SELF-PERCEIVED COMPETENCIES OF NURSES WHO COMPLETED AN UPGRADING PROGRAMME AT THE MALAWI COLLEGE OF HEALTH SCIENCES

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ABSTRACT

The purpose of the study was to determine self-perceived competencies of the Nurse Midwife Technicians (NMTs) who completed the two year upgrading programme at the Malawi College of Health Sciences when providing comprehensive nursing and midwifery care, subsequent to their completion of the upgrading programme. The main objective of this study was to determine the effectiveness of the Upgrading Diploma in Nursing and Midwifery Programme as perceived by the nurses who completed the upgrading programme as State Registered Nurse Midwives (SRNMs).

The researchers used a quantitative and descriptive design. A questionnaire with closed and open-ended questions was used to collect data from SRNMs who completed the upgrading programme.

The findings indicated that the upgrading programme enabled the previous NMTs to improve their competencies and to work effectively as SRNMs. Improvements in the curriculum suggested by some respondents included that more emphasis should be placed on the research, education
and management components of the programme. More clinical supervisors should be available to accompany students in the clinical areas. The library should have more resources such as new books and journals, as well as computers and provide students with access to the Internet.

**Keywords:** continuing education, nursing competencies, nursing education, Nurse Midwife Technician (NMT), State Registered Nurse Midwife (SRNM), upgrading programme

**INTRODUCTION**

Malawi is one of the poorest countries in the world, ranking seventh from the bottom (United Nations, 2004:6). Health care delivery is a major social indicator of a country’s performance. Health care delivery in Malawi is affected by shortages of health care workers. Hospitals and clinics lack material resources and with the advent of HIV/AIDS, most health care facilities are overloaded with patients. A contributing factor to poor health care is the lack of qualified nurses at diploma level. The health indicators reflect the severity of this problem in Malawi (see table 1). Health services can improve through the provision of quality nursing care rendered by more registered nurses.

**Table 1: Mortality statistics** *(Source: http://devdata.worldbank.org/atlas-mdg )*

<table>
<thead>
<tr>
<th>Country</th>
<th>Under 5 year mortality rate per 1 000 in 2006</th>
<th>Maternal deaths per 100 000 live births in 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>120</td>
<td>1 100</td>
</tr>
<tr>
<td>South Africa</td>
<td>69</td>
<td>400</td>
</tr>
<tr>
<td>Botswana</td>
<td>124</td>
<td>380</td>
</tr>
</tbody>
</table>

There is, however, a shortage of nurses as Malawi’s SRNMs continue to emigrate to Europe. Between 1998 and 2001 Malawi lost at least 100 nurses to Western countries (Mula, Mfutso-Bengo, Makoza & Chatipwa 2003:435), due to unfavourable working conditions and low wages of well-trained and qualified SRNMs in Malawi.

In 2006 there were 7 264 nurses in Malawi (WHO, 2006:194). The shortage of medical staff is portrayed in table 2. By comparing the statistics of medical staff per population (table 2), with the mortality statistics (table 1), the influence of the shortage of skilled medical staff on the quality of health care delivery is apparent.

**Table 2: Medical staff per 100 000 populations, 2004**

<table>
<thead>
<tr>
<th>Cadre</th>
<th>South Africa</th>
<th>Botswana</th>
<th>Malawi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>69.2</td>
<td>28.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Nurses</td>
<td>388.0</td>
<td>241.0</td>
<td>25.5</td>
</tr>
</tbody>
</table>

*(Source: Palmer 2006:29)*
According to the WHO (2006:11), “countries with fewer than 2.5 health care professionals (counting only doctors, nurses and midwives) per 1 000 population failed to achieve an 80% coverage rate for deliveries by skilled birth attendants or for measles immunization”.

BACKGROUND INFORMATION

Malawi is a landlocked country in the southeastern part of Africa with a population of 12 million people of whom 80% live in the rural areas (Reserve Bank of Malawi, 2005:3). The country is bordered by Tanzania to the northeast, Zambia to the west and Mozambique in both the south and east.

Malawi is amongst the least developed countries in the world with a per capita income of USD 200 (United Nations, 2004:4) and depends heavily on donor aid that accounts for 70% of the national development budget (Kalua, Kambewa & Mangani, 2005:1).

