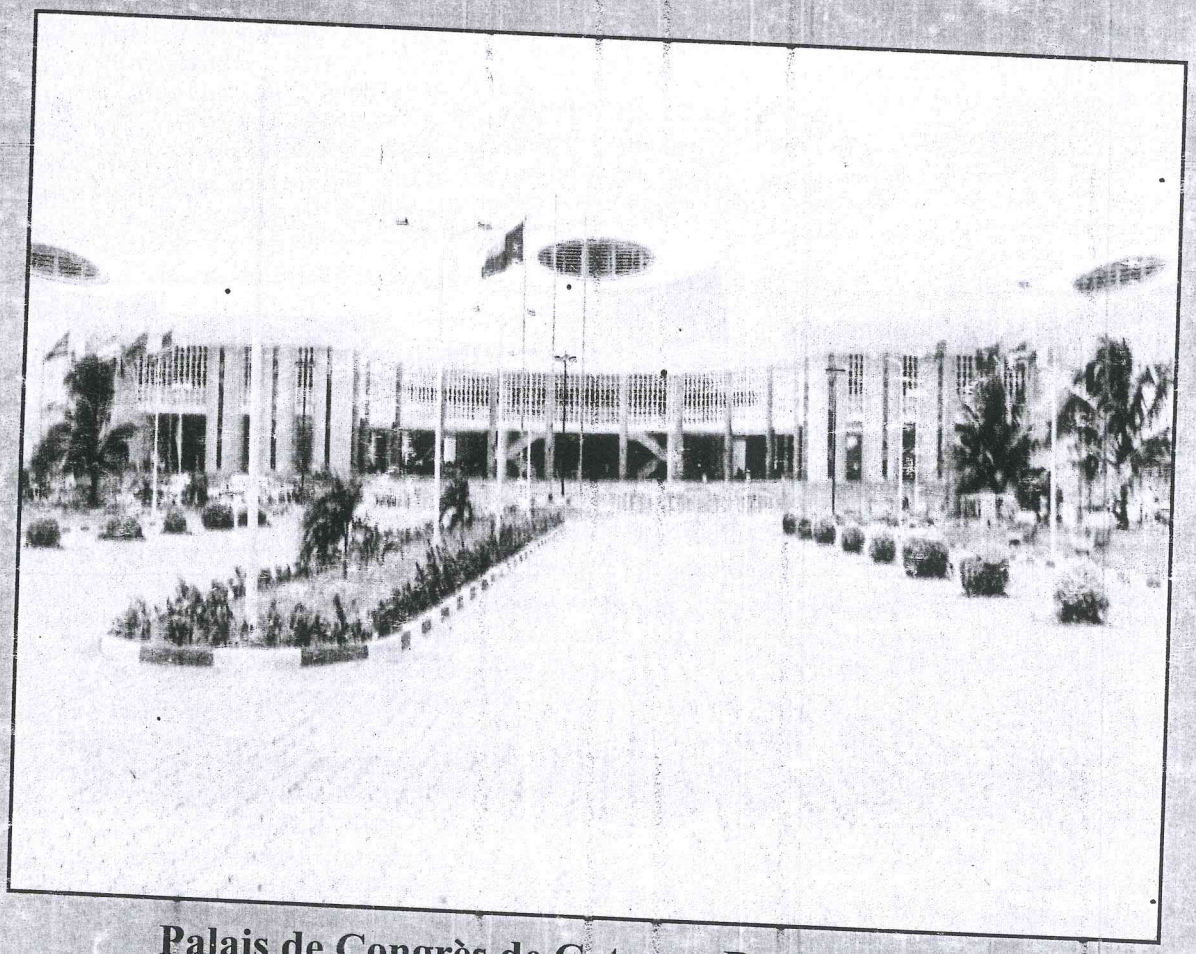
WEST AFRICAN JOURNAL OF NURSING

ISSN 1117-9689

Published by West African College of Nursing.

Vol. 20 No. 1 May 2009



Palais de Congrès de Cotonou Benin Republic

An Agency of West African Health Organisation.

