

The organizational problems presented in Chapter Four are linked to the state of basic nursing education institutions discussed in subsection 5.2.2.1 of this chapter. The three themes (lack of proper legislation governing nursing education, lack of opportunities for professional and personal development, scarce resources) that emerged from this category are consequences of the control of the education

systems by the Ministry of Health at the national level and the medical doctors at the institutional level.

5.2.3.2. Factors in support of the need for to change

It was also shown that all the participating countries agreed on the need to change the current systems of educating nurses in the Region. The two categories that emerged from the data are related to the findings of the study as well as the categories of the problems facing the current systems discussed above. It is suggested that the ever-changing nature of society with the expanding knowledge of medical science, technology, nursing and nursing education requires a constant reassessment of nursing education in order to make it more responsive to external factors from the profession as well as internal factors in the profession.

The above findings do not differ from the literature supporting that the education of nurses should move with the technological advancements; the health care delivery system; the expanding knowledge of the profession and medical sciences; the health needs and demands of the people; and the current political and economic trends of the country and the world in general. It is further emphasized that the ever growing changes within the society, magnify the challenges with regard to the relevance of the nursing education system which has a key role in facilitating the professional and personal development of students and thereby keeping nursing practice relevant to the health needs and expectations of society (ICN, 1997; Mellish & Brink, 1990; Pendleton & Myles, 1991 Salvage, 1993; WHO, 1985).

5.3. EXPLORATION OF THE FUTURE ORIENTATION OF BASIC NURSING EDUCATION SYSTEMS AS PERCEIVED BY THE STAKEHOLDERS

5.3.1. Changes required in future basic nursing education

The future of basic nursing education systems of the Region as perceived by the stakeholders is such that the systems should be able to adequately meet the challenges created by the needs of ever-changing society, such as the expanding knowledge in nursing and overcome the limitations placed on the profession by external or internal factors the within society.

The above perceived changes imply that future basic nursing education systems of the Region should (a) be adequately geared towards meeting the needs of the health care delivery systems; (b) allow the academic preparation of nurses needed to ensure the development of the profession; (c) be governed by a professional body that would facilitate the development of basic nursing education toward maintaining or meeting the expected standards, and consequently the quality of nursing care provided to health consumers; (d) be responsive to the prevailing economic and social climate of the countries; (e) offer opportunities for students to move within the educational institutions of the Region and the exchange of resources as well as limited career opportunities for the graduates; (f) provide graduates with enough research skills and adequate support to nurse educators to engage in research activities for the development of the profession and the practice of nursing.

The proposed changes are in line with the literature, which supports the notion that the education of nurses should move with the technological advancements; the health care delivery system; the expanding knowledge of the profession and medical sciences; the health needs and demands of the people; and the current political and economic trends of the country and the world in general (Affara & Styles, 1993; Creasia & Parker, 1991; ICN, 1997; Mellish & Brink, 1990; Osei-Boateng, 1992; Pendleton & Myles, 1991; Salvage, 1993; WHO, 1994, 1985).

5.3.2. Resources required for initiating changes

The results of this study show that the initiation of the suggested changes will require mainly human, financial and material resources. The human resources that might be needed include qualified nurses with graduate and post-graduate qualifications in clinical nursing speciality, nursing education, and nursing management. By raising these concerns, it appears that the stakeholders were objective in expressing the needs of the countries. The lack of graduate and post-graduate education for nurses in the Region clearly justifies the views expressed by the stakeholders.

The financial, material and other related resources required (availability of financial support, financial incentive for teaching staff, teaching aids, equipped libraries, computer centres, supply of clinical laboratory material) as expressed by the stakeholders corroborate the findings of the first phase of this study, which revealed that the current basic nursing education systems of the Region function with very limited resources. This state of affair is often found in countries

where basic nursing education functions under the Ministry of Health (Gwele, 1995, ICN, 1997; WHO, 1988).

5.3.3. Steps to be taken

The national government, the association of nurses and the WHO Regional Office are seen as the key role-players in the transformation of the current basic nursing education systems. However, the national government is expected to play an active role.

Basically, it is suggested that the national governments need to initiate policy changes with commitment and willingness to transform the systems. These actions or steps are relevant to the roles of any governments in the world. These regulations should aim at bringing the existing systems at the level of the global trend in the nursing education and nursing profession. The literature supports the fact that nursing education system should be guided by regulations that facilitate its development toward maintaining or meeting the expected standards and the quality of nursing care provided to health consumers. Such regulations deal with the programs (type, aims and objectives, structure of education, financing, the facilities, human resources, etc), the qualifications, functions, and principles of practice. The standards of nursing education and nursing practice provide criteria for evaluating the quality of nursing education and the effectiveness of nursing practice (Creasia & Parker, 1991; ICN, 1997; ILO, 1976; WHO, 1984, 1966).

Affara and Styles (1993) argue that the regulation of nursing education ensures that standards for the preparation of nurses are being maintained. The lack of such regulation may result in lower quality

of patient care; the retardation of the development of the profession; and the proliferation of non-accredited nursing education institutions with varied education standards (Cole, 1996; Ellis & Hartley, 1984).

The National Associations of Nurses are expected to initiate changes by empowering nurses and nurse educators, lobbying for changes and through collaboration with other nursing organisations and institutions outside their countries. The literature supports also shows that organized Nurses' Associations in some African countries and other parts of the world have initiated and/or achieved the transformation of nursing education and nursing profession at national, regional and/or continental levels (Adedoyin, 1988; ESCACON, 1996; Salvage, 1993; SANC, 1985). The ICN (1997) acknowledges the role of National Association of Nurses in the transformation of the nursing profession and the systems of educating nurses.

The WHO as perceived by the stakeholders is expected to facilitate the process of change, bring experts and negotiate with the government of the countries to initiate changes in basic nursing education systems. These expectations are relevant to the activities of the WHO. The role of the WHO in facilitating and influencing changes in nursing profession and nursing education can be seen through the various recommendations related to nursing education and the profession published by the organisation, the establishment of various Collaborating Centres with the aims of assisting member countries in the development or strengthening of nursing education, sponsoring of conferences, etc (WHO, 1994).

5.4. CONCLUSION AND RECOMMENDATIONS

It is well documented that nurses are the main health care providers in Africa as well as in many other parts of the world. However, the abilities of nurses to meet the health care demands depend largely on the systems of their education. Therefore, the nurse educators, the national governments, the national associations and other nursing organizations as well as key stakeholders are being called to ensure that the education systems of nurses are relevant and responsive to the ever-growing demands of the health care services, the health needs of the people as well as the expanding knowledge of sciences and technology. Some countries in Anglophone Africa are constantly striving towards the above goal. Unfortunately, as suggested by the results of this study, Francophone African countries have not yet mobilized resources towards the development of nursing education systems in line with the new developments and demands of the health care services and the society. However, the results of this study as presented and discussed above can serve as a starting point for the transformation of basic nursing education in the Region.