According to Malawi’s National Statistical Office (NSO, 2004:2), Malawi’s health indicators are among the worst in the world with a life expectancy of 37 years and with poor health indicators as reflected in table 1. Diseases like malaria and HIV/AIDS, food insufficiency, poverty, poor health care, poor infrastructure and shortages of nurses (considered to be the backbone of Malawi’s health care system) contribute to the high mortality and morbidity rates. These statistics can be reduced if sufficient numbers of SRNMs could provide effective antenatal, labour and postnatal care (Needleman, Buerhaus, Stewart, Zelevinsky & Mattke, 2004:204). Politically, Malawi has been a stable one party state since independence in 1964 with no wars. Although a multiparty system of government was introduced in 1994, Malawi remains politically stable but the economy faces many challenges.

Health care in Malawi

According to Muula, Chipeta, Siziya, Radatsikira, Mataya and Katika (2007:208) the nursing cadre in Malawi, as reported by the Nurses’ and Midwives’ Council of Malawi (NMCM), consisted of 4211 nurses at the end of 2006, “distributed as 2800 enrolled nurse-midwives, 635 nurse-midwife technicians (NMTs), 533 SRNMs (diploma and degree nurses) and 145 nurse-technicians.” Quality nursing care is compromised due to the shortage of SRNMs. Most nursing care is provided by NMTs, working under direct supervision of SRNMs who plan and initiate acts and procedures. One of the roles of the NMCM is to improve the standard of education and training to ensure that quality nursing care is provided to the citizens of Malawi (NMCM, 2005:9). A strategy was implemented to upgrade NMTs to SRNMs through a two-year upgrading programme to improve their competencies in providing nursing care and to increase the number of SRNMs in Malawi.
Training of nurses in Malawi

Nurses in Malawi are trained at certificate (technical), diploma and degree level. Degree programmes (SRNM) are offered at the Kamuzu College of Nursing (KCN), a constituency college of the University of Malawi (UNIMA) and Mzuzu University while the Malawi College of Health Sciences and Kamuzu College of Nursing offer upgrading diplomas for NMTs. The generic degree programme takes four years at Kamuzu College of Nursing and at Mzuzu University. Degree holders enter their work places at professional level as managers and educators of a ward or clinic. Diploma holders enter the work places as sisters-in-charge of their units (supervisory level).

NMTs are trained for 3 years at mission and government nurse training institutions as general nurses and midwives at certificate level. NMTs lack some skills as their nursing training does not prepare them for leadership or management roles preventing them from being in charge of nursing units. These deficits in the NMT training programme need to be addressed before they can function as SRNMs. The upgrading programmes at MCHS and KCN aims at filling the gap in providing SRNMs for providing nursing services at this level. This two-year upgrading programme empowers the NMT to function as a SRNM in a management position. Upgrading of a NMT to diploma is in line with the objective of the Ministry of Health and Population (MOHP, 2003:23) to increase the numbers of competent health personnel in Malawi.

The two-year programme to upgrade NMTs to SRNMs (MOHP 2003:7) has been implemented since 2003 (MCHS, 2000:6). The University of Malawi together with KCN, validates the development and implementation of this curriculum. Upon completion of the programme, successful candidates write the NMCM’s licensing examination to become registered as SRNMs. After licensure, the SRNM provides comprehensive nursing and midwifery services to the residents of Malawi (NMCM, 1995:25).

This programme has produced diplomates who work in various health care facilities since the end 2005. Assessment of this programme requires evaluation as to whether the diplomates provide effective health care in terms of technical competence, maintaining satisfactory interpersonal relations, and complying with all safety measures.

Challenges faced in upgrading NMT students to SRNMs

The upgrading students are given study leave for two years and are accommodated at the college campus. This implies that many students have to leave their families at home, for these two years. The college has minimal resources like up-to-date reference books. Computers are unavailable and students cannot access the Internet. There is a shortage of tutors to act as role models especially in the clinical areas. SRNMs are also unavailable in the clinical areas to be mentors or preceptors. A contributing factor that compromises the quality of training provided to these students, is the status of the health care facilities and number of beds as stipulated in the vision for the health sector in Malawi (MOHP, 1999:340), implying that much equipment is not maintained in a
working condition. SRNMs might not work appropriately, efficiently and effectively due to a lack of equipment.

