Title: The Family Nurse Practitioner in Botswana: Issues and Challenges.

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Abstract:

The nurse in Botswana has been a central figure in health care delivery ever since the inception of the country’s health care system. Constituting almost 70% of the health sector work force, and because of the nature of the skills they possess, nurses represent the client’s first contact with professional services at all levels of the health care system. Achievement of any health care objectives, in particular those of primary health care therefore to a large extent depend on the nurses.

The quality of services offered by nurses and the accessibility of such services to communities especially in rural areas where about 70% of Botswana population lives has been a major concern and challenge for the Ministry of Health and nurses themselves. Developments in provision of health care services as a result of societal needs and demands in particular a shift of emphasis from hospital based care to primary health care in the late 1970s led to establishment of the family nurse practitioner program in 1981. On its inception, this was a one-year program designed for registered nurse/midwives to enable them to provide comprehensive primary health care services to individuals, families and groups. Emphasis was placed on assessment, diagnosis and management of common diseases, health promotion and disease prevention. A repertoire of family nurse practice skills were acquired through intensive theory from nursing, social and medical sciences as well as public health sciences and concentrated periods of clinical practice. The Family Nurse Practitioner curriculum has changed overtime to reflect changes in the country’s health care needs and respond to consumers’ demands. One of the major changes has been on the length of training from one year to eighteen months (18). Exclusion of midwifery as one of the requirements for entry into the program is also being explored.

In view of their preparation nurse practitioners are frequently assigned to local clinics in rural and urban areas where they are the most skilled officers and hence assume full responsibility for primary health care services. They are also placed in outpatient departments of hospitals where they may work with a team of medical officers. Of late, nurse practitioners have broadened their horizons and are found in many other settings including industries, rehabilitation centres and private practice.

The positive impact of nurse practitioners on the quality of health services has been registered both formally and informally. A study conducted by the National Standing Drug Committee on rational drug use rated them highly in their ability to make logical conclusions about client assessment and hence rational prescriptions of drugs in comparison with other prescribers, which includes medical officers and other nurses.

Some of the major challenges for nurse practitioners include lack of understanding of their role by their supervisors which leads to under utilisation, lack of career advancement resulting in all senior nurse practitioners joining administration, and unclear legal boundaries.
**The Country**

Botswana is a landlocked country in Southern Africa sharing borders with Zimbabwe, South Africa, Namibia and Zambia. Its total land area is 582 000 sq. km which is about the size of France or the state of Texas in USA. Much of the country is flat with gentle undulations and occasional rocky outcrops. Almost two thirds of the country is covered with thick sand layers of the Kgalagadi Desert. Kgalagadi supports a vegetation of scrubs and grasses with almost complete absence of surface water. The eastern region has more fertile soils and less harsh climate and it is here where most of Batswana live. The country is largely arid or semi arid with mean annual rainfall of over 650 mm-250 mm. Almost all the rainfall occurs during summer months from October to April. The period of May to September is generally dry. Temperature range is wide with extremes from less than minus 5 up to 43 degree Celsius. The capital city of Botswana is Gaborone.

Botswana has some of the last great population of wild animals left in Africa. Large areas of the country are designated as national parks and game reserves, which constitute a tourist attraction and also make an important contribution to the country’s subsistence economy. Diamonds and copper nickel are Botswana’s largest export commodities.

Botswana has a population of about 1.3 million with 46 % residing in urban areas and the rest in rural areas. The people of Botswana are members of the Setswana-speaking ethnic groups. The official languages are Setswana and English. Females constitute about 52% of the population. About 43% of the total population is under 15 years of age. Infant mortality has shown considerable decline from 100/1000 in the 1970s to 45/1000 in the 1990s. Total fertility rate has declined from 5.2 in 1991 to 4.6 in 1996. Life expectancy is 66.7 years.

**The Health Care System**

The health care delivery system in Botswana is based on primary health care model, which emphasises on accessibility to basic services. The system is organised into different levels based on the complexity of services provided. At the lowest level are 687 mobile health stops, 314 health posts and 209 clinics. Midway there are 14 Primary Hospitals and 14 District Hospitals. The two national referral hospitals represent the highest level of the system.

Infectious diseases are the major causes of ill health and death in Botswana. However because of changes in lifestyle, non-communicable diseases related mainly with diet, social habits, lack of exercise and longer life expectancy such as hypertension, coronary artery diseases, and diabetes, and the different kinds of cancers are becoming some of the major problems. Botswana is also one of the countries that have been hit very hard by the HIV/AIDS pandemic.