This study points to the fact that the current basic nursing education systems of Francophone African countries need to respond to the needs of the health care delivery systems of the countries and the current trends in nursing education. The results of this study suggest that the national governments, the National Associations of Nurses and the WHO Afro Region will play an important role in the transformation of the basic nursing education systems. Therefore, it is recommended that:

The National government should:

1. Formulate and implement legislations establishing Regulatory Bodies for nursing and nursing education. Such bodies must have the power to set the national standards for nursing education and nursing practice, to maintain the above standards and to protect the public.
2. Shift the education of nurses to university or higher education
3. Develop post-graduate and continuing education for nurses within their countries. Such programs have the potential to produce professionals who are able to (a) provide efficient and effective health care based on up-to-date research and knowledge; (b) meet the health needs of the people as members of the health team in a cost-effective way; (c) contribute to the development of the profession through research and continuing self-development; (d) function as educators and leaders in nursing.
4. Transfer the control and administration of nursing educational institutions to qualified nurse educators
5. Improve the working conditions of nurses in order to maintain and attract highly qualified nurses in their countries
6. Develop basic infrastructures for nursing education institutions
7. Use the research findings to improve the existing programs and systems of educating nurses
8. Provide financial support for the students
9. Collaborate with the professional organizations within and outside the continent and international donors to facilitate the transformation of the current basic nursing education systems

The National Associations of Nurses should:

1. Mobilize nursing educational institutions and nursing profession to lobby governments and non-governmental organizations to initiate change in the current basic nursing education systems
2. Educate nurses about the career opportunities and development in nursing
3. Organize regular workshops/seminars/conferences to keep nurses informed on new developments in nursing and nursing education
4. Seek support from nursing professional organizations and nursing educational institutions within and outside the continent to initiate change
5. Initiate and facilitate the establishment of Regional Standards for Basic Nursing Education. Many countries including some Anglophone African countries and in other parts of the world have set national standards for nursing and nursing education. The WACN and ESCACON are examples of such bodies in the African continent. The Regional standards have the potential to (a) facilitate uniformity in the development of nursing education as well as nursing practice. Consequently, increase the mobility of students within the educational institutions, promote networking, sharing of resources, increase career opportunities for the graduates; (b) ensure that the programs are developed according to the health needs of the countries, the demands of health services, the needs of the students, the global trends and international standards in nursing education, (c) ensure that the programs produce the graduates who are competent and accountable to their practice; (d) provide guidelines that may be used by the

educational institutions of the Region as a basis to improve the existing programs, develop new programs, guide the activities of students and teaching staff, and monitor Regional progress.

6. Initiate and facilitate the establishment of a Regional organization of nurse educators and researchers of the Francophone Africa, which must work towards harmonization of nursing education and the development of teaching materials.

The Regional Office of WHO Afro Region should

1. Assist the Francophone African countries to develop graduate and post-graduate education for nurses in the Region.
2. Request its Collaborating Centres to design special programs for nurses in the Francophone Region. Such programs should prepare nurses to play a leadership role in the transformation of the nursing educational institutions, to take direction of nursing educational institutions and nursing services.
3. Influence the national governments to engage in the transformation of the basic nursing education
4. Initiate and finance changes in the basic nursing education systems
5. Organize and facilitate workshops on the development of the basic nursing education systems
6. Finance further research to analyze the implementation process of the findings of this study and evaluate the outcomes.

LIST OF REFERENCES

Abatt, F. and Majia, A. (1988). Continuing education of health workers. Geneva: WHO.

Adedoyin, C. O. (1988). Six Years of West African College of Nursing. West African College of Nursing Journal, 1 (1), 4-8.

Adelowo, E. O. (1989). The Nursing Profession in Nigeria. Lantern Books, Ikeja, Nigeria.

Affara, F. and Styles, M. (1993). Nursing Regulation: From principle to power: A guidebook on mastering regulation. Geneva: Author.

Baly, M. (1977). Nursing: Past into Present Series. B.T. Bastford Ltd. London.

Bandman, E.L. and Bandam, B. (1988). Critical Thinking in Nursing. Connecticut: Appleton and Lange.

Barrows, H. and Tamblyn, R. (1980). Problem-Based Learning: An approach to medical education. Springer Publishing Company, NY.

Bevis, E. O. (1982). Curriculum Building in Nursing: a process. St. Louis. MO: Mosley.

Bless, C. and Higson- Smith, C. (1995). Fundamentals of Social Research Methods: An African perspective. 2nd Ed. Juta and Co.Ltd.

Boahen, A.A. (1987). African perspectives on colonialism. The Johns Hopkins university press. Baltimore

Booyens, S.W. (1998). Decision-making and Problem-solving. Dimensions of Nursing Management. 2nd Ed. Juta and Co, Ltd.

Bridges, E.M. (1992). Problem-Based Learning for Administrators. Eugene, Clearinghouse on Educational Management.

Brink, H.I. (1998). Fundamentals of Research Methodology for Health Care Professionals. Juta and Co.Ltd.

Brink, P.J. and Wood, M.J. (1993). Advanced Design in Nursing Research. Sage Publications, Inc.

Brown, B.J. and Henry, B. (1995). Nursing Administration: Practice, Education, and Research. Health Care Administration: Principles, Practices, Structure, and Delivery. 2nd Ed. Aspen Publishers, Inc.

Brubacher, J.S. (1974). The history of the problems of education. McGraw - Hill Book Company.

Bunn, H. (1995). Preparing Nurses for the Challenge of the New Focus on Community Mental Health Nursing. Journal of Continuing Education in Nursing, 26, (2), 55-59.

Burns, N. and Grove, S.K. (1987). The practice of nursing research, conduct, critique and utilization. Philadelphia: WB.Sawnders.

Butterworth, T. (1995). The current status and future challenges of psychiatric/ mental health nursing. International Journal of Nursing Studies, 32, (4), 353-365.

Chaska, L.N. (1983). The Nursing Profession, A time to speak. McGraw-Hill Book Company.

Clapham, C. (1996). African and the international system: the politic of state survival. University Press, Cambridge.

Cohen, L. and Marion, L. (1989). Research Methods in education. Third edition. Routledge, 11 New Lane, London.

Cole, G. (1996). Fundamental Nursing: Concepts and Skills. 2nd Ed. M Mosby.

Cramer, J.F. and Browne, G.S. (1965). Contemporary education. A comparative study of national systems. 2nd Ed. New York: Brace & World.