PROBLEM STATEMENT

There has been an outcry from the public that the quality of nursing care should improve. The National Health Plan of 1999 - 2004 (MOHP, 2003:13) aimed to improve Malawi’s health care delivery system with one of the actions to upgrade NMTs to SRNMs. The upgrading programme rendered by KCN and MCHS empowers the diplomates with knowledge and skills to provide nursing care at the SRNM level. It is, however, not known whether the upgrading programme actually equips successful NMTs, who became SRNMs, with the necessary skills required in the health services. Therefore, it is important to assess the effectiveness of the programme towards providing its diplomates with the skills and knowledge actually required in the health care services from SRNMs.

PURPOSE AND OBJECTIVE OF THE STUDY

The purpose of the study was to determine self-perceived competencies of the Nurse Midwife Technicians (NMTs) who completed the two year upgrading programme at the Malawi College of Health Sciences. The objective was to determine the effectiveness of the Upgrading Diploma in Nursing and Midwifery programme as perceived by the nurses who completed the upgrading programme as State Registered Nurse Midwives (SRNMs).

THE CONCEPTUAL FRAMEWORK

The study followed the college objectives of the upgrading programme as the conceptual framework. MCHS (2000:10) states that after the two years upgrading programme the SRNMs will perform activities that meet the following objectives:

- Utilise the nursing process to provide comprehensive nursing care
- Provide bio-psychosocial nursing care
- Acquire good communication skills
- Collaborate with members of the health team and the community
- Demonstrate leadership/managerial skills when working in various settings
- Demonstrate a sense of responsibility, accountability and commitment towards the profession
• Assume responsibility for continuing education in order to maintain and develop professional competencies
• Practise nursing independently, dependently, interdependently based on ethical and legal competence
• Participate actively in research to improve nursing care
• Demonstrate qualities of a responsible citizen by participating in the community
• Participate actively in the professional organisation to improve the standards of nursing and midwifery care
• Initiate and advocate change and innovation in the nursing practice and the health care delivery system
• Assume responsibility for teaching members of the health team
• Utilise critical thinking skills when making decisions about nursing and midwifery care

DEFINITION OF KEY CONCEPTS

Competencies imply the specific knowledge, skills, judgements and personal attributes required for a SRNM to practice safely and ethically in Malawi’s health care facilities.

Effectiveness refers to the degree to which the stated goals are achieved (Muller, Bezuidenhout & Jooste, 2006:525). In this article effectiveness refers to the extent to which the upgrading programme is achieving its stated objectives as outlined in conceptual framework.

Nurse Midwife Technician (NMT) is a person who has completed a 3-year period of training in practical nursing and passed the NMCM examination at certificate level.

A State Registered Nurse Midwife (SRNM) is a nurse who has completed a 4-year programme of basic general nursing and passed the NMCM examination at degree or diploma level.

The Upgrading Diploma in Nursing and Midwifery Programme refers to the 2-year bridging programme for NMTs who have worked for more than two years to become registered as a SRNM in Malawi.

RESEARCH METHODOLOGY

A quantitative, descriptive survey research design was used to assess the self-perceived competencies of upgraded SRNMs who have completed the upgrading programme at the MCHS. Surveys collect information about people’s knowledge, opinions attitudes
and values as well as quantify the extent of a problem (Katzenellenbogen, Joubert, & Abdool Karim, 1999:66).

The study used a quantitative research design because self-perceived competencies of upgraded SRNMs were evaluated quantitatively in the study. Babbie and Mouton (2001:52) describe quantitative research as the standard way of assigning numbers to different variables that are susceptible to a variety of statistical manipulations.

According to Katzenellenbogen et al (1999:66) the main use of descriptive studies is to give service providers and planners information that will help them design services and allocate resources efficiently or quantify the extent of a problem. This is in line with the research objectives to describe the self-perceived competencies of SRNM diplomates who had successfully completed the upgrading programme from MCHS.

A research population is an entire group of people, objects or events that meet the sample criteria (Burns & Grove, 2007:549). The population consisted of all SRNM diplomates from MCHS that completed the upgrading programme since its inception in 2003 (N=104). By the end of 2006, diplomates of this programme worked in various hospitals and clinics in Malawi. However, only 70 of these diplomates could be accessed. Sampling was thus not done as all the diplomates who could be traced were invited to participate in the research; 68 usable completed questionnaires were returned, constituting the sample of this study (n=68).

