



The role of nurses in the human immunodeficiency virus/acquired immune deficiency syndrome policy process in Botswana

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Health Policy, HIV/AIDS, Key Players (stakeholder groups), Policy Process, Resource Allocation, Role of Nurses

Abstract

In Botswana, there is dearth of literature on the role of nursing in health-care policy and resource allocation and yet nurses constitute the majority (85%) of health manpower. The health-care delivery system depends mostly on nurses for service provision. There were two main purposes of this study: first, to gather descriptive data from major key players (with particular emphasis on nurses) concerning knowledge of the policy process and resource allocation for management and care of clients with human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) in Botswana; and, second, to identify nurse characteristics (e.g. position, education, experience, job category) associated with motivation to influence health-care policy in HIV/AIDS management and care in Botswana. A policy process conceptual framework was used to guide data collection and analysis. A case-study research method was used to conduct in-depth interviews from a purposive sample of 19 policy makers, and a survey questionnaire was used to collect data from a purposive sample of 95 registered nurses from six study sites in Botswana. The study findings indicate minimal participation of nurses in health-care policy process and resource allocation. The demographic variable of position was a predictor of the involvement of nurses in policy and in budgetary decisions. Both survey and interview data indicated that this minimal participation of nurses in the policy process resulted in implementation problems, thus compromising service provision. Implications of the findings for the nursing profession, nursing practice and policy, which address the importance of nurses' involvement, are discussed.

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Introduction

Botswana currently has one of the highest recorded incidences of human immunodeficiency virus (HIV) infection in Africa, despite the fact that acquired immune deficiency syndrome (AIDS) was only first publicly recognized in 1985. This was the year when the first AIDS case was publicly diagnosed and is commonly and popularly assumed to be the date when AIDS first 'arrived' in Botswana (AIDS/STD Unit 1996a; MoH 1993; MacDonald 1996). With large numbers of people infected with HIV, the disease is likely to have major social and economic consequences and a potentially catastrophic impact on expenditure within the health sector.

In 1998, it was estimated that in Botswana, >125 000 people (or 10% of the population) were infected with HIV. Of these infected individuals, 12 000 were estimated to be children younger than 5 years of age. Projections for adults aged 15–59 were much higher, estimated at 28–30% (240 000 adults). These rates could rise to 31% and 35.5% within 5 years without behavioural change (GoB & UNDP 2000). Model projections from Government sources indicate that the orphan population could rise to between 159 000 and 214 000 by 2010 and will constitute >20% of all children in Botswana (Botswana Human Development Report 2000; GoB & UNDP 2000).

The present article focuses on the role of nurses in the HIV/AIDS policy process in Botswana. The emphasis on nurses is significant, specifically in Botswana, where nurses constitute ≈85% of health manpower, and the health-care delivery system depends largely on them for provision of health-care services. Therefore, the participation and contribution of nurses to the political process at a national level, where decisions and policies affecting their welfare and practice are made, is critical for effective implementation of policy.

Study purpose

This article focused on two objectives that address the HIV/AIDS policy process: resource allocation;

and the role of nurses. The aims of this study were to:

1 gather descriptive data from major key players from government, private and NGO sectors (stakeholder groups), with a particular emphasis on nurses, concerning knowledge of the policy process and resource allocation for management and care of clients with HIV/AIDS in Botswana, and

2 identify the characteristics of nurses associated with motivation to influence health-care policy in HIV/AIDS management and care in Botswana.

The research questions addressed in this article were:

- Who are the major key players (stakeholders) in policy development?
- To what extent were nurses involved in the formulation of the policy for HIV/AIDS?
- To what extent are nurse leaders interested in participating in resource allocation and health-care policy decisions?

Botswana: the people and the epidemic

Botswana is a landlocked country lying at the centre of the southern African plateau. Botswana shares borders with Namibia, South Africa, Zambia and Zimbabwe. Most of the country is desert, with the Kalahari occupying the western part of the country. The eastern part is hilly, with salt lakes in the north. The climate is semi-arid, with hot summers and cold winters. Botswana is ≈582 000 square kilometres (i.e. about the size of Kenya or France). The 1991 census (most recent available data) yielded a de facto population of 1 326 796 compared with the 1971 figure of 574 094 and 1981 figure of 941 027. English and Setswana are the official languages of government and business in Botswana. Although there are several ethnic groups, Setswana was adopted as the national language. Major religions are: African indigenous religions, 60%; Christianity, 30%; and other religions, 10% (Amanze 1994).