₦300

Shortage of registered Nurses and its effect on Health care delivery in Sierra Leone: a case study of Freetown

Jibril N. Umar, M. Comm. H, B.Sc. P.G.D.E, Cert. in H/P.M, H.I.S., FWACN
Lecturer, Department of Nursing Science, College of Medical Sciences, University of Maiduguri, Nigeria.
E-mail: umaribnabu@yahoo.com
Tel: +234-8065482455
Nadette Strasser-King, B.Sc, (Nursing) SRN, SCM, ACNO,
Fourah Bay College Hospital, Fourah Bay College, MT. Aureol, Freetown, Sierra Leone

Abstract

This study was conducted based on the felt health needs of the deplorable health situation in the West African sub region with particular reference to Sierra Leone. A Quantitative study using the descriptive design was used to observe, describes and documents the shortage of Registered Nurses (RNs) in selected health institutions in Freetown. The main objective of the study is to provide explanations for the observed inadequacy of RNs in the health sector of Sierra Leone. And specifically identify factors associated with the movement of Registered Nurses from Sierra Leone to other countries, and to increase the turnover rate of Registered Nurses (RN) in the work force of the country. The research population consist of practicing RNs drawn from three Government Hospitals which are Connaught Hospital, Princess Christian Maternity Hospital and Children's Hospital, and three Private Hospitals which are United Methodist Church Hospital (Kissy), Choithram Memorial Hospital (Hill Station) and Marie Stopes Hospital (Aberdeen). The sample size for the study was 125 practicing RNs. 125 questionnaires were distributed; 118 were retrieved in which 93 Respondents (78.8%) were in Government service and 25 Respondents (21.2%) were from Private health institutions. This gives a total response rate of 94.4%. The findings of the study showed that about 40% of RNs are leaving the country for jobs overseas because of poor remuneration, poor working environment, delayed promotion and lack of incentives. The respondents attributed these as factors responsible for shortages as against the turnover rates of RNs 97.5% and this indicate that most of the respondents are dissatisfied with the working environment in Sierra Leone. The respondents however, suggest better remuneration (better salary and allowances) and good working environment and early recruitment of RNs who have graduated as measures to ameliorate the shortage of RNs problems.

Key-words: *Migration, Positive Work Environment, Registered Nurses (RNs), Shortage, Turnover Rate.*

Introduction and background of the study

Shortages of Registered Nurses (RNs) are problems that affect countries worldwide and Sierra Leone is no exception. In Africa especially in the Sub Saharan region, Nurse Shortages are major problems in the health workforce in countries such as Zambia, Sierra Leone, South Africa, and Ghana. The availability of Nurses in terms of ratio per population is very low in African countries. This may be attributable to a rather low production of Nurses from training institutions and the restrictions imposed on the production of enrolled or Nurse auxiliary groups. The recent upsurge in the recruitment of Nurses from under developed countries to work in more developed countries is an attempt to find solutions in controlling the Nurse Shortage problem abroad and this affecting the human health resource in most African countries[1].

An assessment by the Ministry of Health & Sanitation (MOHS)[2], Sierra Leone, on the migration of Nurses out of the country after training, shows that, 5-10% RNs migrate internationally; 50-60% is employed by the government service yearly, then after midwifery training about 30% leaves government service either for national or international job. According to this estimate at least 70% of RNs, either leave government service for a private health sector/Non Governmental Organisation or migrate internationally.

Statement of problem

Sierra Leone loses at least 40% or more of its Registered Nurses (RNs) every year, this result to pressure of work on the nursing staff that remains in the government service and this subsequently leads to poor quality health care. Because of the shortage of nursing personnel, some wards in the newly refurbished government teaching hospital (Connaught hospital) remain closed. Sierra Leone with population of 5.5million people[3], has 112 Registered Nurses[2], the estimate shows that the trained Nurses migrate internationally for greener pasture abroad, and the estimate above probably put the Nurse-Patient ratio at 1:50[4].

