

## Stress and Harassment among Theatre Nurses at the University Teaching Hospital in Zambia

J. Munthali<sup>1</sup>, K. Bowa<sup>2</sup>, B.F.K. Odimba<sup>3</sup>

<sup>1</sup>Sister in charge Surgical Theatre UTH, <sup>2</sup>Senior Lecturer in Surgery University of Zambia, University Teaching Hospital, <sup>3</sup>Consultant Surgeon Professor of Surgery University of Lumbashi, Honorary Professor of Surgery University of Zambia, University Teaching Hospital.

*Correspondence to:* Dr. Kasonde Bowa, Email: [kbowa@yahoo.com](mailto:kbowa@yahoo.com)

**Background:** The study was undertaken to determine whether occupational stress is a problem among theatre nurses in Zambia.

**Methods:** A total of 75 theatre nurses were asked to answer a self administered questionnaire on stress.

**Results:** Nearly all (98%) of the nurses admitted to stress being a major problem in their job. The major causes of stress were identified as being low pay, heavy work load and the surgeons. Overall, 84% of them felt that the single main source of stress was low pay while 29% attributed their stress to the surgeons as being their major cause of work place stress. Personal harassment by the surgeons was reported by 75% of theatre nurses. The nurses identified verbal abuse by surgeons to be the main form of stress experienced. Sixty eight percent of nurses said that stress had resulted in some form of physical illness.

**Recommendation:** More emphasis in surgical training programs is required on etiquette and attitude towards theatre staff. The Medical Council and Surgical Society should take a more active role in educating surgeons and protecting nursing staff in order to reduce work place stress.

### Introduction

Nurses alongside teachers and managers have been recognized as professional groups most likely to report high levels of work stress<sup>1</sup>. Nursing has a wide range of causes of stress including the 24 hour service, intensive work outputs and high emotional labour<sup>2</sup>. The government in the UK has recognized this as a cause of low recruitments and low retention of nurses<sup>3</sup>. In Zambia there is a high attrition rate for nurses in general, with a nurses to patient ratio being 1: 1420 population. The establishment is for 16, 732, but the actual number of nurses is 8607. In specialized areas like theatre nursing the numbers are even lower. The health reforms of the 1990, to down size the civil service in Zambia, resulted in a mass exodus of nurses from the public health sector. The low pay of about 100 dollars a month, poor accommodation and heavy work load compounded matters further. This study was based on similar studies done in the UK and elsewhere<sup>4</sup>. The high attrition of nurses in general and theatre nurses in particular in Zambia, makes this a worthwhile study. It is hoped

that following this study, the welfare of theatre nurses would be improved by and addressing the identified sources of stress. The objectives of the study were the following;

1. To determine whether stress is a problem among theatre nurses in Zambia.
2. To find out the causes of stress among theatre nurses in Zambia.
3. To determine the effect of stress on theatre nurses in Zambia
4. To determine what can be done to reduce stress among theatre nurses in Zambia.

### Subjects and Methods

The study was done through a self administered questionnaire. The questionnaire was based on the Occupational Stress Indicators questionnaire designed by Cooper, Sloans and Williams<sup>5</sup>. The questionnaire includes a data profile, sources of stress, causes of stress, consequences of stress and perceived solutions. This was first piloted at the main

teaching hospital in Lusaka before being administered to a group of 75 theatre nurses attending a national conference of the Theatre Nurses Association of Zambia. This represented about 60% of the theatre nurses practicing in Zambia. Seventy five questionnaires were distributed, so there was no bias in sampling. A total of 58 completed and returned the questionnaires. The data corrected was entered into an SPSS data base and analyzed. The findings are presented.

### Results

Seventy five questionnaires were distributed to theatre nurses. Fifty eight questionnaires were retrieved, which represented 77% recovery rate. The male to female ratio was 1a to 6. The ages of respondents ranged from 27 years to 54 years with an average of 38 years. The theatre work experience ranged between 8 months and 29years with an average theatre experience of 8years. Work place stress was experienced by 98% of the respondents. Over half (53%) of these theatre nurses said that they experienced stress daily at work while 48% experienced stress at least 1 to 3 days in a week. The nurses reported that low pay and excessive work load were the major sources of their stress. The overwhelming majority (84%) of respondents put low salary as the top cause of stress.

Heavy work load was singled out by 55% as leading cause of work place stress. Poor work place relationships with other hospital staff workers were noted to be an important source of stress. The immediate work supervisor and the surgeon were noted to be causes of stress. The relationship with these members of staff was cited by 29% of the respondents as being one of the main causes of stress. The surgeon was more frequently identified as a cause of stress than was the immediate supervisor.

When the nurses were questioned specifically on interpersonal relationships at work, 76% indicated that they had been victims of harassment by surgeons. The nurses indicated that in 67% of cases this took the form of verbal abuse. Asked

whether work harassment was a bigger problem than low pay, 71% of them stated that low pay was the biggest cause of stress.

The nurses were asked about how they felt stress had affected their health, 63% of the nurses indicated that work place stress had resulted in personal ill health. They identified some of the physical illnesses as headache, backache, peptic ulcers and depression.