The respondents had to meet the following criteria to be included in the sample:

- Completed the two year upgrading course at MCHS
- Working in any health care facility in Malawi
- Registered with the NMCM as a SRNM

It was possible to identify the respondents as current upgrading students were working in the same hospital/clinics as the diplomates. Questionnaires were delivered and returned by the students, explaining the response rate of 93% (n=70). Data were collected by means of self administered questionnaires designed in line with the objective, conceptual framework and literature review, consisting of the following three sections:

Section A - demographic data (7 items)
Section B - a Likert scale on competencies acquired during the upgrading programme (111 items). These statements, relating to the competencies, were derived from the objectives of the upgrading programme as outlined in the conceptual framework.
Section C - open-ended questions on whether they would advocate the upgrading course
to others, their contributions to the nursing profession since upgrading and suggestions to improve the upgrading programme.

Validity and reliability are major criteria for assessing the data collection instrument’s quality and adequacy (Polit & Beck, 2004:416). According to Polit and Beck (2004:422) validity is the degree to which an instrument measures what it is intended to measure. The judgment whether the data collection instrument was valid was done on face value by the supervisors of this study and other experts in the field. The questionnaire was developed after an extensive literature review.

On the other hand, reliability is the degree to which a scale yields consistent results or scores (Brink, Van der Walt & Van Rensburg, 2006:163). It is therefore beneficial to use the instruments that have been tested and are reliable in order to obtain meaningful results. The less variation an instrument produces in repeated measurements of an attribute, the higher is its reliability. Pre-testing of the instrument was conducted among five participants of the population to identify ambiguity and inaccuracies which should be rectified before the actual research. These five respondents were not included in the actual research. The pre-test indicated that respondents needed more time to complete the questionnaire and more information on the research as the accompanying letter from the college was not included during the pre-test. It was necessary to change a typing error in one of the questions from “My qualification has prepared me adequately to handling scheduled medicine correctly” to “My qualification has prepared me adequately to handling scheduled meetings correctly.”

From the 70 returned questionnaires, two were discarded due to incompleteness. Research Infomasters (REIMA) assisted with the statistical analysis using the Statistical Package for Social Sciences (SPSS), version 12.6.

ETHICAL CONSIDERATIONS

Protection of the rights of human subjects should be exercised when humans are used as study respondents (Polit & Beck, 2004:141). Respondents were informed that their participation was voluntary, aiming to assess whether the upgrading nursing programme equips students with required competencies, not to scrutinise the mistakes the diplomates might make. The principle of beneficence was taken into consideration as there was no harm done to the respondents. Anonymity and confidentiality were maintained throughout the data collection process as respondent’s identities were not required. Before the research commenced, a letter of introduction was issued by the Campus Director of MCHS to explain why the study would be conducted. This letter accompanied all the questionnaires issued to the respondents.
RESULTS AND DISCUSSION

The research results were analysed and discussed according to the sections of the questionnaire, namely demographic data, the respondents’ views on their competencies relating to the objectives of the upgrading programme (referring to the conceptual framework) and three open-ended questions.

Demographic data

There were 68 respondents of whom 90.0% (n=61) were aged 21-40 years. This is in line with the findings of Ofuso (1996:73) on continuing education amongst nurses in Ontario (Canada) that the age group between 25-34 years is more likely to take courses than younger or older women. More female respondents (91.2%; n=62) than males (8.8%; n=6) completed the upgrading programme. Most of the respondents completed their Malawi School Certificate of Education with subjects such as biology (98.5%; n=67), physical science (92.6%; n=63) and mathematics (100.0%; n=68). Of the respondents 35.3% (n=24) had up to 4 years’ experience since becoming NMTs compared to those who had 5-9 years experience (39.7%; n=27) as NMTs. Most (61.8%; n=42) had worked for two years and fewer as SRNMs after completion of the upgrading programme.

The majority of the respondents worked in hospitals (74.0%; n=50) and clinics (12.0%; n=8). They mostly worked in obstetric/gynaecology wards (38.2%; n=26) and medical wards (23.5%; n=16).