High infant and maternal mortality rates in developing countries due to lack of quality care are attributed to shortage of nursing staff. According to British Broadcasting Corporations) it is estimated that in Sierra Leone, the crude death rate for 2006 was 17/1000 which is considered high and the infant mortality rate is estimated at 170/1000 and maternal mortality estimated at 1800/1000[2], this could probable be linked with the shortage of Nurses.

Shortage of Nurses started in the late 1970s to 80s and worsened in the early 1990s due to the ten year rebel war in Sierra Leone which resulted in a serious socio-economic crisis in the country and it consequently affected the healthcare delivery to the entire population in the country. This study broadly aimed at providing explanations for the observed shortages of Registered Nurses in the health sector and to investigate the factors associated with the shortages as well as the attrition rate of Registered Nurses in Sierra Leone to other countries.

- To provide explanations for the observed shortage of RNs in the health sector of Sierra Leone.

Specific objectives of the study

- To assess the turnover rate of Registered Nurses in Sierra Leone.
- To examine the work environments for Nurses in Sierra Leone.

Research Questions

- What are the factors responsible for the shortage of RNs in Sierra Leone?
- What is the turnover rate of registered nurses in Sierra Leone?
- What is the respondent's opinion on ways shortage of RNs could be improved?

Review of literature

Recent studies have shown that there is a global growth of nursing staff shortages and more people have become aware of nurse staffing shortages; nursing staff shortages in the United Kingdom (UK), United States of America (USA) and elsewhere have been a repetitive phenomenon, usually due to increase demand for Nurses outstripping static or more slowly growing supply[6]. The demand for Nurses continues to grow, while projections for supply point to actual reductions in the availability of Nurses in some developed and developing countries [7].

By 1991, there was 1.7% decline in full time equivalent Registered Nurse openings and a record increase in the employment of Nurse Extenders. There is perception of widespread reductions in hospital Staff Nurse Workforce in the mid-1990s and an increase in Unlicensed Assistive Personnel (UAP) that has not been reflected yet in regional and national data[8].

Highlights of the International Council of Nurses report on Global Nursing workforce reported that Nurse Population ratio varies in different countries from less than 10 nurses per 100,000 population to more than 1000 nurses per 100,000, a variation of more than one hundred fold. The average Nurse Population ratio in high income countries is almost eight times more than in low income countries. Many countries, particularly in Africa, are struggling to provide a minimum level of nurse staffing. One recent estimate is that sub-Saharan African countries have a shortfall of more than 600,000 Nurses[9].

Factors contributing to nursing workforce shortage

Many factors contribute to the current shortage according to Peter Buerhaus[10], and these include -

- Steep population growth resulting in a growing need for health care services.
- A diminishing pipeline of new students in nursing,
- An aging nursing workforce.
- In addition, with improved technology and managed-care issues, only the most critically ill patient in hospital stays for intense treatment. Thus skilled and specialized Nurses are in great demand.

These issues are occurring just as the majority of Nurses are retiring and job opportunities and basic care are expanding. The hospitals and other health institutions need more Nurses to deliver specialized care. Sometimes what is portrayed as shortage of Nurses is actually a shortage of funding because vacant positions are frozen due to lack of financial resources, as such countries may experience both desperate shortages and unemployment of Nurses. In some African countries, Sierra Leone especially, Nurses are obliged to work as volunteers for no pay just to maintain their skills and be in a better position to find a job in the future[9].

Declining enrollments

This is another factor contributing to nurse shortages in developed countries. In 1994, overall enrollments in basic RN programmes decreased for the first time in 6years[11]. This decrease is continuing with 1996 enrollment in the

...-level of the bachelor's programmes falling 6.2 percent ... previous year. Thus, supply is decreasing in response ... number of factors. These include:-

Decrease in the population of people aged 18 to 32.
Shift in interest from a career in nursing, compounded by the number of career choices available to women (who comprise 97 percent of Nurses).
Compression of salary and promotion on the increase throughout the nursing career.

- Image problems, including an emphasis on hard technical work, low entry salaries and limited career financial potential, limited return for increase education, etc.
- Increase labour intensity of acute illness, coupled with attention given to understaffing.
- Widespread fear of contacting AIDS.
- Perceived lack of hospital jobs coupled with lack of awareness of community based employment.