Creasia, J.L and Parker, B. (1991). Conceptual Foundation for Professional Nursing Practice. 2nd Ed. M. Mosby

Crous, M.J. (1994a). Decision-making. General Management: Planning, Organizing, Activating, Control. 4th Ed. J.Kroom Edition

Crous, M.J. (1994b). The Delphi Techniques. General management: Planning, Organizing, Activating, Control. 4th Ed. J.Kroom Edition

Davis, B. and Bernard, P. (1992). Academic levels in nursing. Journal of Advanced Nursing, 17(12), 1395-1400.

Davis, S. P. (1995). A challenge to develop a new paradigm in nursing education. Journal of Cultural Diversity, 2 (4), 124-130.

Dekker, E. and Van Schalkwyk, O.J. (1989). Modern Education Systems. Butterworths, Durban.

DeYoung, L. (1972). The foundations of Nursing as perceived, learned, and practiced in professional nursing. 2nd Ed. Mosby Company.

Duffield, C. (1993). The Delphi technique: a comparison of results obtained using two expert panels. International Journal of Nursing Studies. 30(3), 227-237.

Ebrahim, G.J. and Ranken, J.P. (1992). Primary Health Care; reorienting organizational support. MacMillan Press, London.

Eby, F. (1952). The Development of Modern Education: In Theory, Organization and Practice. 2nd Ed. Englewood Cliffs NJ: Prentice-Hall.

Ellis, J.R and Hartley, C.L. (1992). Nursing in today's world: Challenges, Issues, and Trends. 2nd Ed. J.B. Lippincott Company

ESCACON (1997). Workshop on harmonisation of basic nursing and midwifery education in the East, Central and Southern Africa Region. 20th -24th January 1997. Pretoria, South Africa.

ESCACON (1998). ESCACON/ Draft framework for professional self-regulation.

Fink, A; Kosecoff, J; Chassin, M. and Brook, R. H. (1984). Consensus methods: characteristics and guidelines for use. American Journal of Public Health. 74, 979-983.

Gillies, D.A. (1994). Nursing Management- a system Approach. Philadelphia: Saunders.

Gillies, D. A. (1989). Nursing Management. A systems Approach. 2nd Ed. W. B. Saunders Company.

Gray, G. and Pratt, R. (1992). Issues in Australia Nursing 3. Churchill Livingston. Longman Group, UK Ltd.

Greaves, F. (1987). The Nursing Curriculum: Theory and Practice. Chapman and Hall, London.

Gwele, T. (1995a). National Commission on Higher Education. Submission by Kwazulu-Natal Nurse educators. Unpublished work.

Gwele, T. (1995b). National Commission on Higher Education: Task Group: Current situation: Non-university nursing education. Unpublished work.

Hays, J. (1994). The new paradigm: Concepts and application in community health nursing. Public health nursing, 11 (3), 150-156

Hurst, K. (1985). Traditional versus progressive nurse education: a review of the literature. Nurse education today, 5, 30-36.

Hibberd, J.M. (1994). Professional Goals and Industrial Strategies: An International Survey. International Nursing Review, 41(4),107-117.

Holmes, B. (1990). International Handbook of education systems. Vol.II, John Willey & Sons.

ICN (1997). Nursing education: past to present. Vol.1: Current and future trends. Geneva.

ICN (1993). ICN position statements. Geneva: Author.

ICN (1992a). Guidelines on continuing education for nurses' association. Geneva: Author.

ICN (1992b). Guidelines on specialization in nursing. Geneva: Author.

ICN (1990). Preparation of nurse managers and nurses in general health management: Guidelines for national nurses' associations and others. Geneva: Author.

ICN (1988). Nursing and primary health care: A unified force. Geneva: Author.

ICN (1987). Definition of nursing. Approved by CNR. Poster.

ICN (1986a). Mobilizing Nursing leadership for primary health care: A guide for nurses associations and others. Geneva: Authors.

ICN (1986b). Nursing Regulation: A Report on the Present. A Position for the Future. ICN, Geneva.

ICN (1985). Report on the regulation of nursing: A report on the present,
a position for the future. Geneva: Author.

International Nursing Review (1993). ICN World' News.

ILO (1976). Convention on the employment and conditions of work and life of nurses. Geneva.

Kauffman, D. (1985). Implementing Problem-Based Education: Lessons from successful innovations. New York: Springer.

Lanara, V. (1989). Nursing education in the 21st century. Proceedings of a symposium. (EUR 12040). Brussels: Commission of the European Communities.

Lancaster, J. and Lancaster, W. (1982). The nurse as a change agent. St. Louis: Mosby.

Leddy, S. and Pepper, M.J. (1985). Conceptual Bases of Professional Nursing. J.B. Lippincott Company.

Lindeman, A. C. (1995). Nursing Education in Changing Times. NLN Research and Policy PRISM, 3(1), 1-2.

Linstone and Turoff (1975). The Delphi Method: Techniques and Applications. Addison - Wesley Company.

Loots, I. and Vermaak, M. (1975). Pioneers of Professional Nursing in South Africa. P.J. de Villiers, Publisher.

Lowe, R. (1992). Education and the Second World War: studies in schooling and social change. The Falmer Press.

Malan, J. (1997). Conflict resolution wisdom from Africa. ACCORD, Durban, SA.

Mcclostees, J.C. and Grace, K.H. (1990). Current issues in Nursing. Third edition. C. V. Mosby Co.

McIntyre, J. (1997). The Context of teaching and Researching Community Development Issues. Community Development Journal, 32(4), 368-371.

Mellish, J.M. (1990). A Basic History of Nursing. 2nd Ed. Butterworth. Durban.

Mellish, J.M. and Brink, H. (1990). Teaching the practice of Nursing. Third edition. Butterworth, Durban.

Moccia, P. (1993). A Vision for Nursing. NLN, Boston.

Neuman, W.L. (1997). Social Research Methods: Qualitative and Quantitative. 3rd Ed. Allyn and Bacon.

Nursing in the World (1993): The facts, needs and prospects. 3rd Ed. The international nursing foundation of Japan. 2-4, 3 Chrome, Tokyo 102, Japan.

Nutting, M.A. and Dock, L. (1974). A History of Nursing. Vol.I &II. The Heritage Press, bufflo, New York.

Oppenheim, A.N. (1992). Questionnaire Design, Interviewing and Attitude measurement. New Edition, Printer Publishers. London and New York.

Osei-Boateng, M. (1992). Nursing in Africa today. International Nursing Review. 39 (6), 175-180.

Osler, A. (1994). Development Education: Global Perspectives in the curriculum. Casell-London WC2N5JE.

Pendleton, S. and Myles, A. (1993). Curriculum Planning in Nursing Education: Practical Applications. 2nd Ed. Edwards Arnold, London.

Polit, D.F. and Hungler, B.P. (1983). Nursing Research: Principles and methods. 2nd Ed. Lippincott Company.