Current estimates project that ≈300 000 Botswana (≈20% of the total population) are infected with HIV (Botswana Human Development Report 2000). Botswana has and continues to expe-

rience an HIV epidemic and is set to experience an AIDS epidemic, replete with untold human misery and suffering. By 2010 it is projected that >30 000 deaths will have occurred as a result of AIDS (GoB & UNDP 2000). Life expectancy is also expected to fall dramatically in Botswana, with the largest reductions taking place in women, who tend to be affected at a relatively young age. Life expectancy will fall owing to the deaths of young adults, as well as deaths of infants and children. The combined life expectancy for both males and females in Botswana is projected to be 46–52% of that of non-AIDS life expectancies (GoB and UNDP 2000). These grim statistics have implications for care-giving, both in the home and in health facilities, which are mostly staffed by women.

The Botswana national policy on HIV/AIDS

In Botswana, the HIV/AIDS pandemic has forced the public and the government to develop a national HIV/AIDS policy for prevention and care. The Botswana Government initially responded to the AIDS pandemic by developing a short-term plan (STP I), which was implemented between 1987 and 1988 (MoH 1993; MoH 1997; AIDS/STD Unit 1995a,b,c,d,e). The objectives of the STP I were to:

- 1 strengthen the epidemiological surveillance activities,
- 2 prevent transmission through blood and blood products,
- 3 strengthen diagnostic, management and infection-control practices, and
- 4 evaluate and monitor the programme.

Following the STP I, another HIV/AIDS working document was developed, referred to as the medium-term plan I (MTP I) and was implemented from 1989 to 1993; this document was reviewed annually from 1990 by a team of experts from the World Health Organization (WHO), United Nations Development Programme (UNDP), Norwegian Agency for Development Cooperation (NORAD), United States Agency for International Development (USAID) and the Botswana Government. The objectives of the MTP I were to:

- 1 prevent and reduce HIV transmission in Botswana,
- 2 reduce the morbidity and mortality associated with HIV infection and AIDS, and
- 3 reduce the social and economic impact of HIV and AIDS.

As the epidemic grew, limitations of the MTP I were noted and the review team recommended a multi-disciplinary approach that led to the development and formulation of the first national HIV/AIDS policy, which was adopted in November 1993. The policy outlines the roles of key players (stakeholder groups) such as government ministries, the private sector and NGOs (all listed below) in the national response to HIV/AIDS, as the basis for a national strategic plan in HIV/AIDS prevention and care:

- The Ministry of Health (MoH) was identified as the lead ministry, playing a co-ordinating role,
- The Office of the President, providing political leadership and advocacy,
- The Ministry of Labour and Home Affairs and Social Welfare, dealing with aspects of welfare support and employment legislation,
- The Ministry of Finance and Development Planning, mobilizing the appropriate resources for implementation and research,
- The Ministry of Education, integrating knowledge of sexually transmitted disease (STD) into all levels of education, and
- The Ministry of Local Government, Lands and Housing, dealing with implementation at local and district levels.

The HIV/AIDS policy also outlined regulations and procedures to be followed when dealing with people living with HIV and AIDS, as well as providing guidelines for HIV testing. These guidelines included, but were not limited to, encouraging voluntary HIV testing and discouraging pre-employment HIV testing as part of the assessment of eligibility to work. The guidelines outlined by the policy seem appropriate and comprehensive; however, what is unclear is whether or not these guidelines are being adhered to. For instance, what are the checks and balances in place to ensure that people's rights are not violated?

The interdisciplinary approach is commendable in that it embraced several key players from govern-

ment, private and NGO sectors. However, questions remain within given ministries and departments about who was involved, how were they involved, who was excluded in the policy process and how these processes influenced and/or impacted policy implementation. It is within this context that the researcher was interested in investigating the role of nurses in the formulation and development of this major health-care policy of HIV/AIDS in Botswana.