**Evolution of the Nurse Practitioner Program**

The nurse in Botswana has been the central figure in the health care system ever since its inception. Nurses constitute about 70 % of the health sector work force. Because of their numbers and the skills they posses, nurses represent the client’s first contact with professional services at all levels of the system. Achievement of primary health care objectives therefore to a large extent depends on the contribution of the nurses.
The quality of services provided by nurses to communities especially in rural areas where almost 70% of the population lives, as well as changing societal needs and expectations have posed a significant challenge to the Ministry of Health and to nurses themselves over time. Communities were forever complaining about the quality of health care services through different means such as the media or even through their formal political representatives such as councillors and parliamentarians. Practising nurses themselves, particularly those in primary health care settings voiced their lack of skills in the area of patient assessment and management of diseases and called for some kind of continue education to enable them to acquire such skills which are not a focus in the generic curriculum. The Government through the Ministry of Health responded to the challenge by establishing the Family Nurse Practitioner (FNP) Program. The program started as a collaborative project between the Government of Botswana and the United States of America. One of its major preparatory tasks was to send a group of five nurse to the Unites States for training as nurse practitioners so that they can act as preceptors for nurse practitioner students. Faculty for the nurse practitioner program was also sent for training in the United States. The project was launched in 1981 enrolling about fourteen students.

On its inception the FNP program was a one-year program designed for registered nurse/midwives to enable them to provide comprehensive primary health care services to individuals, families and groups. Emphasis was placed on assessment, diagnosis and management of common diseases, health promotion and disease prevention. A repertoire of family nurse practice skills were acquired through intensive theory from nursing, social and medical sciences as well as public health sciences and concentrated periods of clinical practice.

The Family Nurse Practitioner curriculum has changed overtime to reflect changes in the country’s health care needs and respond to consumers’ demands. One of the major changes has been on the length of training from one year to eighteen months (18). This came as a result of inputs from the graduates of the program and FNP faculty who felt that content was too much to be mastered in one year. Exclusion of midwifery as one of the requirements for entry into the program is also being explored in an attempt to reduce training costs for the ministry of health and also improve staff utilisation. Since its inception the program has been training an average of about fifteen family nurse practitioners per academic year. To date there are about two hundred practising nurse practitioners in the country.

**The Family Nurse Practitioner Program Today**

The program run for eighteen (18) months from January to June of the following year. It is divided into three terms. The first term runs from January to June. The students take the following courses: -

?? Family Nurse Practice 1/Health Assessment
?? Communication in Health Intervention
?? Family Nursing
?? Maternal and Child Health
?? Pharmacology
?? Public Health Sciences (Epidemilogy, Research, Statistics)
?? Clinical Nutrition
Term two is July to December. The students take the following courses: -

- Mental Health Intervention
- Dental Health Intervention
- Laboratory Intervention
- Maternal and Child health 11
- Family Nurse Practice 11/Disease Diagnosis and management
- Role Development
- Practicum 11

Term three runs from January to June. The students are placed in primary and district hospitals all over the country under the supervision of preceptors. Family Nurse Practitioner faculty visit on scheduled times to review student progress and assist as needed.

The final examination is in May. It consists of three theory papers and a practical examination. The practical examination is conducted by a team of examiners made up of a faculty member, an experienced medical officer, and an external examiner who is usually an experienced nurse practitioner faculty from outside Botswana. So far all our external examiners have come from different universities in the United States.

**The Role of Family Nurse Practitioners**

In view of their preparation nurse practitioners are frequently assigned to local clinics in rural and urban areas where they are the most skilled officers and hence assume full responsibility for primary health care services. In these settings nurse practitioners are responsible for patient assessment and diagnosis; ordering and interpreting basic diagnostic tests; developing and implementing a comprehensive plan of care which includes prescribing drug and non drug interventions and education and counselling. Being the most skilled in patient assessment, diagnosis and management in most primary health care clinical settings, nurse practitioners act as resource persons for other members of the health team.

In some districts, in addition to assigning nurse practitioners to individual clinics, a nurse practitioner may be based on the district health team where she/her assume responsibility for a number of clinics in the district, paying them visits periodically to attend to referred patients and provide staff education and guidance. At the community level nurse practitioners are often required to participate in community based health projects and act as resource persons in workshops and seminars.

Nurse practitioners are also placed in outpatient departments of hospitals where they may work with a team of medical officers. The relationship of the two cadres is mainly collegial with nurse
practitioners assuming responsibility for patients under their care, co managing chronic cases with medical officers and referring as need arise.

Of late, nurse practitioners have broadened their horizons and are found in many other settings including industries where they provide basic and occupational health services, rehabilitation centres and private practice. They are also making strides in taking the lead in selected special health care programs such as control and management of sexually transmitted diseases and HIV/AIDS, (STD/AIDS) program, and prevention of maternal to child transmission of HIV/AIDS (MTCT) program.