Potgieter, E. (1992). Professional Nursing education 1860-1991. Academia, Pretoria.

Ralph, C. (1993). Regulation and the Empowerment of Nursing International Nursing Review, 40 (2), 58-61.

Reid, U. (1993). Human Resources in Nursing: Determining Requirements and Skills. International Nursing Review, 4 (4), 119-123.

Ruperti, R. M. (1976). The Education System in Southern Africa. J.L. van Schaik (Pty) Ltd, Libri Blgs, Pretoria.

Sadlo, G. (1995). Problem-Based Learning. Tertiary Education News, 5 (6), 8-10.

Salvage, J. (1993). Nursing in action, strengthening Nursing and Midwifery to support health for all. WHO Regional office for Europe. Copenhagen.

SANC (1985). Regulations relating to the approval of and the minimum requirements for the educator and training of a nurse (general, psych and community) and midwife leading to registration. Regulation R425 in terms of the Nursing Act, 50 of the 1978, as amended. Pretoria, Government Printers.

Searle, C. (1992). Professional Practice. A South African Nursing Perspective. 2nd Ed. Butterworth, Durban.

Searle, C. (1987). Ethos of Nursing and Midwifery: A general perspective. Butterworth, Durban.

Sefton, A. J. (1997). From a Traditional to a Problem-Based Curriculum - Estimating Staff Time and Resources. Education for Health, 10 (2), 165-178.

Stevens, B. (1985). Does the 1985 nursing education proposal make economic sense? Nursing Outlook, 3(1), 124-127.

Thomas, M. (1990). International Comparative Education: Practices, issues and prospects. Butterworth Heinemann.

Turoff, M. (1975). The Policy Delphi. Delphi Methods. Technique and Applications. Addison-Wesley Company.

Uys, L.R. (1999). Curriculum Guide for Basic Nursing & Midwifery Education in WHO Afro Region; unpublished work.

Van Zyl, C. (1991). The De Lange Report: Ten years later. PhD. Thesis, University of Pretoria

Vos, A.J. and Brits, V.M. (1990). Comparative Education and National education systems. Butterworth, Durban.

Wan, T.H. (1995). Introduction to Health Care Management Study. Analysis and Evaluation of Health Care Systems: An Integrated Approach to Managerial Decision Making. Health Professionals Press, Inc.

Watson, K. (1982). Education in the Third World. Watson Edition.

WHA (1992). Strengthening of Nursing and Midwifery in support of strategies for health for all. WHA resolution 45.5. Geneva: Author.

White, R. (1988). Political Issues in Nursing; past, present, and future. Volume 2, John Willey & Sons.

WHO (1998). The World Health Report, 1998. Geneva: Author.

WHO (1995). Community-Based Education for health personnel. Geneva: Author.

WHO (1994). Nursing beyond the year 2000. Report of a WHO Study Group. WHO technical Report Series: 842. Geneva: Author.

WHO (1993). Increasing the relevance of education for health Professionals. Geneva: Author.

WHO (1992). Study group on problem-solving education for the health professions. Geneva: Authors.

WHO (1989). The role of nursing and midwifery personnel in the strategy for health for all. Report by the director-General to the forty-second World Health Assembly. (A42/6). Geneva: Author.

WHO (1985). A guide to curriculum review for basic nursing education. Orientation to PHC and community health, WHO (1985) Geneva.

WHO (1984a). Post-basic and graduate education for nurses. Report on a WHO meeting, Helsinki, 4-8 June. Copenhagen: Author.

WHO (1984b). Education and training of nurse teachers and managers with special regard to primary health care. General (Technical report series 708).

WHO (1978). Alma-Ata, 1978: Primary health care. Geneva: Author.

WHO (1966). Report of the expert committee on Nursing- Geneva (Technical Report series 347).

WHO (1948). Constitution of the World Health organization. Geneva: Author.

William, S.B. (1977). A Comparative Study of Nursing Education in the United States of America and the Republic of South Africa. The South African Nursing Association, Pretoria.

World Bank (1997). World development report, 1997. Washington: The International Bank for the Reconstruction and Development.

Young, W.H. and Hogben, D. (1978). An experimental study of the Delphi Technique. Educ. Res. Perspective, 5, 57-62.

APPENDIX ONE:

ANALYSIS OF BASIC NURSING EDUCATION SYSTEMS OF FRANCOPHONE AFRICAN COUNTRIES OF WHO AFRO REGION

Sir/ Madam,

Kindly spare a few moment to complete this set of Questionnaires designed for a research study entitled: " An Analysis of current Basic Nursing Education Systems of Francophone African countries of WHO AFRO Region". The study is undertaken towards the fulfilment of the requirements for the degree of Doctor of Philosophy (PhD) in Nursing at the University of Natal-Durban, South Africa.

The study is divided into two phases: (a) the description and analysis of the current basic nursing education systems, and (b) the exploration of the future orientation of basic nursing education systems. The outcome of this study may yield information that can be used to improve basic nursing education systems of Francophone African countries of WHO AFRO Region.

All responses will be treated with the utmost confidentiality and anonymity. The return of the questionnaire will be considered as your consent to participate in the study. The personal information will be used only for correspondence purpose. The final results will not contain the specific names of the participating countries or respondents.

Yours truly,

M. GANGA-LIMANDO
Doctoral Student (University of Natal Durban, South Africa)
School of Nursing
Durban 4041 South Africa
Telephone: +27 (031)-2602497.
Fax: +27 (031) 2601543
E-mail: Gangalimandom@Mtb.und.ac.za

APPENDIX TWO: FIRST PHASE QUESTIONNAIRE

THE CURRENT BASIC NURSING EDUCATION SYSTEM

Note:

- Basic Nursing Education System in this study refers to a formally recognised program of nursing study that leads to the qualifications of basic diploma or basic degree in nursing and the specific structure that facilitates the provision of Basic Nursing Education.

- The questionnaire consists of three major sections: General Information; Current System of Basic Nursing Education System and Your Perception of the current system of Basic Nursing Education.

- Please, answer all the questions by placing a cross (X) against the appropriate choice (s), or fill in the appropriate words or figures to complete the statements.

SECTION I: General information

1. Name of country.................................:...........................
2. Your present position: ....
3. Your Address..

   Tel..............................Fax...........................E-Mail.................................

SECTION II: Current Basic nursing education systems

1. Aims and objectives of basic nursing education programs

Note.

- The aims of Basic Nursing Education Programs in this study refer to the general educational objectives that represent the educational, professional, and occupational development of the students; the intention and purposes of nursing, nursing education and the school of nursing.
- The objectives of the programs in this study refer to specific behaviours or outcomes that students should demonstrate in order to achieve the educational aims (E.g. competencies; knowledge; skills; etc).

