Perspectives on critical care nursing: South Africa

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SUMMARY

- The first critical care units in South Africa were established in the early 1960s.
- Critical care nursing education is provided on two levels: as a post-registration diploma and as a post-graduate (Masters) degree.
- South African critical care nurses are independent, accountable practitioners who function within a professional ethical framework.
- Currently there is an acute shortage of critical care nurses, and only around 26% of the nurses working in critical care are suitably trained.
- In South Africa, nurses describe the experience of working in critical care as a 'passionate nightmare'.

INTRODUCTION

The health care system in South Africa comprises two parallel structures: a public sector and a well-developed private sector. A total of 448 critical care and high dependency units were recently identified in a national audit of critical care resources. Some 53% of these units are in the private sector. The majority of the units in South Africa are managed on the 'open intensive care unit' principle (44% in the public sector and 96% in the private sector). The majority of doctors treating patients in the units are specialists but very few are accredited intensivists (CCSSA, 2004).

There is no nationally prescribed nurse to patient ratio in South Africa and such ratios vary greatly across units. South Africa is currently facing an acute nursing crisis, especially within critical care nursing. Critical care nurses are either leaving the nursing profession or choosing to practice overseas, albeit often on a temporary basis.

HISTORY OF SOUTH AFRICAN NURSING

The origins of western-style nursing practice in South Africa can probably be traced back to the woman who helped at the birth of the first child of the wife of a Dutch East India company official, two months after the first permanent settlers landed in the Cape at Good Hope in 1652 (Harrison, 1979).

The single most important person in South Africa's colourful nursing history is without a doubt Sister Henrietta Stockdale of the Anglican Community of St Michael and All Angels (see Figure 1). Sister Henrietta, the South African 'Lady of the Lamp', was a friend of the British nurse Ethel Gordon Bedford Fenwick (née Manson) who worked hard internationally for state registration of nurses. Ethel Fenwick was a founding member of the British Nurses Association (later the Royal British Nurses Association) and pursued her idea of state registration with vigour in the then British colonies. Sister Henrietta joined the British Nurses Association in March 1888 as the fifteenth member. However, she only received her certificate of membership in 1890 when the register of members was officially opened (Searle, 1991).

Figure 1: Sister Henrietta Stockdale of the Anglican Community of St. Michael and All Angels (Source: Kimberley Africana Library).

Sister Henrietta went on to establish a branch of the British Nurses Association in the diamond fields of Kimberley. She started her campaign for state registration by writing numerous letters to politicians, senior civil servants, church leaders, wives of high officials, the Governor and the Prime Minister.

Sister Henrietta and a Dr John Mackenzie established a three-year nursing training course which was regarded at the time as the most advanced of all nursing education programmes in the British Commonwealth. This training course, coupled with Sister Henrietta's endless campaign efforts, resulted in the Medical and Pharmacy Act, 1891. This Act provided for the registration of doctors, dentists, apothecaries, midwifes and nurses within different parts of the same register. This was the first Act in the world to provide for state registration of nurses and midwives, as opposed to local control as found in many other countries. This meant that South African nurses were not only the first to achieve state registration, but were also the first nurses in the world to write a national qualifying examination, which began in 1892. Sister Louisa Jane Barrett of the Anglican Community of St Michael and All Angels thus became the first officially-registered nurse in the world on 28 July 1892 (Kotzé, 1991; Searle, 1988; 1991).

Mrs Ellen Parson and Dr. John Fitzgerald in King Williamstown on the Eastern Cape identified the need for the local Xhosa people to have nurses from their own cultural background. Their efforts resulted in Ms Cecilia Makiwane becoming the first black woman to qualify as a registered professional nurse in South Africa in 1908. Also, Ms Ella Ruth Gow-Kleinsmidt became the first so-called coloured registered professional nurse and midwife in South Africa in 1920 (Harrison, 1979).

Statutory control of nurses by nurses was realised in 1944 when the first nursing Act was ratified. The newly-established Nursing Council met for the first time in Pretoria on the same day (Kotzé, 1991).

DEVELOPMENT OF CRITICAL CARE NURSING

In the 1960s, South Africa saw the beginning of a variety of single function units such as the post-operative ventilation of cardiothoracic patients, ventilation of patients with respiratory problems in pulmonary units in Cape Town and a neonatal tetanus unit in King Edward VIII Hospital in Durban. The first multidisciplinary unit was opened in the Addington Hospital in Durban in October 1970. Dr Neil Goodwin from Sweden was appointed as the first full-time intensivist on the African continent to manage this unit (CCSSA, 2005).