JOB SATISFACTION

According to Leddy & Pepper[12], job satisfaction is also an issue causing shortages of Nurses. In a survey, the researchers found out that Nurses express dissatisfaction with basic working conditions, such as:

a. Scheduling,
b. Adequate numbers of staff,
c. dissatisfaction of nursing and support personnel,
d. Professional issues, including:
   i. Control over nursing practice
   ii. Adequate autonomy for client care
   iii. Respect for others (especially physicians and administrators)
   iv. Opportunities for growth and promotion.
e. Nurses' salaries are, on average, considered inadequate in comparison to other lucrative professions.

In developing countries such as in Africa, the main factors causing job dissatisfaction are inadequate remuneration and poor working conditions. These factors encompass inadequate pay or better or realistic remuneration, better management of health services, deficient benefits and deficiencies in the working environment such as lack of equipment. Inadequate training or continuing education training or qualifications are also mentioned as a significant problem. These findings are supported by a survey undertaken in five African countries (Zimbabwe, Ghana, Uganda, South Africa & Cameroun) where low motivation resulted in migration of the health worker[13].

Methodology

Study setting

Freetown is the capital city of Sierra Leone situated in the Western Area Province. It has a population of about 1.2 million people[3]. The population density is high along the coast and lower in the mountainous areas. Freetown was originally bought by the Colonial Masters for freed slaves. There are two seasons, the rainy season and dry season. Because of its high population density along the coast, majority of the study was conducted in hospitals situated in the coastal region (Freetown). The study covered three selected government hospitals, the Connaught Hospital, Princess Christian Maternity Hospital and Children's Hospital and three Private Hospitals, the United Methodist Church Hospital (Kissy), Choithram' Memorial Hospital (Hill Station) and Marie Stopes Hospital (Aberdeen) respectively.

Study design

A quantitative study using a descriptive design was used to observe, describe and document aspect of shortage of RNs and factors responsible for movement of Registered Nurses in the selected government and private hospitals to other countries .

The population and sample

The population consist of two hundred and two (202) RNs working in Government service nationwide. A total of one' hundred and twelve (112) RNs were sampled from the three government hospitals and thirty (30) were sampled from three private hospitals in Freetown with age range between 25 and 40.

Sampling process

The two-staged stratified random sampling technique was used in selecting the sample from hospitals and various units to ensure proportional representation. The government health facility constituted one stratum whilst the second stratum was the private health facility. In the case of the first stratum 100 RNs were targeted and 25 RNs were targeted in the private health facilities. Respondents were selected randomly from lists provided by the Matrons in the health facilities visited. Names on the list were put in a bag and the unwanted number of names was drawn from the bag. Those names left in the bag were the ones selected for the sample. The sample size for the study was 125

practicing RNs. 125 questionnaires were distributed, 118 were retrieved in which 93 Respondents (78.8%) were in Government service and 25 Respondents (21.2%) were from Private health institutions. This gives a total response rate of 94.4%.

A pilot study was conducted in one private and a government hospital using 15 respondents. These did not constitute part of the sample. After the pilot study the instrument used for major data collection exercise was improved and validated.

Research Instrument

The main instrument for primary data collection was a structured questionnaire comprises five sections: Section A, personal data, Section B, information about clinical practice, Section C, information concerning conditions of service, Section D, information concerning in-service training and Section E, turn over rate of RNs in Sierra Leone. The structured questionnaire was developed to answer the research questions. In addition, personal interviews of practicing RNs in government service were also conducted. Interviews focused on suggestions on how to minimize the retention problem and improve turn out rate of RNs. Notes were transcribed immediately after the interviews. Secondary data collection is from records at the Ministry of Health and Sanitation and WHO statistical information service. Ethical issues were considered during the research. This took the form of obtaining consent from all categories of people involved in the study; these are the health institutions and the respondents. Consent was obtained for the interview and participation in the administration of the main instrument.