Diplomates’ perceived competencies

The respondents perceived that the upgrading programme provided them with competencies to utilise the nursing process to provide comprehensive nursing and midwifery care. Nursing requires nurses to treat patients as whole persons, as “nursing is concerned with the whole person” (Chabeli, 2007:75). The respondents felt best qualified to implement nursing care plans (97.1%; n=66) and provide curative care (97.1%; n=66). This correlates with the areas of their employment, namely hospitals.

Respondents agreed (98.5%; n=67) that the upgrading programme equipped them with bio-psychological knowledge in all five items relating to this aspect of their curriculum. To deliver quality care, nurses should have knowledge about the reactions of the body to disease, trauma, treatment and medicine.

Good communication and documentation is a legal requirement of nursing practice (Ogden, 2005:18). Verma, Paterson and Medves (2006:114) state that nurses must employ a range and variety of communication skills appropriate to the client. All items on communication skills, except one, scored over 91.2% (n=62). Respondents felt less adequately prepared to utilise modern technology (computers, cell phones) for the benefit of the patients according to 60.3% (n=41) of the respondents. Malawi is a developing country and everyone does not yet have access to computers, the Internet
and cell phones, explaining this shortcoming to some extent. These facilities were not available at the college.

Collaboration with the health team and community is required for quality patient care. Of the respondents 92.6% (n=63) agreed to collaborate with members of the health team, with a lower percentage (72.1%; n=49) indicating collaboration with traditional leaders, churches and schools when providing care in the form of health education to the community. “Inter-professional collaboration requires different professions to learn from and about each other in order to provide efficient patient focused delivery of health care” (Kenny, 2002:68).

The purpose of the upgrading programme is to empower the upgrading of nurses with leadership and managerial skills at unit level. Leadership and managerial skills is an important component of the upgrading programme, preparing the upgrading of NMTs for their roles as SRNMs who work as professional nurses in charge of hospital wards (see table 3). Respondents felt most empowered in implementing time management (98.5%; n=67) and determining their unit’s staffing needs and orientating newly appointed staff to their unit, both items scored 95.6% (n=65). Respondents felt less empowered to discipline subordinates (77.9%; n=53) and complete incident reports (79.4%; n=54). According to Anderson and Pulich (2001:2) supervisors “may avoid taking disciplinary action because they never received training in how to discipline employees; consequently, they lack confidence in its use.” This might influence the quality of patient care negatively.
Table 3: Leadership and managerial skills (n=68)

<table>
<thead>
<tr>
<th>My qualification has prepared me adequately to</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>implement the policy of the health service</td>
<td>10.3</td>
<td>7</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>utilise policy manuals</td>
<td>11.8</td>
<td>8</td>
<td>7.4</td>
<td>5</td>
</tr>
<tr>
<td>interpret the goals of the health service</td>
<td>3.0</td>
<td>2</td>
<td>5.9</td>
<td>4</td>
</tr>
<tr>
<td>set objectives to meet the goals of the service</td>
<td>7.4</td>
<td>5</td>
<td>7.4</td>
<td>5</td>
</tr>
<tr>
<td>plan activities in the unit</td>
<td>3.0</td>
<td>2</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>schedule personnel according to patients’ needs</td>
<td>3.0</td>
<td>2</td>
<td>4.4</td>
<td>3</td>
</tr>
<tr>
<td>delegate work effectively</td>
<td>5.9</td>
<td>4</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>implement time management effectively</td>
<td>-</td>
<td>-</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>develop a budget for the unit</td>
<td>14.7</td>
<td>10</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>control supplies</td>
<td>10.3</td>
<td>7</td>
<td>4.4</td>
<td>3</td>
</tr>
<tr>
<td>control equipment</td>
<td>3.0</td>
<td>2</td>
<td>5.9</td>
<td>4</td>
</tr>
<tr>
<td>handling scheduled substances correctly</td>
<td>1.5</td>
<td>1</td>
<td>5.9</td>
<td>4</td>
</tr>
<tr>
<td>determine staffing needs of the unit</td>
<td>1.5</td>
<td>1</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>orientate newly appointed personnel to the unit</td>
<td>1.5</td>
<td>1</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>give in-service education</td>
<td>3.0</td>
<td>2</td>
<td>4.4</td>
<td>3</td>
</tr>
<tr>
<td>create a climate conducive to learning</td>
<td>3.0</td>
<td>2</td>
<td>5.9</td>
<td>4</td>
</tr>
<tr>
<td>managing conflict effectively</td>
<td>1.5</td>
<td>1</td>
<td>4.4</td>
<td>3</td>
</tr>
<tr>
<td>supervise subordinates</td>
<td>7.4</td>
<td>5</td>
<td>5.9</td>
<td>4</td>
</tr>
<tr>
<td>doing effective ward rounds</td>
<td>4.4</td>
<td>3</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>appraise staff fairly</td>
<td>5.9</td>
<td>4</td>
<td>4.4</td>
<td>3</td>
</tr>
<tr>
<td>chair meetings</td>
<td>7.4</td>
<td>5</td>
<td>7.4</td>
<td>5</td>
</tr>
<tr>
<td>provide a disaster care programme for the unit</td>
<td>10.3</td>
<td>7</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>complete incidents reports</td>
<td>13.2</td>
<td>9</td>
<td>7.4</td>
<td>5</td>
</tr>
<tr>
<td>discipline subordinates</td>
<td>10.3</td>
<td>7</td>
<td>11.8</td>
<td>8</td>
</tr>
<tr>
<td>motivate staff members to increase productivity</td>
<td>11.8</td>
<td>8</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Health care professionals should be informed and kept updated about codes of professional conduct and changes concerning legal aspects of professional practice (Beech, 2007:46). All items on professionalism scored higher than 92.6% (n=63).