The number of persons in Botswana with HIV/AIDS has profoundly affected the practice of nursing. Nurses interact with people who are affected by HIV/AIDS as spouses, children, mothers and grandparents and, in certain cases, as victims themselves. The participation of nurses in resource allocation and health-care policy is critical. The active participation of nurses in health-care policy would strengthen their efficiency and effectiveness through:

- collaborating with other professionals and/or organizations,
- consulting with local and external agencies,
- continuously monitoring and evaluating health policy decisions, and
- improving the care provided to the population.

The increase in the number of people with HIV/AIDS creates a demand for health care beyond what existing facilities can provide. The percentages of

bed occupancy for HIV illness in medical and paediatric wards in the two referral hospitals (Nyangabgwe and Princess Marina) are 70% and 50%, respectively. In Primary and District hospitals, the occupancy of HIV-related illness is ≈ 30% of the total beds. AIDS has now become the most common diagnosis for the medical ward admissions and accounts for 40% of total deaths in the ward (MoH 1998; AIDS/STD Unit 1996a).

Policy process: a conceptual framework

The theoretical framework for the study was adapted from Anderson's policy process (Table 1). Public policy-making cannot be adequately studied in isolation from the environment or context in which it occurs. Government and politics are the institutions that authoritatively allocate most of the public's scarce resources. Decisions about allocation of resources necessitate identification of priorities, as these decisions involve making difficult choices among prevention, health promotion, caring and curing objectives. The policy agenda in the policy process represents the HIV/AIDS epidemic. To date, the latter has received considerable research attention from both local and international organizations. HIV/AIDS cuts across all phases of the pol-

Table 1 The Policy Process

<i>Policy terminology</i>	<i>Stage 1: Policy agenda</i>	<i>Stage 2: Policy formulation</i>	<i>Stage 3: Policy adoption</i>	<i>Stage 4: Policy implementation</i>	<i>Stage 5: Policy evaluation</i>
Definition	Problems that receive the serious attention of public officials	Development of a pertinent and acceptable proposed course of action for dealing with a public problem	Development of support for specific proposals so that a policy can be legitimized or authorized	Application of the policy by the government's administrative machinery	Efforts by the government to determine whether the policy was effective and why or why not
Commonsense	Getting the government to consider action on the problem	Proposals to address the problem	Getting the government to accept a particular solution to the problem	Applying the government's policy to the problem	Did the policy work?

Source: adapted from Anderson (p.36).

icy process. In Botswana, policy implementation is epitomized in the form of the HIV policy document. The national HIV/AIDS policy is a government intervention strategy at a macro level, which requires skilled personnel to be in place at various levels of the policy process to enable effective implementation and functioning. It should be noted that the stages in the policy process model are not mutually exclusive; participation in or lack of participation in the other stages has implications for the other.

From this framework, policy formulation and implementation are perceived as political in that they involve disagreement and struggle among individuals and groups with conflicting interests and desires on public policy issues. This approach has been adopted from Anderson (1990) for the following advantages:

- policy-making often does follow the stages described, which help capture the flow of action in the policy process. Policy formulation and adoption may be merged,
- the sequential process is open to change and elaboration. Additional steps can be introduced if experience indicates that they are needed to improve description and analysis,
- the framework yields a dynamic and developmental, rather than a cross-sectional or static view, of the policy process, and
- the sequential approach is not 'culture bound' and can be utilized to study policy making in different settings and political systems.

The literature on public policy indicates that policy-making is a dynamic process shaped by social, cultural, political and economic factors (environmental factors). These four structures combined help to form a political culture, which, in turn, shapes political behaviour.

Methodology and research design

Although nurses are the primary health-care providers for people with HIV/AIDS, very little is known about the involvement of nurses in health-care policy and resource allocation in Botswana. To understand the role of nurses in the health-care policy and resource-allocation processes (dynamics,

controversies and context) of the 1993 HIV/AIDS policy in Botswana, methodological triangulation was used. The purposes of triangulation are to increase the reliability and validity of the study (known as convergence or confirmation in qualitative research) and to increase the comprehensiveness of a study (Creswell 1998; Lincoln & Guba 1985; Miles & Huberman 1984; Munhall & Boyd 1993; Stake 1995; Yin 1994).