The nurses were asked about the safety of their current work environment; 68% of the nurses said they felt at risk of occupational injury. The large majority, 71%, felt that the greatest risk was from HIV infection. 84% had heard about PEP only 3% had ever used it, though 44% admitted having had needle stick injuries in the last year.

The nurses felt that work place stress could be reduced by increasing the pay, improving staffing levels and giving the theatre nurses a bigger role in the decision the making process.

### Discussion

Zambia has a population of 10 million people. It has a per capita income of about 370 US dollars. It has an average life expectancy of 39 years and an HIV prevalence of 16%. It has an establishment for nurses of 16,372 with a current staffing level of 8706. The ratio of nurses to the population is 1:1421. The loss of nursing staff is any where between 15-30% annually. This means retention of nursing staff is a matter of national importance. The main reference hospital in Zambia is the University Teaching Hospital, it serves a catchment area of 2 million people. The average daily patient load in theatre is 100 per day. The majority of theatre nurses are females and are relatively young. The causes of stress found were similar to those which have been identified in other studies<sup>5</sup>. In our study, the key causes of stress were heavy work load, low pay and conflict with the supervisors and surgeons. Other studies have had similar results with high workload ranked as the greatest cause of stress followed by conflict with physicians<sup>6</sup>. Lack

of reward or low pay still ranks as one of the six main causes of work place stress among nurses. The study found that the surgeons were a major source of interpersonal stress to the nurses. In a survey by the Royal College of Nurses it was found that 30% of nurses explained absenteeism as being due to harassment and intimidation based on sex, age, race or personal clashes<sup>7</sup>.

As high as 63% of nurses reported some symptoms which they directly related to the stress. Studies show that when a mismatch between the demands being placed on an individual and their capacity to meet those demands occurs, then the stress threshold for that individual has been reached<sup>8</sup>. This then leads to psychological and physiological adverse effects. Some of these manifest as somatic illness such as ulcers, hypertension, and diarrhea and so on.

Many theatre nurses felt insecure and not able to deal effectively with the surgeon who is perceived as a figure of authority. The national health services have tried to redress this issue by changing management policy to make it more inclusive<sup>3,5</sup>.

Studies have shown that nurses face more occupational stress than other employed work force. One study in the United Kingdom found 28% of nurses admitted to occupational stress in contrast to 18% in other occupations<sup>9</sup>. The high loss of staff in Zambia due to the combination of low pay and heavy workload has been recognized as requiring urgent attention<sup>10</sup>. This study found that as many as 44% of nurses had occupational injury in the last year. In a country where the HIV prevalence of patients admitted to medical wards is at 67%, this constitutes a major risk for infection. The combination of high occupational risk for HIV, low pay, heavy workload and harassment increases the level of stress on theatre staff in Zambia. It is one of the reasons for the high levels of staff loss seen in the profession<sup>10</sup>. It is necessary to address this problem by including decorum and etiquette in surgical training programs. Through the Surgical Society it is important for surgeons to see the whole

surgical team as important and constituting partnerships in patient care. The Medical and Nursing councils can also play a role of deterrence with punitive sanctions of defaulting surgeons.

## References

1. Smith A, Bruce C, Collins A, Mathews V & McNamara R.(2000) The scale of Occupational Stress: A further analysis of the input of demographic factors and type of job. HSE books,HMSO,Norwich. Available at <http://www.hse.gov.uk/research/researchpublications>.
2. French S.E,Lennon R,Walters V & Eyles J(2000) An empirical evaluation of expanded nursing scale stress scale. Journal of Advanced Nursing 15,577-584.
3. Department of health(2002) The NHS plan –a progress report DH,London.
4. Foxall M.J,Zimmermen L,Standley R & Bene B(1990).A comparison of frequency and sources of nursing job stress perceived by intensive care, hospice and medical-surgical nurses. Journal of Advanced Nursing 32,473-280.
5. Cooper C L, Sloans S J ad Williams S (1988). Occupational Stress Indicator management guide. NFER-Nelson.Windsor.
6. Williams s,Miche S & Pattani S(1998) Improving the health of the NHS workforce.The Nuffield Trust,London
7. Stordeur S,D'HooreW & Vandenberghe C (2001). Leadership organizational stress and emotional exhaustion among nursing staff. Journal of Advanced Nursing 35,535-542.
8. Ball J, Pike G,Cuff C, Mellor-Clark J & Connell J(2002) RCN working well survey.RCN online <http://www.rcn.org.uk/publications/pdf/working-well-survey-inside1/pdf>
9. Clancy J & Mcvicar A.(2002) Physiology and anatomy: A homeostatic approach,2<sup>nd</sup> ed. Chapter 22: Stress. Arnold London pp 611-633.
10. Jenkins R, Lewis G and Bebbington P et al (1997) The national psychiatric morbidity surveys of Great Britain- initial findings from household survey. Psychological medicine 27,775-789.
11. Nursing Work force, International Council of Nurses 2005 Geneva