The South African Association of Anaesthetists approached the South African Nursing Council (SANC) in 1962 to consider the establishment of a post-registration course in anaesthetic nursing. The motivation for such a course was the international effort to improve post-operative nursing and casualty services, in support of the concept that leading academic hospitals should create resuscitation units where medical and surgical patients with respiratory problems could be cared for (Fölscher, 1983).

In 1964, the SANC granted permission for the post-basic diploma course in intensive care nursing. The first such course was offered at the Johannesburg Hospital in 1966 (Ashton, 1983; Schreiber, 1990).

The development of dedicated critical care units continued to gather pace and a need arose to organise this young discipline. In February 1978, a group of doctors held a meeting at the Baragwanath Hospital in Soweto at which the constitution for the Critical Care Society of Southern Africa (CCSSA) was officially accepted. The Society was initially not recognised by the Medical Association of South Africa because it had opened its membership to nurses, it was multiracial and it represented Southern Africa and not just the Republic of South Africa (CCSSA, 2005). Today the Critical Care Society of Southern Africa is one of the biggest medical societies in the country and offers a multi-disciplinary home to doctors, nurses and other members of the critical care health team.

The Critical Care Society of Southern Africa was instrumental in the creation of the World Federation of Societies of Intensive and Critical Care Medicine, and Society member Dr Goodwin assisted with the drafting of the original constitution and was selected to the first World Council in Washington in 1981 (CCSSA, 2005). South Africa currently has representation on the councils of the World Federation of Societies of Intensive and Critical Care Medicine and World Federation of Critical Care Nurses.

CRITICAL CARE NURSING EDUCATION AND TRAINING

Student nurses are trained at either a nursing college or under the auspices of a university degree programme. Both of these avenues offer a four-year comprehensive programme leading to simultaneous registration in general nursing, psychiatry, community health and midwifery (SANC, 1985a; 1985b).

In addition, certain colleges and universities are also accredited as post-registration centres for various courses leading to an additional qualification for the purpose of specialist nursing practice (SANC, 1997), one of which is critical care nursing. As such, critical care nursing education is provided on two levels: as a post-registration diploma, which is the route followed by the majority of students, and as a post-graduate (Masters) degree. Both of these training options are offered in public and private sector institutions.

Entry requirements for potential critical care nurses include proof of current registration with the SANC as a general nurse, a senior certificate or basic degree qualification and a recommended minimum of six months' experience in critical care nursing.

According to 'The Teaching Guide for a Course in Clinical Nursing Studies' (SANC, 1993), all advanced nursing programmes comprise a compulsory component ('Nursing dynamics') and an elective component determined by the clinical field of study. The elective component for critical care nursing in turn consists of two components; namely 'Internal medicine and surgery capita selecta' and 'Medical and surgical nursing science (critical care nursing – general)' as the area of specialisation.

The content addressed within 'Nursing dynamics' includes ethos and professionalism, health service dynamics, communication and teaching, management and research. 'Internal medicine and surgery capita selecta' encompasses national, regional and local health profiles, policy-making structures, both at a macro and micro level, as well as national policy, assessment, diagnostic and treatment methods, social, cultural and trans-cultural considerations, in conjunction with aetiology of disease, and primary, secondary and tertiary prevention of disease. 'Medical and surgical nursing science', on the other hand, addresses professional, ethical and legal norms for practice, systematic approaches to assessment

and intervention within family groups and community contexts, referral systems, quality assurance and applied dynamics of nursing practice in the area of specialisation.

Each nursing college or university develops their own curriculum according to these broad guidelines for submission to and approval by the SANC. Nurse educators (tutors or lecturers) are registered with the Council, are qualified in the clinical speciality and are primarily responsible for the education and training components of the course. However, it is not unusual for specialist medical staff to participate in the teaching components of the course, both in theory and clinical practice.