A case study research method and a survey were used to guide data collection, data coding and data analysis. A case study research method was used to collect data from January 1998 to November 1998 among 19 policy makers from 11 different organizations and/or institutions in Gaborone, the capital city of Botswana. The population of Gaborone is \approx 183 800 (Ministry of Finance and Development Planning 1998). This study site was selected because:

- Government ministries, private organizations and NGOs are concentrated in the capital, and
- Gaborone is the second leading urban area in HIV/AIDS infection in Botswana and it provided access to other sources of information such as libraries, archives and public and private documents.

A survey design was employed to complement the case study research method and to provide baseline data for Botswana, which would enable comparative opportunities with other national situations. The survey was used to collect data among 95 registered nurses in six study sites – Francistown, Gaborone, Serowe, Molepolole, Mochudi and Ramotswa – between July and September 1998. The six study sites were selected for both regional and national representation of nursing leadership, owing to the difficulty in obtaining a sufficient sample size. Francistown was selected because it is currently the leading urban area in HIV infection and is the second largest city in Botswana, with a population of 88 300 (Ministry of Finance and Development Planning 1998). All six study sites had schools of nursing within their boundaries.

Sampling

A purposive sampling method was used to select study participants. When obtaining a purposeful

sample, the researcher selects a participant according to the needs of the study (Glaser & Strauss 1967; Lincoln & Guba 1985; Morse 1991). Participants with atypical experiences are sought so that the entire range of experiences and the breadth of the concept or phenomena may be understood. Rather than selecting a sample using criteria based on typical or representative population characteristics, the sample is selected according to the informant's knowledge of the research topic. This sampling technique was implemented to ensure adequate representation of important themes and to guarantee that the best informants were selected to meet the information needs of the study.

Analysis

Data analyses were conducted simultaneously with data collection for the case study research method. Raw data were obtained from interview transcripts and field notes. Data analysis involved examining, categorizing, identifying themes and interpreting data for meaning of the findings. Concurrent analysis was performed to ensure that data were consistent with the research questions and enabled the researcher to identify gaps and discrepancies at an early stage. Descriptive statistics was used to analyse survey data, together with selected non-parametric statistics such as the χ^2 -test and Fisher's exact test.

Results

Interview data indicate that although nurses are the backbone of the Botswana health-care delivery system, their participation in the HIV/AIDS policy process was minimal. Those involved in the policy process were in senior positions at a ministerial level and in similar positions in the private sector and NGOs. Nurses were not perceived as powerful and autonomous, as they are sometimes alleged or inferred to be. The role of nurses was not prominent in setting the tone in the policy process that would contribute to the image and prestige of their profession and professional organization.

A total of 11 organizations agreed to participate in the study, and a sample of 19 policy makers was drawn from this group of organizations. Policy

Table 2 Demographic characteristics of policy makers

<i>Variables and categories</i>	<i>n</i>	<i>Valid percentage</i>
Gender		
Males	5	26.3
Females	14	73.7
Education		
BSc or lesser degree, BA	4	21.1
Master's degree or greater	15	78.9

makers occupied senior positions at the levels of permanent secretary, under-secretary, directors and heads of departments in various government ministries and departments, academic institutions, the private sector and NGOs. Study participants included 14 (73.7%) females and five (26.3%) males (Table 2).

These policy makers were also among the most highly educated in society: four (21.1%) held a bachelor's or lesser degree and 15 (78.9%) held a graduate degree. In selecting these subjects, the researcher (in particular) sought contrasts and similarities in features or characteristics of policy makers and their environments that might affect and/or influence their participation in the policy process. The investigator envisioned that the choices dictated by the selection criteria would provide as broad, and yet controlled, a range of factors and consequences as could be managed.

There was a general consensus among policy makers that omission and/or exclusion of nurses from the policy process was a great mistake; however, some policy makers were highly critical of the nursing professional organization. Policy makers argued that the Nurses Association of Botswana (NAB) was not sufficiently proactive in responding to the HIV/AIDS epidemic, even though the literature indicates that the epidemic was spreading faster among women and children, of which nursing (as a predominantly female profession) is a part. One policy maker stated:

We do not have a very assertive body of nurses. Even when nurses are selected to participate, only a few would talk in public spheres. Nursing education at the university level has also failed to

instill or develop assertive behaviour within the nursing profession. This is a very submissive profession.