Most respondents, varying from 88.2% (n=60) to 100.0% (n=68) agreed on the items that the upgrading programme prepared them for planning continuing education and development for themselves and for their subordinates. Being a continuous life long learner is a core competency essential for providing quality nursing care (Koerner, 2003:9).

Respondents’ feelings varied about their competencies related to ethical and legal practice, scoring the highest for respect for human life and protection of human dignity (95.6%; n=65). The lowest scored items in this category were how well the upgrading programme prepared them to apply legislation applicable to professional practice (77.9 %; n=53) and for the formulation of a philosophy for their wards (66.1 %; n=45).

Except for providing support to other researchers (92.6%; n=63), the overall score in the research category was low. Only 61.8% (n=42) of the respondents indicated that the upgrading programme prepared them well to conduct research and even fewer (58.8%; n=40) to write research reports. Research is regarded as “an integral part of professional practice” and nurses should be prepared to do research, apply research results, write reports and evaluate the findings (Yoder-Wise, 2007:408).

One of the objectives of the upgrading programme is to prepare students for community participation. Respondents agreed (92.6%; n=63) that the upgrading programme prepared them to promote healthy living in the community, although their preparation to mobilise resources to work on health related risks scored low (78.0%; n=53). Most respondents were working in hospitals, limiting their contact with communities.

Affiliation with national and international professional organisations is beneficial for health professionals. Respondents participated (94.1%; n=64) in NANM’s and in the Association of Malawian Midwives’ (AMAMIs’) activities, but did not register or participate in activities of the East, Central and Southern African College of Nursing (ECSACON). A challenge in modern health care delivery is the continuous change and innovation in health care delivery. Some aspects seemed to be well covered, although the use of the Internet and exposure to international health care opportunities were low (see table 4).
Table 4: Adaption to change and innovation (n=68)

<table>
<thead>
<tr>
<th>My qualification has prepared me adequately to</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>be able to understand new technologies as they come available</td>
<td>7.4</td>
<td>5</td>
<td>16.2</td>
<td>11</td>
</tr>
<tr>
<td>keep abreast of new innovations in health care delivery</td>
<td>7.4</td>
<td>5</td>
<td>11.8</td>
<td>8</td>
</tr>
<tr>
<td>understand new treatment and nursing interventions</td>
<td>1.5</td>
<td>1</td>
<td>4.4</td>
<td>3</td>
</tr>
<tr>
<td>use the Internet to explore new ways of doing things</td>
<td>38.2</td>
<td>26</td>
<td>19.1</td>
<td>13</td>
</tr>
<tr>
<td>be exposed to international health care issues and opportunities</td>
<td>33.8</td>
<td>23</td>
<td>14.7</td>
<td>10</td>
</tr>
</tbody>
</table>

Professionals have a distinct role to play in teaching. Verma et al (2006:111) emphasise that nurses should utilise their knowledge and expertise in health promotion and disease prevention to a range of stakeholders. The upgrading programme seems to succeed in this respect as respondents scored more than 94.1% (n=64) on all five items on teaching members of the health team.