1.1. Are the following basic nursing education programs offered in your country?

Programs	Yes	No
Basic nursing diploma programs		
Basic nursing degree programs		

If yes,

When was/were the above program(s) established? ....(Year)

When was /were the above program(s) last reviewed?.........(year)

1.2. What are the general aims of the basic nursing education programs in your country? (Diploma and degree programs)

1.3. What are the general objectives of the basic nursing education programs in your country? (Diploma and degree programs)

2. Structures of Basic Nursing Education programs

Note.

- The structures of Basic Nursing Education programs in this study refer to the duration of the programs, admission requirements to the programs, the content of the programs, the clinical learning components, the teaching methods and students' assessments methods.

2.1. Give the total duration (in years) of Basic Nursing Education programs in your country: Basic diploma...............(number of year)
Basic degree...............(number of year)

2.2. What are the admission requirements to the above programs?

2.3. Are the above admission requirements similar to other similar professional education programs in your countries? **Yes / No**
If no, please specify:

2.4. How would you describe the nursing subjects included in Basic Nursing Education programs in your country in terms of the courses and number of hours allocated to each course. (Please distinguish between the diploma and degree programs)

Basic diploma			Basic degree		
Courses	Hours allocated		Courses	Hours allocated	
	The	Prac		Th	Prac

Th: Theory; Prac: Practical

2.5. How would you describe the biomedical and other health related subjects included in Basic Nursing Education programs in your country in terms of the courses and number of hours allocated to each course. (Please distinguish between the diploma and degree programs)

Basic diploma		Basic degree	
Courses	Hours allocated	Courses	Hours allocated

2.6. How would you describe the general subjects included in Basic Nursing Education programs in your country in terms of the courses and number of hours allocated to each course. (Please distinguish between the diploma and degree programs)

Basic diploma		Basic degree	
Courses	Hours allocated	Courses	Hours allocated

2.7. How would you describe the clinical learning experience of students in terms of the settings and the number of hours allocated to each setting?

Basic diploma		Basic degree	
Settings	Hours allocated	Settings	Hours allocated
Hospital (general, and specialists)		Hospital (general, and specialists)	
Primary Health Care settings (Polyclinics, Clinics, health centres, and Health posts)		Primary Health Care settings (Polyclinics, Clinics, health centres, and Health posts)	
Community Settings		Community Settings	
Clinical Laboratory		Clinical Laboratory	
General Total		**General Total**	

2.8. Which teaching methods are used in Basic Nursing Education?

2.8.1. Basic diploma programs:

Teachings Methods	Response		If, yes give the %
	Yes	No	
1. Classroom lectures			
2. Problem-based teaching/ learning			
3. Seminars / discussions			
4. Demonstration in clinical laboratory			
5. Demonstration in clinical settings			
6. Self study (Projects, case studies, etc.)			
7. Others, specify			

2.8.2. Basic degree programs:

Teachings Methods	Response		If, yes give the %
	Yes	No	
1. Classroom lectures			
2. Problem-based teaching/ learning			
3. Seminars / discussions			
4. Demonstration in clinical laboratory			
5. Demonstration in clinical settings			
6. Self study (Projects, case studies, etc.)			
7. Others, specify			

2.9. Are all nursing subjects taught by nurses? **Yes / No**

If No, specify.

2.10. Are all non- nursing subjects taught by subjects specialists?
Yes/ No

If No, specify.

2.11. What assessment methods are used in the evaluation of students? (During the course of the year and at the end of the year)

3. Administration or control

Note:

- Administration or control refers to the executive organs of nursing education institutions and their functions.

3.1. Describe the academic calendar of Basic Nursing Education institutions in your country in terms of the opening and closing dates.

3.2. Nursing Education is controlled at the national level by:

Controlling Body	Institutions offering basic nursing diploma programs		Institutions offering basic nursing degree programs	
	Yes			**NO**
Ministry of Health				
Ministry of Education				
Other, specify				

3.3. How would you describe the Basic Nursing Educational institutions of your country in terms of types and number?

Types	**Number**
Hospital-Based Institutions	
Autonomous Colleges or Institutes	
Higher Institutes or University	
Total Number	

3.4. What are the qualifications of the heads of the above nursing education institutions?

Qualifications	**Numbers**
Medical Doctors	
Masters and PhD in Nursing	
Basic degree in Nursing	
Basic diploma in Nursing	
Other, specify	

3.5. Are the following programs available for nurses in your countries?

Programs	**Yes**	**No**
Open learning programs		
Distance education programs		
Part-time programs		
Other, specify		

4. Support services and financing

Note.

Support services are specialised services within the educational institutions that provide support to students and teaching staff in order to reach the desired educational goals.

4.1. Which of the following describe the support services available within Basic Nursing Education institutions?

Please, use the following keys: A: Always; S: Sometimes; N: Never.

Services	Always	Sometime	Never
Counselling/ Health clinics for students			
Adequate Classrooms			
Libraries			
Computer centres for students			
Clinical laboratories			
Financial supports to students (Bursary, loans, etc)			
Accommodation for students			
Recreational facilities			
Others, specify			

4.2. Which of the following apply to teaching staff?

	Always	Sometime	Never
1. Paid study leave is part of the condition of service			
2. Fees remission is given to staff for continuing education			
3. Research funds are provided to staff			
4. Office spaces			
5. Teachings aids (Over head projectors, video)			
6. Personal computer			
7. Fax and Photocopying machines			

4.3. Basic Nursing Education Institutions are financed by:

Sources of finance	Yes	No
Government		
Private sectors		
Students and parents		
Others, specify		

4.4. Are the above institutions financed in the same way other professionals educational institutions are financed? **Yes/ No**

If No, Explain the difference.

SECTION III: Your perceptions of the current basic nursing education systems in your country

1. What do you perceive as problems in the current basic nursing education systems in your country?

2. Do you think that there is a need to change the current basic nursing education systems in your country?

3. If yes, what factors support the above need?

4. **Any other suggestions or comments?**

APPENDIX THREE: SECOND PHASE QUESTIONNAIRE FUTURE ORIENTATION OF BASIC NURSING EDUCATION SYSTEMS AS PERCEIVED BY STAKEHOLDERS

Dear colleagues,

Thank you for returning the questionnaire for the first phase of the study which looked at the current basic nursing education systems of Francophone African countries of WHO Afro region. Eighteen countries out twenty-one have returned their questionnaire.

The results of the preliminary analysis of the returned questionnaires showed that all 18 (100%) countries agreed on the need to change the current systems of basic nursing education systems in the Region. The above need for change was supported by internal factors within the profession as well as external factors outside the profession. These factors ranged from the expanding scope of practice of nurses, the expanding knowledge of nursing, the new developments in nursing profession, the social, political, and economic transformation taking place in countries to the expanding knowledge of medical sciences and advances in technology.