**Issues and Challenges in Family Nurse Practice.**

*Lack of understanding of the nurse practitioner role*

One of the major challenges for nurse practitioners is lack of understanding of their role by their supervisors, which leads to under utilisation. The health system in Botswana is very familiar with registered nurses and nurse midwives. In hospitals in particular, family nurse practitioners are more often assigned to midwifery units where they provide basic midwifery services. A significant number is assigned to inpatient care units where they function just like first level registered nurses. While in ambulatory settings, as a result of lack of understanding, some managers may limit the nurse practitioners’ prescriptive powers and admission.

*Unclear legal boundaries.*

**Scope of practice**

There is currently no specific legislature that regulates family nurse practitioners in Botswana. The practice of nurse practitioners is generally controlled by the Nursing and Midwifery Council under a broad nurses and midwives act. The council is still working on specific regulations for all nurses practising on advanced roles (Nurse Practitioners, Nurse Anaesthetists, Community Psychiatric Nurses etc.)

**Prescriptive Authority**

The nurses and midwives act is very silent on the issue of drug prescription for nurses and midwives. However because of the country’s situation and needs, all nurses do have some prescriptive rights as enshrined in the Drugs and Related Substance Act no. 18 of 1992. This act further more acknowledges the existence of nurses with special or advanced training such as nurse practitioners and gives them additional prescriptive powers over and above the average registered nurse. However due to lack of understanding of the role of nurse practitioners, some health facilities may limit their prescriptive powers relegating them to the level of registered nurses.
Reimbursement for Nurse Practitioners on Private Practice

Private practice for nurse practitioners is still a very new undertaking. There are therefore no clear guidelines addressing their practice or reimbursement issues. The picture however is not very gloomy. Our two main medical insurance companies have included nurse practitioner in their list of providers. They both pay nurse practitioners about 65% of what they will pay a general practitioner for consultative services. There are no differences in the charges for other services such as surgical procedures, basic medical examination etc. There is still however a lot of uncertainties in the relationship of companies and nurse practitioners.

Lack of career advancement

The health system in general has no specific advancement opportunities for nurses with special or advance training. Nurses are generally lumped together in a large group with registered nurse at the lowest level and matron at the highest. Progression in this regard is along administrative lines. This situation is very unfortunate because it results in all senior nurse practitioners joining administration for better prospects. The situation therefore robs the health facilities of the expertise of senior clinicians who could otherwise make valuable contribution to the quality of services.

Family Nurse Practitioner Training Program

Faculty

It is very difficult for the nurse practitioner program to meet the country’s needs for trained nurse practitioners. One of the major reasons is unavailability of qualified faculty to teach in the program. Ever since its inception, the FNP program has never had more than four (4) qualified faculty members. This limited the student intake to not more than twenty in order to be within the acceptable student/staff ratio. Currently all masters prepared nurse practitioners who act as faculty for the family nurse practitioner were trained in the United States where nurse practitioner education is more established. It is not easy to send officers for training in America. Most candidates have difficulties in meeting the requirements for registration, which is a prerequisite for most universities, and also a safeguard for the country to ensure that its candidates will fully participate in nurse practitioner education.

The family nurse practitioner program has also experienced a very high attrition rate over the past two years. While senior faculty members were forced into administration by lack of advancement in their speciality, others left for better opportunities elsewhere.

Preceptors

Poor utilisation of nurse practitioners throughout the health system denies the program the opportunity to have seasoned nurse practitioners as preceptors. The lack of these role models has a negative impact on the students’ ability to integrate the nurse practitioner role. In most cases nurse
practitioner students are precepted by medical officers who do a very good job in the area of disease diagnosis and management.

**Conclusion**

Botswana is one of the few countries in Africa with an established nurse practitioner program. Different external examiners over years have rated the program as very impressive, and suggested that it should be offered at a masters level. Practising nurse practitioners are making a positive impact on the quality of health services. This has been registered both formally and informally. A study conducted by the National Standing Drug Committee on rational drug use rated them highly in their ability to make logical conclusions about client assessment and hence rational prescriptions of drugs in comparison with other prescribers, which includes medical officers and other nurses. Calls are made by members of parliament for additional efforts in training FNPs to fill the gap created by acute shortage of medical personnel. Although the program is facing a lot of challenges as cited above, efforts are made to sustain and improve it in an attempt to meet the country’s needs.

**Bibliography**

Government Printers (1967). *Nurses and Midwives: Chapter 61:03*. Gaborone