Data Collection

Data Collection was carried out for four (4) weeks and a total of 125 questionnaires were distributed (government 100, private 25). Although all questionnaires were retrieved from Private health facilities only 93 were retrieved from government resulting in a non-response rate of 5.6%. The questionnaire was administered by the researcher and researcher assistant. Some questions were pre-coded on the instrument prior to data collection. But there were some open ended questions which were later coded after the data collection exercise e.g. the years of working experience.

Data Analysis

Data was computerized and part of the analysis was done using Excel Spreadsheet. The interview checklist was sorted out manually using a table calculator. The data analysis is then presented into frequencies; cross tabulation e.g. age was cross tabulated to type of employer and graphs to determine the relationship between the two variables that were sampled.

Discussion of findings

Research question 1 what are the factors that are responsible for shortage of RNs in Sierra Leone?

Lack of motivation and poor working environment, such as poor salary, lack of equipments in both private and government hospitals in Sierra Leone were identified as most prominent reason put forward by the RNs that is affecting Nurses' performance in rendering quality care to clients. In their study, Zurn et al.[14] identified similar factors that come to play in nursing performance, these are, known

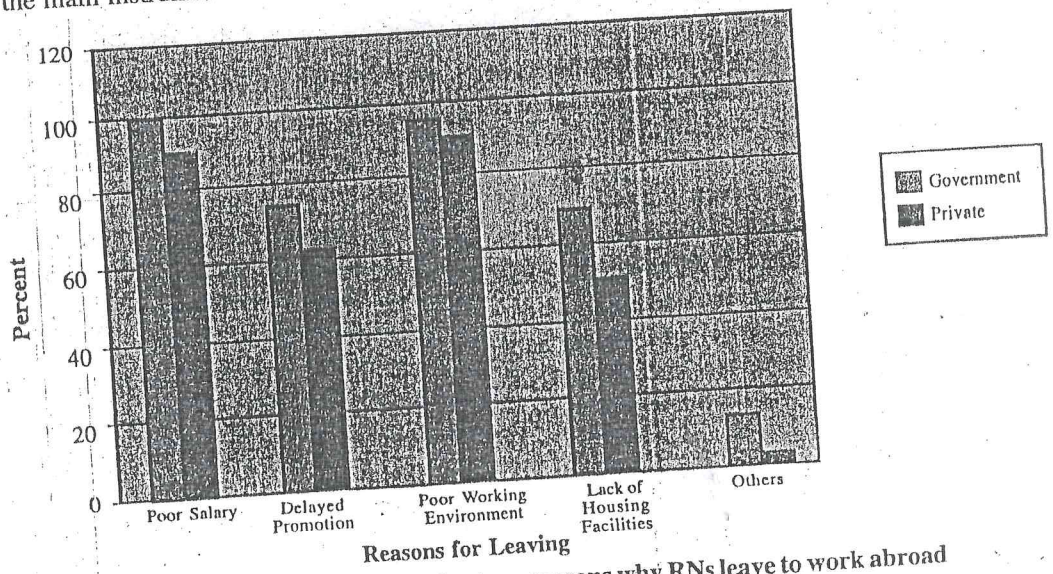


Figure 1: Distribution of respondents on reasons why RNs leave to work abroad

ability of staff to do their job, probably due to their knowledge, skills and experience to perform the job, these will depend on the availability of resources, the presence of policies and practices conducive to performance, physical and social environment. Absences of aforementioned factors were found in the study to be an impediment to RNs abilities to remain on their jobs.

Table 1: The turnover rate of Registered Nurses

Year	No. of RNs employed by Government from 1993-2006
1993	623
1998	NE
1999	NE
2000	NE
2001	NE
2002	NE
2003	266
2004	112
2005	184
2006	202
Total	**1387**

Research question 2: What is, the turnover rate of registered nurses in Sierra Leone?

In 1993 there were 623 RNs in Government service, but due to the ten years rebel war in the country, there was stagnation of training of RNs in the country (table 1 & fig. 2).