Therefore, the second phase of this study explores the future orientation of basic nursing education systems as perceived by you stakeholders. Your participation is highly appreciated to complete the three rounds questionnaires of this phase. A brief summary of the views expressed by other stakeholders of the participating countries will be given each time with the questionnaire to keep you informed on how your colleagues perceive the systems in term of the future orientation.

Yours truly,

M. GANGA-LIMANDO
Doctoral Student (University of Natal Durban, South Africa)
School of Nursing
Durban 4041 South Africa
Telephone: +27 (031)-2602497. Fax: +27 (031) 2601543
E-mail: Gangalimandom@Mtb.und.ac.za

FIRST ROUND DELPHI QUESTIONNAIRE

Country: ....

Your current position:...

Address:...

....Tel...

Fax..........................E-ail..................................

Note: Please, answer all the questions and be precise in all your answers.

1. Would you recommend changes in any of the following components of basic nursing education system in your country?

Components of education system	Yes	No
Aims and objectives of Basic Nursing Education		
Types of programs		
Duration of the programs		
Entrance requirement		
Theoretical content of the programs		
Clinical Learning (settings, supervision; duration)		
Students assessments methods		
Teaching Methods		
National controlling body		
Supporting services		
Financing		

2. What changes would you strongly recommend in the current basic nursing education system in your country?

3. What resources (human, financial, material, etc) are required to initiate the above changes in your country? **Please be precise.**

4. What steps do you think need to be taken to initiate the above changes in your country? **Please be precise.**

5. Who should take the above steps?

7. Any other suggestions or comments?

SECOND ROUND DELPHI QUESTIONNAIRE

Country: ....

Your current position ....

Address:..

....................................Tel...Fax..............................

E-Mail.................................

Note: All statements included in this questionnaire are based on the results of the preliminary analysis of the first phase Delphi questionnaire. Please, evaluate each of the statements using the following keys: SA: strongly agree; A: agree; D: disagree; SD: strongly disagree. Place a cross (X) in the appropriate cell.

Section I. The changes required in the Basic Nursing Education system

1. Do you think the following changes are required in the basic nursing education system in your country? Please, express your views by using the following keys: SA: strongly agree; A: agree; D: disagree; SD: strongly disagree.

1.1. Aims of Basic Nursing Education programs

Suggested changes	Scale			
	SA	A	D	SD
Be clearly defined to allow for the assessment of learning				
Be based on the philosophy and principles of Primary Health Care				
Shift from the predominantly medical model of disease and hospital based to the community-orientated education with focus on promotive, preventive, curative, and rehabilitative care.				
Take into account the health policies and priorities of the government				
Be similar in the region to facilitate regional co - operation, and networking between staff and students' mobility				
Reflect the WHO recommendations on Basic Nursing Education				
Reflect the International Council of Nurses recommendations on Basic Nursing Education				
Reflect the International Labour Organization recommendations on Basic Nursing Education				
Other, Specify				

1. 2. Objectives of basic nursing education programs

Suggested Changes	Scale			
	SA	A	D	SD
The graduates of the programs should be able to:				
Demonstrate knowledge and skills in community-oriented nursing				
Demonstrate a broad range of general knowledge as foundation for practice of nursing and the continued professional development				
Provide comprehensive health care (including promotive, preventive, curative, and rehabilitative) to individual, family, group, and community at the primary, secondary and tertiary health settings and community level				
Demonstrate the ability to think critically, analytically and creatively and apply scientific approach to nursing				
Function as change agents responding to the changing needs of individuals, families and communities				
Adapt their nursing roles and functions to the health policies and priorities of the government				
Provide comprehensive nursing care including general, mental health, community and midwifery				
Work in partnership with the community and other disciplines				
Organize and participate in team efforts to improve the health status of the community in partnership with the community, and other health related sectors				
Participate and conduct research				
Demonstrate respect for the dignity and uniqueness of the individual in his / her socio-cultural context				
Demonstrate competence as professional nurses in affective, cognitive, and psychomotor skills				
Willingly participate in continuing education				
Develop and maintain the Professional Ethic and the Image of the Profession				
Work at the national, regional, continental and international levels				
Other, specify:				

1.3. Structures of the programs

1.3.1. Admission requirements

Suggested Changes	Scale			
	SA	A	D	SD
Admission Requirements:				
Candidate should have a senior state certificate or equivalent				
The requirements should be:				
Based on individual assessment of the candidate by the teaching staff of the educational institution				
Consistent with the education standards and legislation of the country				
Similar in all Basic Nursing Education Institutions of the country				
Similar with other Professional programmes of the country				
Similar throughout the Francophone African region to facilitate students' mobility				
Other, specify:				

1.3.2. Theoretical content

Suggested Changes: The content of the programs should:	Scale			
	SA	A	D	SD
Be relevant to the objectives of the program and the Legislation of the country				
Include Nursing subjects, General subjects, Biomedical and other health related subjects				
Take into account the needs of students and the resources (Staff, Infrastructure) of the education institutions				
Be relevant to the clinical practice and responsibility of the nurse				
Dedicate more hours to nursing subjects than other subjects				
The nursing subjects should include:				
Fundamental nursing				
Medical and Surgical nursing				
Mental health nursing				
Community Health/Public health and Primary health care				
Midwifery				
Nursing history and Trends in nursing profession				
Nursing research				
Ethics and legal responsibility of the nurse				
Integrate the patho-physiology of the common diseases of the countries and the treatment thereof				
The General, biomedical & other health related subjects should include:				
Statistics				
Communication and writing skills				
Social science subjects, such as sociology, Anthropology, and Psychology				
Basic computer skills				
Nutrition & Dietetics				
Anatomy				
Human physiology				
Pharmacology				
Microbiology				

What other subjects do you think should be included in programs?

1.3.3. Clinical learning experiences

Suggested Changes	Scale			
	SA	A	D	SD
The clinical learning should:				
Be planned by the teaching staff of the education institutions				
Be relevant to the objectives of the programme and the theoretical content				
Clinical Learning should take place in a variety of settings including:				
➢ Clinical laboratory				
➢ PHC settings (Clinics, Health centres, Polyclinic, Health Post, etc)				
➢ Community (Schools, Residential areas, Industry, Working places)				
➢ Hospitals (General, specialist)				
Offer more practice opportunities in PHC settings and communities than hospitals.				
Be supervised by teaching staff from the education institutions to ensure continuity between theory and practice				
Other, specify:				

1.3.4. Teaching Methods and teaching of nursing subjects

Suggested Changes	Scale			
	SA	A	D	SD
Teaching Methods and teaching of nursing subjects:				
The subject/ teacher -centred approach of teaching should be shifted to student -centred approach				
New teaching methods should be regularly introduced to meet the needs of students				
The theoretical and clinical teaching of nursing subjects should be done by subjects specialists with Masters or PhD in nursing				
The general and biomedical subjects should be taught by subjects specialists				
Other, specify:				