The duration of critical care nursing courses varies between one and two years, depending on whether the course is taken as a post-basic diploma or post-graduate degree. Student critical care nurses complete their clinical practice in registered public or private accredited critical care units, under the supervision of specialist nurse practitioners during the duration of their course. Clinical rotations include general medical and surgical units, cardio-thoracic, trauma and neuro-surgical units, and coronary care. In selective facilities, renal dialysis, anaesthesia, burns and paediatric intensive care are offered in addition to the generic clinical areas. In addition, all post-graduate students are required to conduct research under supervision in their selected speciality.

On completion of the programme, candidates sit college or university-based examinations (theoretical and clinical) and register the additional qualification on the national register of the SANC and the National Qualifications Framework (SAQA, 2000). Currently, nursing colleges have an association agreement with universities and are thus deemed to fall within the higher education band of the Framework. However, legislation requires colleges to either establish themselves as private institutions or integrate into existing universities or education establishments (Republic of South Africa, 1997). All pre- and post-registration course unit standards and exit level outcomes are predefined by the Standards Generating Bodies (SGB) for nursing in terms of the South African Qualifications Act (Republic of South Africa, 1995). (Draft unit standards in critical care nursing can be viewed on the Critical Care Society of Southern Africa website at *http://www.criticalcare.org.za/)*. In terms of this Act, the SANC is appointed as the education and quality assurance body to the Qualification Authority. Its role is to represent the profession and control the quality of its different courses.

PROFESSIONAL AND ETHICAL FRAMEWORK

The Nursing Act empowers the SANC to regulate nursing practice professionally and ethically. The Council does this by registering practitioners, creating and imposing regulations, maintaining professional discipline and applying educational standards. Critical care nurses in South Africa are independent practitioners and are accountable for all actions they undertake. Two important regulations for critical care nursing relate to the scope of practice (SANC, 1991) and acts and omissions (SANC, 1990). These two regulations are not specialisation specific and are broadly set to encompass all nursing disciplines. They also provide a framework for the ever present changes in the discipline.

The scope of practice, however, has been interpreted for critical care nursing (Scribante et al., 1995). It is based on certain assumptions about the science, art, ethics and philosophy of nursing. Searle (1987; 1991) identified the following assumptions:

- Nursing is involved with an individual's health from before birth until death.
- Nurses are holistically involved with individuals in their culture and social milieu; that is their total health status. Nurses should have respect for their dignity and vulnerability in the health care system.
- Nursing interactions are carried out within legal and ethical parameters.
- Nursing entails a great many planned scientific actions based on biological, physical, chemical, psychological, social, educational, medical and technical knowledge and skills that vary from basic to highly complex.
- Nurses are accountable for their professional acts or omissions.
- Nurses will have the necessary knowledge and skills for actions needed in the scope of specific practice.
- Nurses will maintain caring standards, develop skills and knowledge, and will practise within the ethical norms and legal limitations of the profession.
- Nurses are practitioners in their own right and have a duty towards the community, their employer and other members of the health team.

PROFILE OF NURSES CURRENTLY WORKING IN CRITICAL CARE

The Critical Care Society of Southern Africa completed an in-depth audit in 2004 with the aim of describing the critical care and high care resources in the public and private sector hospitals of South Africa. The objective of part one of the overall study was to describe the profile of nurses working in critical and high care units. A 100% response rate was achieved. Some 84% of nurse unit managers are trained critical care nurses and have more than eight years' critical care nursing experience. Only 25.6% of the nurses working in critical care and high care are critical care trained nurses. Of those trained nurses, 65% work in the private sector. Some 21.4% are drawn from the ranks of semi-professional nurses. There are only 3.8% neonatal trained nurses. Registered nurses represent the largest part of the population and are, in practice, relatively inexperienced, with an average of less than five years' experience. Agency nursing staff are used in two provinces and by all the private hospital groups. A detailed profile of agency nursing staff could not be developed due to incomplete data and poor record keeping. It was, however, established that 65% of nurses working in units that use agency staff were full-time staff members (CCSSA, 2004).

WORKING IN A 'PASSIONATE NIGHTMARE'

Currently there is a shortage of critical care nurses in South Africa and nursing staff in general are very unhappy. A study was undertaken in 2002 (Scribante & Bhagwanjee, 2003) where critical care nurses attending the South African Critical Care Congress at Sun City, South Africa, were invited to complete naïve sketches. The question posed to these nurses was 'How do you find working in ICU?'. The results presented an interesting dichotomy that was later named 'The passionate nightmare of working in two worlds' (Scribante & Bhagwanjee, 2003; see Figure 2).