The MoH was also blamed for the exclusion of nurses from the policy process. Policy makers complained that most health policies are imposed on nurses and that the MoH, as a co-ordinating body for the HIV/AIDS policy process, should have consulted with the nurses through their professional organization and their institutions. They argued 'we cannot make decisions for professionals.' Another policy maker further argued that:

Policies are imposed on nurses without their involvement in planning and development. At times, nurses are called in a day or two before the policy is wrapped up and we call it involvement. For example, there has never been a seminar for at least 200 nurses to come and share their knowledge, experience, expectations and/or frustrations on the issue of HIV/AIDS. Nurses should be released or allowed time to participate, especially those in lower and middle management. The excuse given for their exclusion is that there are manpower constraints.

Dominance by the medical establishment was also cited as one reason why nurses were excluded from the policy process. Some policy makers complained that doctors monopolized health-care policy. When national strategies for HIV/AIDS were discussed, there was minimal acknowledgement of the contribution of nurses to the epidemic.

Talks about partners in HIV/AIDS do not include nurses. Even at international conferences on HIV/AIDS, you hardly see nurses; instead you will see doctors. From other countries you will see nurses.

Although there was a general consensus that an interdisciplinary approach was used in the policy process, most policy makers reported that for nurses and other marginalized professions 'planning was still top-down'. They argued that had HIV/AIDS been given serious attention when the first AIDS case was reported in 1985, the epidemic would have been halted. This major concern was

attributed to lack of political will or commitment when the epidemic first hit the country. The majority of the policy makers believed that had HIV/AIDS hit the most prominent figures in the country first, commitment to HIV/AIDS would have been different.

Role perceptions and attitudes about nurses seem to have played into some societal stereotypes about nursing as a profession. Hinshaw (1983) describes role, attitudes and opinions as subjective phenomena learned from social and cultural experiences. Even though nurses are amongst the most highly educated people in the country, some policy makers did not see the need for nurses to be involved in resource allocation decisions at the highest level, as summarized in this citation by one policymaker:

I don't think we need nurses in resource decisions because that one is beyond them as it deals a lot with economics; where we ask questions such as, why should I give district X so much as opposed the other one. I take a nurse to be an operator because they are the people at the grassroots level.

These findings seem to suggest that nurses, for all the power and independence attributed to them and for all their striving as the majority health manpower, did not make a difference. Admittedly, this statement is ambiguous because there are also grounds for believing that nurses made a difference in the policy process with regard to policy implementation and service provision because nurses staff most health facilities in Botswana. Unfortunately, in the HIV/AIDS policy process, nurses did not exercise their power and autonomy to exert their influence. It is in this regard that nursing's role seemed to have produced minimal effects and led the researcher to conclude that there was professional subordination.

Survey data

A total of 95 registered nurses (96.8% of whom were female) participated in the study: 45.7% of registered nurses held a diploma certificate; 30.0% held a baccalaureate degree; and 23.3% held a master's degree. The majority (58.9%) held the position of

Table 3 Demographic characteristics of registered nurse survey

Variables and categories	n	Valid percentage
Gender		
Males	3	3.2
Females	92	96.8
Education		
Diploma	42	46.7
BSN, BSc, BEd	27	30.0
Masters and above	21	23.3
Position		
Lecturer/Principal	39	40.0
Nursing Sister/Matron	56	58.9

Table 4 Nurses' participation in the policy process

Stage/phase	n*	Percentage
Planning	4	14.3
Adoption	6	21.4
Implementation	24	85.7
Evaluation	5	17.8
Not involved	66	70.2

* Total = 94.

Note that activities are not mutually exclusive. Therefore, participation of nurses in different phases of the policy process resulted in an overlap between the categories.

nursing sister/matron; 40% held a lecturer's or principal's position. All respondents were full-time employees. Demographic variables are summarized in Table 3.

Survey data indicate that most nurses (88.4%) were aware of the national HIV/AIDS policy, while 9.7% were not. Different methods to disseminate information on the national HIV/AIDS policy were used, such as memos, mass media and workshops. Despite varied sources of awareness of the HIV/AIDS policy, only 28 (29.8%) nurses reported that they were involved in the policy process, while 66 (70.2%) were not involved. Of those 29.8% nurses who participated in the policy process, 14.3% were involved in policy planning, 21.4% in policy adoption, 85.7% in policy implementation and 17.8% in policy evaluation (Table 4).