There were no training of RNs for the period 1993 to 2002; this was as a result of the civil war in the country that consequently reduces the total population of RNs from 623 in 1993 to 266 in 2006. A downward trend was also observed from 2003 to 2004 but there were slight increase in RN turnover in 2005 to 2006[3]. (table 1), this downward trend leads to a gap of 398 RNs created in the health care system of the country. About 600 RNs are needed in the health work force to fill the existing vacant positions, It is obvious that the turnover rate of RNs is negligible and the situation could be devastating if government refuses to address the acute shortage of RN s in the health sector.

Research question 3: what is the respondents' opinion on ways the shortage of RNs could be improved?

Relative to the back ground that other factors came in to play that lead to mass exodus of RNs, displaced individual

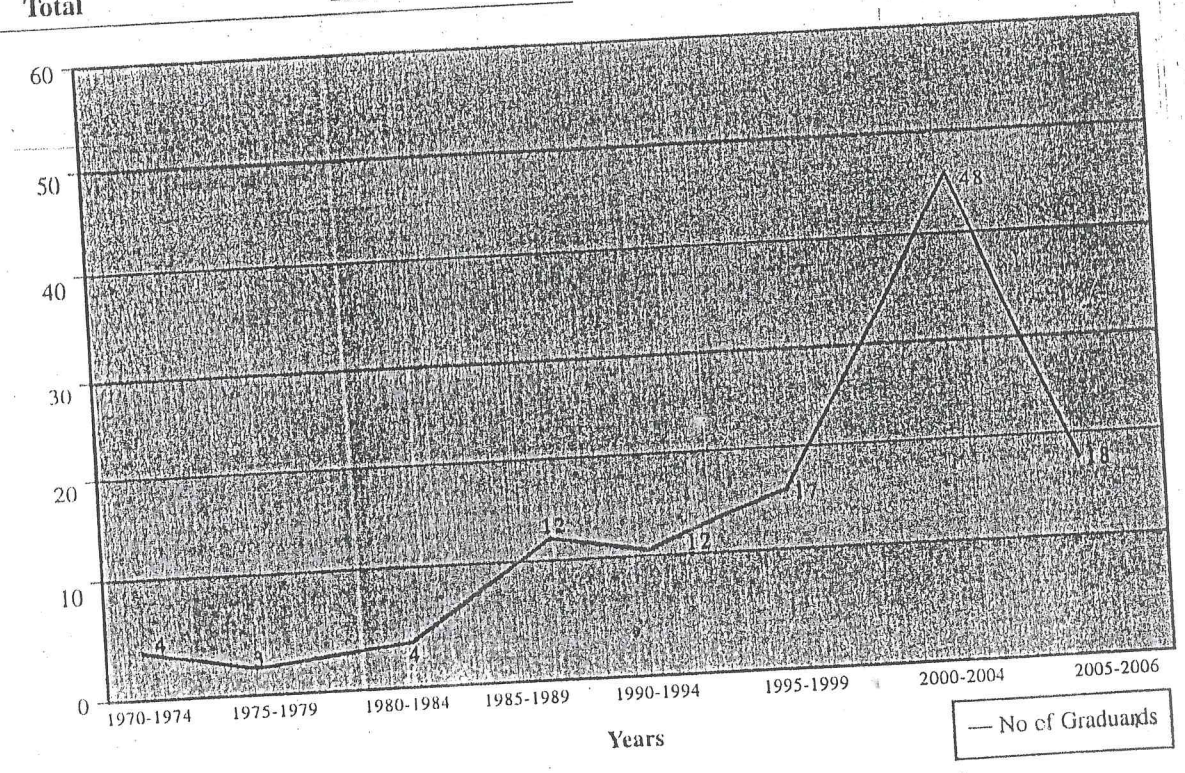


Figure 2: Distribution of respondents on the years of graduation

and families in Sierra Leone, there were other factors that contributed to the shortages of RNs as identified by the respondents in the interview. Majority (97.5%)of the respondents were not satisfied with the salary being offered and inadequate allowances, such as transportation, hazard and poor working environment are among other motivational factors responsible for the shortages and consequently place a high workloads on the few RNs resulting in job dissatisfaction. This was supported by the survey conducted in five African countries by Awases, et al,[13] which in their conclusion showed that factors such as inadequate pay or better remuneration, better management of health services, deficient benefits and poor working environment such as lack of equipment, inadequate training or continuing education training are significant problems of shortages of Nurses in developing countries.