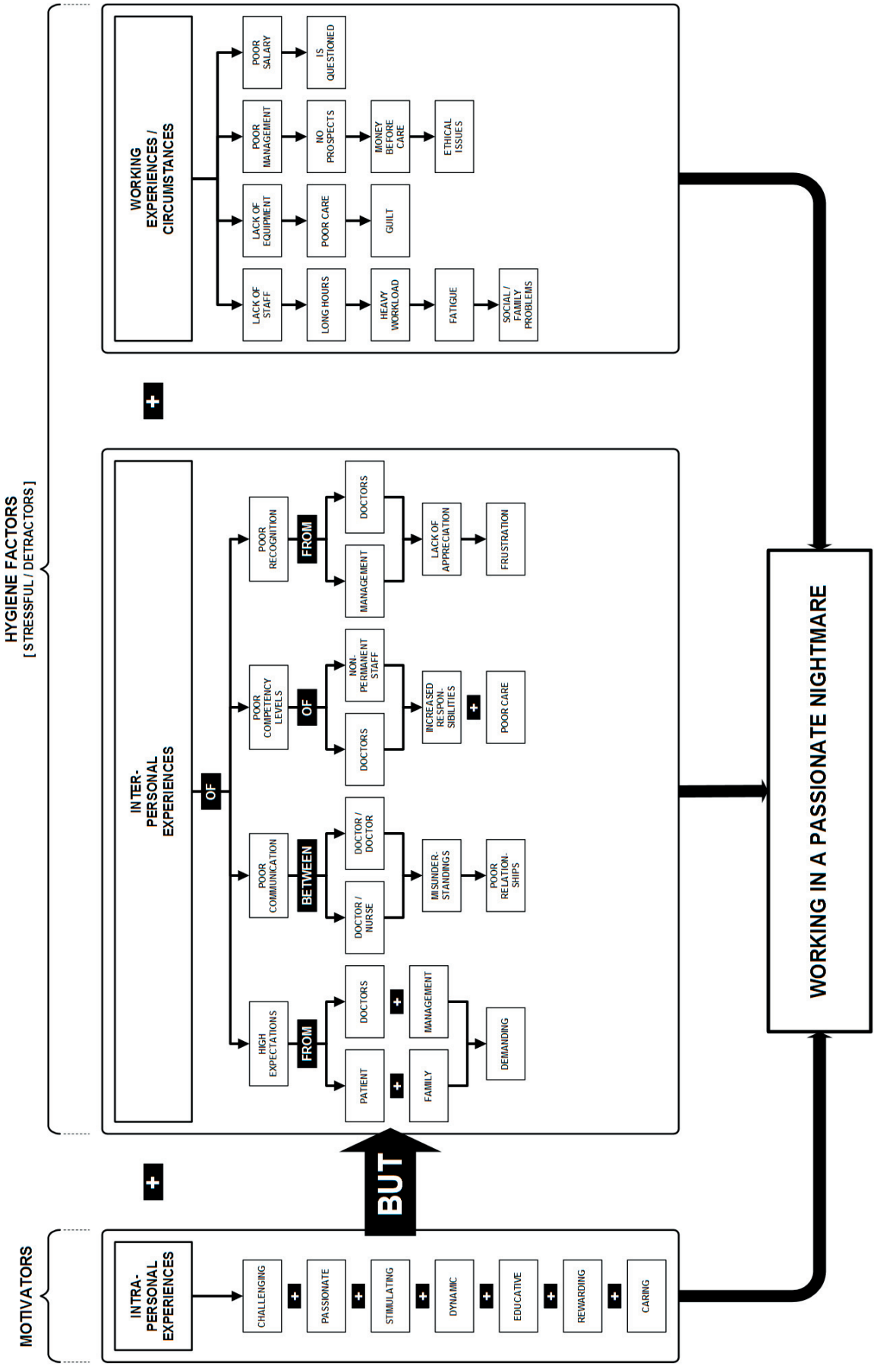

Figure 2: Working in a Passionate Nightmare (Scribante & Bhagwanjee, 2003).

Intra-personal experiences that were expressed were that the nurses found working in critical care to be challenging, stimulating, dynamic, educative, rewarding and caring.