Participation of nurses in different phases of the

Table 5 Nurses' participation in budgetary decisions

Decision	n*	Percentage
Finance	2	2.7
Personnel	7	9.3
Equipment & supplies	2	2.7
Not involved	66	88.0

* Total = 75.

policy process resulted in an overlap between the categories. Participation of nurses in different phases of the policy process was tested using Fisher's Exact Test. There was a significant difference between those who participated at the planning phase and those who did not (Fisher's exact test: $P = 0.028$). The higher the position, the more likely the respondents were to participate in policy-making decisions. Survey data further indicates that although most nurses (40%) were aware of specific resources allocated for HIV/AIDS and the changes in the health-care budget, their participation remained minimal. Only nine (12.8%) nurses were involved in the budgetary process, while 88.0% were not involved. Of those nurses actively involved in budgetary decisions, 2.7% participated in finance decisions, 9.3% in personnel decisions, and 2.7% in equipment and supplies decisions (Table 5).

Again, it should be noted that there is an overlap between categories. Relationships between position, education, job category and budgetary decisions were tested using Fisher's Exact Test. Nurses in senior positions were more likely to participate in budgetary decisions compared with other nurses ($P = 0.005$). The variable of position appeared to be the only variable associated with the involvement of nurses in the policy process. The variables: job category, education, awareness and interest did not seem to have any influence on the involvement of nurses in the policy and resource-allocation decisions.

Discussion

The focus of discussion in this article is anchored in the following two phases of the policy process (see

the policy model); policy formulation; and policy implementation. These phases are pivotal to the success and/or failure of the HIV/AIDS policy with regard to the participation, and/or lack of participation, of nurses. Nurses in Botswana are the key players in the provision of health services. Policy formulation involves drawing up an action plan, which requires the subsequent full co-operation and collaboration of others for the policy to be successful. Embedded in the policy implementation phase are the expectations, activities, roles and responsibilities of nurses in combating the epidemic. Active participation (or lack of it) of nurses in the formulation of the policy therefore has practice implications for service delivery to clients. Deprived of comprehensive understanding of key aspects of HIV/AIDS policy, nurses are less likely to be effective implementers.

Studies on public policy indicate that policy process is highly complex and dynamic. The environment within which the HIV/AIDS policy process in Botswana took place was confronted with the rapid transmission of HIV and the need to act quickly amidst a myriad of problems, such as social change, and cultural, economic and political issues. The majority of policy makers acknowledged AIDS as a developmental issue and that it poses serious threats to the economy of Botswana in terms of economically productive persons, loss of money on manpower development and rearing of orphans.

AIDS militates against development. The economic gains made over previous decades could be reversed if HIV/AIDS is not given the attention it deserves. In recent years, United Nations (UN) projections of life expectancy in Botswana suggests that it would be reduced as a result of the HIV/AIDS epidemic. The 2001 Human Development Report for Botswana indicates that life expectancy has shown a reduction from 67 to 42 years of age owing to the impact of HIV/AIDS (UNDP 2001). Similarly, the 2002 Human Development Report indicates that in Botswana, more than one-third of adults have HIV/AIDS, and that a child born today can expect to live only 36 years (UNDP 2002).

Furthermore, the finding that nurses' involvement in the policy process was minimal is very disturbing and calls for a review of the profession's

mission statement. Nursing in Botswana should clearly define its future orientation as it relates to the broader institutional and social policies. The participant list of HIV/AIDS workshops showed that nurses were under-represented compared with other health professionals (AIDS/STD Unit 1995b,c,d,e). The minimal participation of nurses threatens effective implementation of the policy. This supports the need for a focus on the structures, barriers and dynamics that impede and/or facilitate nurses' participation in policy.

According to the International Council of Nurses (ICN), the nurse plays a major role in determining and implementing desirable standards of nursing practice and education and, furthermore, the nurse (acting through the professional organization) participates in establishing and maintaining equitable social and economic working conditions in nursing. If nurses are not actively involved in the political process, how can they achieve these goals? How can they truly advocate for equitable resources when they are not involved in the policy process where resource decisions take place? The role of nurses in Botswana include those outlined by the ICN but expand to include those of doctors and laboratory technicians because of shortage of manpower, especially in the rural and remote settings of Botswana.