Amongst the suggestions made by the respondents to minimize the shortages and increase training/recruitments, are better remuneration which includes increase salary and allowances, improved working environment and better management of staff and facilities are the top options. These suggestions were also supported by the members of Sierra Leone Nurses Association in their proposal to the national government as part of their negotiation for better remuneration, better working environment and better management of staff and health facilities[15].

Summary and conclusion

From the findings and result of the study it is observed that there is shortage of RNs in both Government and Private health facilities in the country. The study also reveals that majority of RNs leave because of inadequate remuneration (poor salary and allowances) and poor working environment. Majority of respondents especially those in Government service were disgruntled and were able to give suggestions on how to reduce the staff shortage and improve the turnover rate of nursing staff.

The situation now call for government and private administrators in the health sector to take a bold step in solving these problems so as to avoid a disaster in the health sector wherein there will be health facilities with no qualified staff to render the necessary care to clients. More studies need to be conducted to determine the relationship between the shortages of Registered Nurses and the quality of care given to clients in both government and private health facilities in the country.

Recommendations

1. Motivating Nurses

- Remuneration must be adequate with a substantial increase in salaries and allowances; to make the nursing profession more competitive with other profession.
- There should be promotional opportunities and the upgrade of hospitals by providing adequate medical

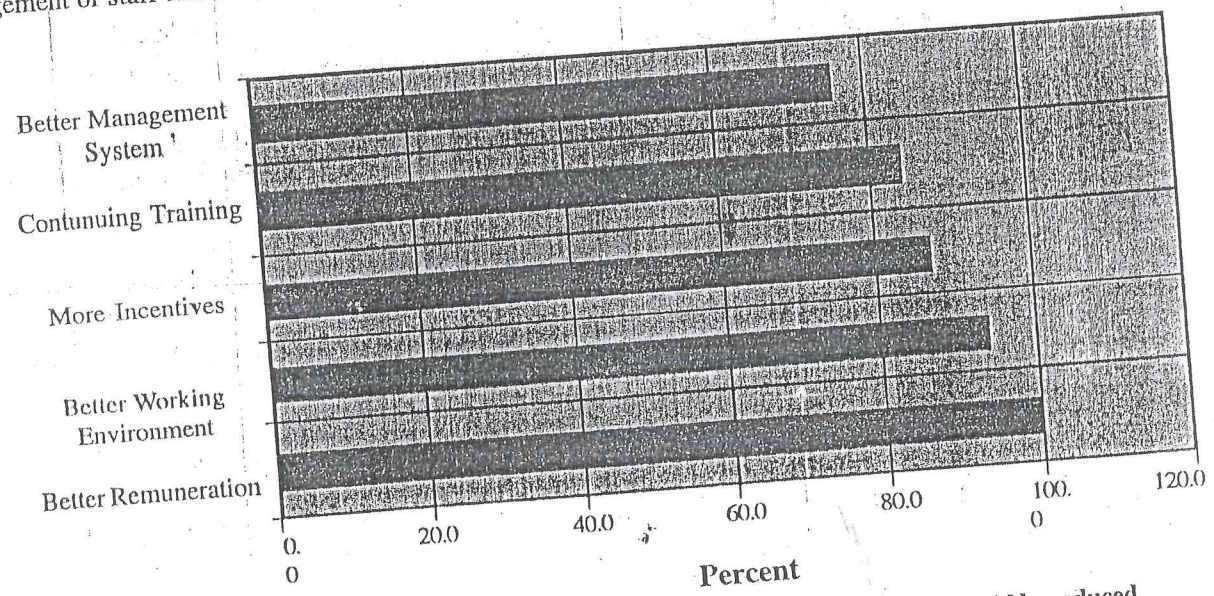


Figure 3: Government respondents interviewed on how nurses shortages could be reduced

equipment, supplies and logistics, good light facility and adequate water supply for efficiency in job satisfaction.