The interpersonal experiences were:

- ❖ High expectations are posed on nurses which they found demanding.
- ❖ Poor communication exists, resulting in poor relationships.
- ❖ Poor competency among nurses is more common than expected, resulting in lower standards of patient care and increased responsibility being placed on competent nurses.
- ❖ Lack of recognition, resulting in personal frustration.

Other working experiences that were commented on include lack of staff, lack of equipment, poor senior management and poor remuneration.

The results of this study were in keeping with problems identified in critical care nursing internationally, but it is important to note that the problems identified are complex and the answers/solutions to these problems vary from implementing 'common sense answers' to in-depth strategic planning on a national level.

THE FUTURE OF CRITICAL CARE NURSING IN SOUTH AFRICA

South Africa is a country in the process of transition. The problems facing critical care nursing are vast and complex; some are unique and some are universal. In the early days on the mining fields, Sister Henrietta faced substandard conditions in a radically changing social system. However, not only did she accept the challenge to address the problems of the day, but she also brought South African nursing to the forefront internationally. In 2005, nursing, especially critical care nursing, is again facing an enormous challenge in South Africa. As nurses, we hope that we can take on this challenge and not only address our own problems, but through this process also make a positive contribution to critical care nursing internationally.

REFERENCES

Ashton D. (Ed) (1983) Official Opening – Johannesburg Hospital (commemorative book). Johannesburg: Dee Aye Promotions.

CCSSA. (2004) National Audit of Critical Care in South Africa: Report. Presented at 26th Annual Conference of the Critical Care Society of Southern Africa, Durban, August 2004.

CCSSA. (2005) History [online]. Available at: *http://www.criticalcare.org.za/history.htm* [accessed 10 March 2005].

Fölscher CW. (1983) 'n Evaluering van die opleiding in intensiewe algemene verpleegkunde in die RSA (Afrikaans). [An evaluation of intensive care nursing training in South Africa]. Johannesburg: Rand Afrikaans University, Dissertation.

Harrison PH. (1979) Salute to some nursing pioneers. *Curationis* 2 (2), 53-55.

Kotzé WJ. (1991) Milestones in the 'Pursuit of Excellence'. *Nursing RSA* 6 (9), 2.

Republic of South Africa. (1985) South African Qualifications Act, No. 58 of 1995. Pretoria: Government Printer.

Republic of South Africa. (1997) Higher Education Act, No. 101 of 1997. Pretoria: Government Printer.

SANC. (1985a) A Comprehensive Four Year Diploma or Degree Qualification in General, Psychiatric and Community Health Nursing and Midwifery. Pretoria: South African Nursing Council.

SANC. (1985b) Regulation R425 of 22 February 1985 as amended by Regulation R753 of April 1988. Pretoria: South African Nursing Council.

SANC. (1990) Regulation 387: Rules setting out the acts and omissions in respect of which the council may take disciplinary steps. Pretoria: South African Nursing Council.

SANC. (1991) Regulation 2598: Regulations relating to the scope of practice of persons who are registered or enrolled under the Nursing Act 1978. Pretoria: South African Nursing Council.

SANC. (1993) Teaching Guide for a Course in Clinical Nursing Science Leading to Registration of an Additional Qualification. Regulation R212 of February 1993. Pretoria: South African Nursing Council.

SANC. (1997) Regulations for a Course in Clinical Nursing Science Leading to Registration of an Additional Qualification. Regulation R212 of February 1993 as amended by Regulation 74 of January 1997. Pretoria: South African Nursing Council.

SAQA. (2000) The National Qualifications Framework: An overview. Pretoria: South African Qualifications Authority.

Schreiber L. (1990) Johannesburg Hospital 1890-1990. Johannesburg: Perskor.

Scribante J & Bhagwanjee S. (2003). Working in a passionate nightmare. Presented at "DARE TO CARE" Combined congress of The South African Thoracic Society, The Critical Care Society of Southern Africa and The Allergy Society of South Africa, Cape Town, August 2003.

Scribante J, Muller ME & Lipman J. (1995) Interpretation of the scope of practice of the South African critical care nurse. *South African Medical Journal* 85 (5), 437-441.

Searle C. (1987) Professional Practice: a South African nursing perspective. Durban: Butterworth.

Searle C. (1988) Truths that endure. *Nursing RSA* 3 (11-12), 24-25; 38-39.

Searle C. (1991) South Africa celebrates 100 years of state registration of nurses and midwifes. *Nursing RSA* 6 (3), 6-8.