The last objective of the upgrading programme was preparing upgrading students in critical thinking and decision making in nursing and midwifery. Respondents agreed that the upgrading programme provided them with skills to “identify problem areas in the unit” (94.1%; n=64), “suggest alternative solutions to solve problems” (92.6%; n=63), “make prompt and inexpensive decisions” (94.1%; n=64) and “communicate to other health team members on decisions taken” (95.6%; n=65). The lowest score for the five items in this category was for the item on “evaluation of the outcome on the action to solve problems” which scored 88.2% (n=60).

Research results: open-ended questions

Analysis of data obtained from open-ended questions was coded into themes according to answers obtained from each respondent. These themes are described according to the responses. The reasons given for advocating the importance of undergoing the upgrading programme are portrayed in figure 1.
Figure 1: Reasons given by respondents for advocating the importance of undergoing the upgrading programme (n=68)

The research findings show the importance of the upgrading programme to the diplomates as more than a third (38.2%; n=26) reported that the upgrading programme assisted them to acquire knowledge and skills, while nearly a fifth (19.1%; n=13) indicated improvements in their decision making skills and critical thinking abilities.

The question of their contribution to nursing after completing the upgrading programme, confirmed their contributions in various ways, such as the provision of quality nursing care through proper decision making and critical thinking (41.2%; n=28) and functioning as nurse managers in various sectors of the health care systems (22.1%; n=15). The upgrading programme seems to equip these diplomates with skills and competencies to manage clinics and hospitals better. One respondent wrote “since the completion of my upgrading programme diploma as an SRNM, I was appointed nurse in charge at a health centre and the first role I worked on was to motivate my subordinates so that we can work hard as a team to provide quality care.” Other contributions mentioned are illustrated in figure 2.
Figure 2: Contribution of respondents to nursing after undergoing the upgrading programme (n=68)

Respondents recommended the following improvements of the programme:

Repetitions of learning material included in the curriculum for NMTs should be avoided (13.2%; n=9) with the emphasis on the principles of management, education and research as indicated by 26.5% (n=18) nurses. Respondents seemed to experience a lack in technological competencies as 19.1% (n=13) wanted to include computer lessons and access to the Internet during their training. They varied about the duration of the upgrading programme as 11.8% (n=8) of the respondents were of the opinion that the programme should be reduced to 1.5 years, while 8.8% (n=6) felt the learning content of the programme was too much and the programme should be increased to 3 years.

Hassles experienced included the unavailability of books in the library (10.3%; n=7) and lack of supervision and guidance in the clinical areas (10.3%; n=7). McCormack and Slater (2006:135) emphasise the coordinating role of the clinical education facilitator, ensuring that nurses maintain appropriate levels of practice.

LIMITATIONS OF THE STUDY

The study involved diplomates from one institution in Malawi who followed the upgrading programme and thus the research results might not be applicable to other countries, institutions or other programmes.
RECOMMENDATIONS

The following recommendations, if implemented, would enhance the upgrading programme for nurses in Malawi and could be considered for further research in this field.

- The curriculum needs to reflect the increasing requirements by adding subjects assisting them to remain abreast with the technology (especially computer skills), emphasising research, education and management.
- The library should be well equipped with resources, the Internet, up to date books and subscription to different journals.
- Recruitment of more lecturers or clinical instructors for clinical supervision and guidance. The recommended number for clinical supervision is 1 lecturer to 10 students (NMCM, 1995:22).

CONCLUSION

The research indicated that the NMTs who completed the upgrading programme perceived that their competencies were improved through the upgrading programme. There are, however, some challenges that should be addressed to improve the upgrading programme. The study was an attempt to contribute to the quality of nursing care rendered to the citizens of Malawi by determining the effectiveness of the upgrading programme for NMTs.

REFERENCES


Malawi College of Health Sciences. 2000. Upgrading Diploma in Nursing and Midwifery Curriculum. Lilongwe: MCHS.


MCHS – See Malawi College of Health sciences.


MOHP- See Ministry of Health and Population.


NMCM – See Nurses and Midwives Council of Malawi.

NSO – See National Statistical Office.


NMCM - See Nurses and Midwives Council of Malawi.


WHO – See World Health Organization.