- Government should link up with Non-Governmental Organizations and Donors to help improve remuneration and working conditions of all health personnel.

2. **Improving the Nurse workforce supply**

- Absorption of more Nurses into the health work force and fast tracked appointment immediately after training.
- To increase the enrolment of male candidate into schools of nursing to complement female nurses in the profession.
- Each region of the country should have at least one School of nursing to encourage rural recruitment of Nurses from these regions.

3. **Continuing education for Nurses**

- To enhance skills and performance, not just multiple workshops but carefully planned skill nursing updates that mostly involve job training which do not disrupt delivery of services.
- Hospitals should be equipped with internet facilities which can help on-line learning so that Nurses can improve and update their knowledge and skills for improved productivity.

4. **Create positive work environment for Nurses**

- More incentives like loans, bonuses, extra duty allowances and better housing facilities must be provided for nurses. Additional incentives should be given to nurses working in the rural areas.
- Monetary incentives need to be implemented for Nurses working as part-time (Volunteers) and to be absorbed to full-time employment into the Civil Service.
- Nurses should be rotated regularly so as to improve their experience in both rural and urban setting.

5. **Policy making**

- Nurses Association and Board of Nursing and Midwifery must be involved in policy matters related to health issues, planning and decision making.
- There should be a regulatory body that should look into and formulate policies on the quality of health personnel and health care provided by private clinics and hospitals to curb the menace of quackery in health care delivery in the country.

References

1. Mujanja, O. K, Kibuko S, & Dovlo, D. The Nursing Workforce in sub-Saharan Africa, International Council of Nurses, Geneva, Switzerland, 17, 2005.
2. Ministry of Health & Sanitation, Sierra Leone Primary Health Care Handbook, Freetown, Sierra Leone. 2006
3. National Population Commission National Population Census Report. Republic of Sierra Leone. 2005.
4. Adeleye,S.A. Nursing Personnel Shortage and its effect on health care delivery, West African Journal of Nursing. 2006; 17, 174-176.
5. British Broadcasting Corporation, , Migration of Health Personnel in Africa, BBC World News, Bush house, London, 2006.
6. World Health Organization, Assessment of Health Human Resources - 6 countries case studies. WHO, Department of Organization of Health Services Delivery, Geneva, Switzerland, 2004.
7. Buchan, J. Seccombe, I. Smith, G. Nurses work: an analysis of the UK. nursing labour market, Alders hot, Ash gate press, 1998.
8. Aiken, L.H., Stochastic, T. & Anderson, F. x, Downsizing the Hospital Workforce, Health Affairs, 1998; 15, 88-92
9. International Council of Nurses, International Perspectives, International Nursing Review (INR),2006. 52, 4-11
10. Buerhaus, P. Facts about Nursing Shortage in USA, Honor Society of Nursing Sigma Theta Tau International, USA 2005; 2-3
11. Nursing Data Review, New York, National League for Nursing, 1996.
12. Leddy, S. & Mae Pepper, J., Conceptual Bases of Professional Nursing, Philadelphia, Lippincot Raven Publishers, 1998; 4, 258-260
13. Awases, M, Nyoni, J, Gbary, A and Chatora, R, Migration of Health Professionals in six countries: a synthesis report. World Health Organization, WHO Regional Office for Africa, Division of Health Systems and Services Development, Geneva, Switzerland, 2003.
14. Zurn P, Dolea C & Stilwell B, Nurse Retention and Recruitment: Developing a Motivated Workforce, WHO, Department of Human resources for Health, Geneva, Switzerland, 2005; 12, 1.
15. Sierra Leone Nurses Association Report submitted to the Ministry of Health and Sanitation, 2006, unpublished.

WHEN a child was asked "where is your home?" she replied, "wherever my mother is, is my home.

Author Unknown

A FRIEND will strengthen you with her prayers, bless you with her love and encourage you with her heart

Author Unknown