1.4. Administration or control

Suggested Changes	Scale			
	SA	A	D	SD
Basic Nursing education Institutions should:				
Develop under the University or other Tertiary Education Institutions				
Be controlled by the Ministry of Education				
Be approved by the government through the Nursing Regulatory Body				
Be regulated by the Nursing Regulatory body				
Be headed by qualified nurse educators with Masters or PhD in nursing fields				
Organize part-time programmes to allow nurses to further their education without leaving their jobs				
Be available in rural areas as well as in urban areas				
Other, specify:				

1.5. Support Services

Suggested Changes Basic nursing education institutions should provide the following facilities:	Scale			
	SA	A	D	SD
Health and Counselling services for students				
Adequate classrooms				
Accommodation				
Transportation				
Financial support to students (bursary, loans, etc)				
Library				
Computer for the Teaching staff				
Clinical laboratory				
Teaching aids (over head projector, videos, etc)				
Research Fund for the teaching staff				
Computer centres for students				
Recreational facilities				
Other, specify				

1.6. Financing

Suggested Changes	Scale			
	SA	A	D	SD
Basic Nursing Education Institutions should have financial autonomy				
Government must finance Basic Nursing Education Institutions in the same way other education institutions are financed				
Private organizations should finance Basic Nursing Education				
Parents should finance Basic Nursing Education Institutions through school fees and special contributions				
Other, specify:				

SECTION II. The resources required for initiating the above changes

1. Do you think the following resources are required for initiating changes in basic nursing education system in your country? Please, express your views by using the following keys: SA: strongly agree; A: agree; D: disagree; SD: strongly disagree.

Resources required	Scale			
	SA	A	D	SD
Qualified nurse educators with Masters and PhD in nursing				
Clinical Nurse Specialists with Masters and PhD in nursing				
Organized Nursing Regulatory Body				
Teaching material and teaching aids (Books, Journals, videos, etc)				
New legislations pertaining to Nursing Education				
Experts to assist in planning and implementing change in basic nursing education				
Basic infrastructure (Classroom facilities, Library, Clinical Laboratory, Computers and Photocopy machines)				
Bursary for students				
Bursary and research fund for the teaching staff				
Financial assistance from international organizations				
Organization of Nurse Educators and Researchers of Francophone Africa				
Other, specify;				

SECTION III: Steps needed for initiating changes

Please give in order of priority and feasibility the steps needed to initiate changes in your country by using the following keys: **4 = Very urgent; 3important; 2 = less important; 1 = Not important**

Steps to be taken and by Whom	Scale			
Government should:	4	3	2	1
Shift Basic Nursing Education to University or Higher Education				
Facilitate the development of Masters and PhD programmes in nursing education and management				
Facilitate the development of Masters and PhD programmes in clinical nursing speciality				
Provide bursary to nurses for Masters and PhD studies in nursing abroad				
Formulate proper legislation for nursing and nursing education				
Transfer the control and administration of nursing education institutions to qualified nurse educators				
Establish a Regulatory Body for nursing and nursing education with the power to generate and maintain standard for nursing and nursing education				
Establish commission to review the current system				
Finance research project to evaluate the current system				
Facilitate the implementation of the WHO recommendations on basic nursing education				
Develop basic infrastructure for nursing education institutions				
Apply for funding from international donors to initiate change in basic nursing education				
Nursing Association should:				
Mobilize nursing education institutions (teachers and students) and nursing profession to advocate for change				
Approach the ICN to assist the country in transforming nursing education				
Facilitate the establishment of a regional organization of nurse educators and researchers in Francophone Africa which will work toward the harmonization of nursing education and the development of teaching materials				
The World Health Organization should:				
Employ consultants to assist countries in changing Basic Nursing Education				
Organize and facilitate Workshops on the development and harmonization of Basic Nursing Education in Francophone Africa				
Initiate and Finance change in Basic Nursing Education				
Other, specify:				

Section IV. Please write any other comment or suggestions regarding any aspects of the above questionnaire n space below or in a separate paper.

Thank you very much for your time and collaboration.

Mr. Makombo Richard Ganga -Limando
Fax: +27-031-2601543 Tel; +27 - 031- 2602497
E-Mail: Gangalimandom@Mtb.Und.ac.za

THIRD ROUND DELPHI

Country: ....

Your current position

....

Address:..

......................................Tel..Fax...............................

.....

E-Mail...................................

Note: All statements included in this questionnaire are based on the results of the preliminary analysis of the second phase Delphi questionnaire. Please, evaluate each of the statements using the following keys: 4: very important; 3: important; 2: less important; 1: not important. Place a cross (X) in the appropriate cell.

Thirty-six respondents from eighteen countries have returned the questionnaire of the second round. They views are included in this third round questionnaire.

Section I. The changes required in basic nursing education system

More than 70% of stakeholders agreed on the changes reflected below. Please, indicate how important are these changes for the future of basic nursing education system in your country. Please, express your views by using the following keys: **4: very important; 3: important; 2: less important; 1: not important. Place a cross (X) in the appropriate cell**

1.1. Aims of Basic Nursing Education programs

Suggested changes	Scale			
	4	3	2	1
Be clearly defined to allow for the assessment of learning				
Be based on the philosophy and principles of Primary Health Care				
Shift from the predominantly medical model of disease and hospital based to the community-orientated education with focus on promotive, preventive, curative, and rehabilitative care.				
Take into account the health policies and priorities of the government				
Be similar in the region to facilitate regional co - operation, and networking between staff and students mobility				
Reflect the WHO recommendations on Basic Nursing Education				

2.2. Objectives of basic nursing education programs

Suggested Changes	Scale			
	4	3	2	1
The graduates of the programs should be able to:				
Demonstrate knowledge and skills in community-oriented nursing				
Demonstrate a broad range of general knowledge as foundation for practice of nursing and the continued professional development				
Provide comprehensive health care (including promotive, preventive, curative, and rehabilitative) to individual, family, group, and community at the primary, secondary and tertiary health settings and community level				
Demonstrate the ability to think critically, analytically and creatively and apply scientific approach to nursing				
Function as change agents responding to the changing needs of individuals, families and communities				
Adapt their nursing roles and functions to the health policies and priorities of the government				
Provide comprehensive nursing care including general, mental health, community and midwifery				
Work in partnership with the community and other disciplines				
Organize and participate in team efforts to improve the health status of the community in partnership with the community, and other health related sectors				
Participate and conduct research				
Demonstrate respect for the dignity and uniqueness of the individual in his / her socio-cultural context				
Demonstrate competence as professional nurses in affective, cognitive, and psychomotor skills				
Willingly participate in continuing education				
Develop and maintain the Professional Ethic and the Image of the Profession				
Work at the national, regional, continental and international levels				