Nurses should be involved in policy decisions because of their constant interaction with the patients and their ability to recognize and assess a range of patient outcomes. The unique function of nurses is to help people, sick or well, in the performance of those activities contributing to health, its recovery (or to a peaceful death) that they would perform for themselves if they had the necessary strength, will or knowledge and to help them to become independent as rapidly as possible (Henderson 1950).

Although there was a general consensus that a multidisciplinary approach was used in the development and formulation of the HIV/AIDS policy, some policy makers reported that 'for nurses and other marginalized professions, planning was still top down'. One policy maker complained that gender must have been a major factor in the exclusion and/or omission of nurses in the policy process,

Table 6 Distribution of health personnel per population 1990–1996

<i>Year</i>	<i>Population (in thousands)</i>	<i>No. of doctors</i>	<i>Population per doctor</i>	<i>No. of nurses</i>	<i>Population per nurse</i>
1990	1301	257	5062	2413	539
1991	1327	288	4608	2679	495
1992	1358	343	3959	3057	444
1993	1391	363	3832	3286	423
1994	1425	398	3580	3355	425
1995	1459	393	3712	3678	397
1996	1495	393	3807	3678	407

Source: Ministry of Finance and Development Planning (p. 388.)

given that nursing is predominantly female. The concept of nurses' involvement should be viewed and understood within the context of the Botswana health-care delivery system.

The nurse–patient and doctor–patient ratios explain the significance of nurses' involvement (Table 6). Study findings and previous research indicate that nurses have a central role to play in the health-care system and that care giving usually falls disproportionately on women, of whom the majority are nurses (Goblier 1997; Phaladze 1999; Jackson & Anderson 2001; Shaibu 1997; Tlou 1996). Nurses expressed the need to be involved in policy at all levels because they believe their care influences patient outcomes and that their exclusion runs the risk of compromising a quality patient care-nursing product!

The study findings also indicate that people living with HIV and AIDS were not actively involved in the 1993 national HIV/AIDS policy process, an obvious oversight because people living with HIV and AIDS live the experience. This clearly supports the need to encourage both formal and informal leaders, and advocates, to participate in policy development. Their participation would assist policy makers in developing culturally sensitive strategies and/or programmes that fully address the needs of the people. The focus of the national policy placed greater emphasis on prevention rather than treatment, because there is no cure for AIDS.

To date, the revised HIV/AIDS policy of 1998 has been broadened to include prevention, palliative care and anti-retroviral therapy. As of 2000, the MoH initiated a mother-to-child transmission pro-

gramme in which AZT was pilot tested among pregnant women; this programme has since been fully established in 2001. Furthermore, the MoH has already developed guidelines for application of anti-retroviral therapy in Botswana, which began in the first quarter of 2002.

Although transferability of findings might be a problem, the study findings provide baseline data on which to generate new research questions and points to new directions for the future development of major public health policies.

Conclusions

The growing complexity of the health-care delivery system in Botswana creates broad administrative problems of decision making about resource allocation. The overlap among service components and various programmes within the health sector is a source of heightened inefficiency. The minimal participation and/or exclusion of nurses from the policy process was found to deprive the process of their knowledge and experience in the planning and evaluation of available resources and acquisition of resources crucial to survival and adequate functioning.

Another compounding factor in the involvement of nurses in the policy process is that nursing's contributions are mingled with the contributions of others, which makes it difficult to identify their contribution to the final product.

While participation in health-care policy on its own is not a solution to all pending nursing issues, it could serve as an intervention strategy. In express-

ing discontent over the HIV/AIDS policy process, one policy maker complained that nurses did not know their role in the epidemic and stated that, 'We are in a journey, going to a place we do not know.' Finally, a scientific nursing paradigm is needed to understand the basis of attitudes of various interest groups toward nurses' involvement in policy decisions. Information obtained from such studies could be used to design sustainable programmes and initiatives for lobbying community leaders and policy makers on the need to have nurses as key participants in health-care policies. In sub-Saharan Africa, where the epidemic is most concentrated, study findings could be used to design quantitative methods for appraising and assessing nurses' experiences in policy and resource-allocation decisions.

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