1.4. Structures of the programs

1.3.1. Admission requirements

Suggested Changes	Scale			
	4	3	2	1
Admission Requirements:				
Candidate should have a senior state certificate or equivalent				
The requirements should be:				
Based on individual assessment of the candidate by the teaching staff of the educational institution				
Consistent with the education standards and legislation of the country				
Similar in all Basic Nursing Education Institutions of the country				
Similar with other Professional programmes of the country				
Similar throughout the Francophone African region to facilitate students' mobility				

1.3.2. Theoretical content

Suggested Changes: The content of the programs should be:	Scale 4	 3	 2	 1
Be relevant to the objectives of the programme and the Legislation of the country				
Include Nursing subjects, General subjects, Biomedical and other health related subjects				
Take into account the needs of students and the resources (Staff, Infrastructure) of the education institutions				
Be relevant to the clinical practice and responsibility of the nurse				
Dedicate more hours to nursing subjects than other subjects				
The nursing subjects should include:				
Fundamental nursing				
Medical and Surgical nursing				
Mental health nursing				
Community Health/Public health and Primary health care				
Midwifery				
Nursing history and Trends in nursing profession				
Nursing research				
Ethics and legal responsibility of the nurse				
Integrate the patho-physiology of the common diseases of the countries and the treatment thereof				
The General, biomedical & other health related subjects should include:				
Statistics				
Communication and writing skills				
Social science subjects, such as sociology, Anthropology, and Psychology				
Basic computer skills				
Nutrition & Dietetics				
Anatomy				
Human physiology				
Pharmacology				
Microbiology				

1.3.3. Clinical learning experiences

Suggested Changes	Scale			
	4	3	2	1
The clinical learning should:				
Be planned by the teaching staff of the education institutions				
Be relevant to objectives of the program and the theoretical content				
Clinical Learning should take place in a variety of settings				
Offer more practice opportunities in the PHC settings and the communities than the hospitals.				
Be supervised by teaching staff from the education institutions to ensure the continuity between theory and practice				

1.3.4. Teaching Methods

Suggested Changes	Scale			
	4	3	2	1
Teaching Methods:				
The subject/ teacher -centred approach of teaching should be shifted to student -centred approach				
New teaching methods should be regularly introduced to meet the needs of students				

1.4. Administration or control

Suggested Changes	Scale			
	4	3	2	1
Basic Nursing education Institutions should:				
Develop under the University or other Tertiary Education Institutions				
Be controlled by the Ministry of Education				
Be approved by the government through the Nursing Regulatory Body				
Be regulated by the Nursing Regulatory body				
Be headed by qualified nurse educators with Masters or PhD in nursing fields				
Organize part-time programmes to allow nurses to further their education without leaving their jobs				
Be available in rural areas as well as in urban areas				

1.5. Support Services

Suggested Changes	Scale			
Basic nursing education institutions should provide the following facilities:	4	3	2	1
Health and Counselling services for students				
Adequate classrooms				
Accommodation				
Transportation				
Financial support to student (bursary, loans, etc)				
Library				
Computer for the Teaching staff				
Clinical laboratory				
Teaching aids (over head projector, videos, etc)				
Research Fund for the teaching staff				
Computer centres for students				
Recreational facilities				

1.6. Financing

Suggested Changes	Scale			
	4	3	2	1
Basic Nursing Education Institutions should have financial autonomy				
Government must finance Basic Nursing Education Institutions in the same way other education institutions are financed				
Private organizations should finance Basic Nursing Education				
Parents should finance Basic Nursing Education Institutions through school fees and special contributions				

SECTION II. The resources required for initiating changes

More than 70% of stakeholders agreed on the fact that the resources listed below are required for initiating changes in basic nursing education systems. Please, indicate how important are these resources for initiating changes in basic nursing education system in your country. Please, express your views by using the following keys: **4: very important; 3: important; 2: less important; 1: not important. Place a cross (X) in the appropriate cell**

Resources required	Scale			
	4	3	2	1
Human resources:				
Qualified nurse educators with Masters and PhD in clinical nursing speciality				
Qualified nurse educators with Masters and PhD in nursing education				
Qualified nurses with Masters and PhD in nursing management and administration				
Experts to assist in planning and implementing change in basic nursing education				
Financial resources:				
Increase financial support for the educational institutions				
Increase financial support for students				
Financial incentive for the teaching staff				
International financial support to the national government for initiating changes				
Material and other related resources:				
Supply of teaching materials and teaching aids (Books, Journals, videos, etc)				
Equipped libraries				
Supply of Clinical Laboratory equipment				
Computer centres within the educational institutions				

SECTION III: Steps needed for initiating changes

More than 70% of stakeholders agreed on the fact that the steps described should be taken for initiating changes in basic nursing education systems. Please, indicate how important are these steps for initiating changes in basic nursing education system in your country. Please, express your views by using the following keys: **4: very important; 3: important; 2: less important; 1: not important. Place a cross (X) in the appropriate cell**

1. The National governments should:

Formulate policies that would facilitate:	Scale			
	4	3	2	1
The transfer of the control and administration of nursing education institutions to qualified nurse educators				
The shift of basic nursing education to university or higher education				
The development of post-graduate education for nurses				
The establishment of a regulatory body for nursing and nursing education				
Give authority to new regulatory body for nursing and nursing education to generate and maintain standard for nursing and nursing education				
Commit itself to:				
The improvement of the working conditions of nurses in order to maintain the highly qualified nurses in the country				
Develop basic infrastructures for nursing education institutions				
Finance research projects to evaluate the current systems				
Express willingness to;				
Establish commission for the review of the current programs				
Provide bursary for nurses to do masters and doctoral degree in nursing abroad				
Provide financial support to the students				

2. The National Associations of Nurses should:

	Scale			
Mobilize nursing education institutions (teachers and students) and nursing profession to advocate for change	4	3	2	1
Educate nurses about career opportunities and development in nursing				
Organize regular workshops/seminars/conferences to keep nurses informed on new developments in nursing and nursing education				
Seek support from nursing professional organizations and nursing education institutions from the continent and out side the continent to initiate changes				
Facilitate the establishment of a regional organization of nurse educators and researchers in Francophone Africa which will work toward the harmonization of nursing education and the development of teaching materials				

3. The regional Office of WHO Afro Region should:

	Scale			
Employ consultants to assist countries in changing Basic Nursing Education	4	3	2	1
Organize and facilitate Workshops on the development and harmonization of Basic Nursing Education in Francophone Africa				
Initiate and Finance change in Basic Nursing Education				
Initiate and finance change in basic nursing education systems				

Please write any other comment or suggestions regarding any aspects of the above questionnaire n space below or in a separate paper.