

Veterinary nursing in South Africa (1977–2000)

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Abstract

The history of the university course in veterinary nursing in South Africa is reviewed from its inception in 1977 to 2000. The motivation for, and initial problems encountered in, its implementation are outlined. Selection criteria and course subjects, including clinical work, are supplied and the changes in these, following the introduction of a new curriculum in 1993/94, are highlighted. Reference is made to the legal status of the nursing profession.

Introduction

The concept of formal training in veterinary nursing originated in England and America. In Britain, Registered Animal Nursing Auxiliaries (RANAs) were trained under the auspices of the Royal College of Veterinary Surgeons (RCVS) from 1961 onwards. One course consisted of 2 years of in-service training either at veterinary practices or veterinary hospitals connected to veterinary schools. During this time, student nurses attended part-time courses at various approved educational institutions. There was also a full-time course lasting 3–6 months. In order to qualify as a RANA,² public examinations, which were organised and conducted by the RCVS, had to be passed^{9,10}.

The American courses were less structured than those in Britain. Courses varied, from state to state, from a 6-month certificate course to a 2-year course. The 1st 2-year course was established in Delhi, New York in 1961. Graduates were referred to as 'animal technicians', 'animal health technicians' or 'veterinary assistants'. Later a 4-year post-certificate degree course was established, whose graduates could use the title of 'animal technologist'³. There was no standardised curriculum^{4,9,11}. Only in 1975 did the American Veterinary Medical Association assume responsibility for the accreditation of the Animal Health Technologist (AHT) programmes^{5,10}.

The development of veterinary nursing in South Africa

Veterinary nursing in South Africa owes its existence to the idealism and farsightedness of a veterinarian in private practice in Pretoria. As early as 1946, C F B Hofmeyr employed qualified medical nursing sisters in his practice. The 1st was a Sr Uys. Amongst other duties, such as the pre-operative preparation of patients, sterilisation of instruments, drapes and gowns, she also assisted in the operating theatre.

When Prof Hofmeyr became Head of the Department of Surgery at the Onderstepoort Faculty of Veterinary Science, University of Pretoria, in January 1958, he motivated for the employment of medical nursing sisters in the clinical departments on a permanent basis to assist with certain clinical tasks. These appointments were eventually granted by the Agricultural Technical Services Department of the Government and in 1962 Sr S M Bekker was employed as theatre sister, soon to be followed by others in the clinics. Medically trained nursing sisters, however, had their shortcomings in the veterinary field. They had no training in the handling of animals, in veterinary radiography, anaesthetics, dental hygiene or laboratory techniques (CFB Hofmeyr, Faculty of Veterinary Science, University of Pretoria, pers. comm., 1988).

When the 1st RANAs from Britain and AHTs from the USA came to South Africa after 1961, enterprising private practitioners like Drs G Frost and J D Welton, R N Pryce and A G Rose employed some of them. However, they were in short supply and had some shortcomings in their training^{4,8,9,11}.

A definite need to train our own veterinary nurses according to South African standards was therefore recognised. In the late 1960s or early 1970s, at the request of Hofmeyr, the Council of the South African Veterinary Association (SAVA), appointed a 2-man committee (Prof C F B Hofmeyr and Dr J J (Johnny) van der Watt) to examine the feasibility of training veterinary nurses in South Africa. Dr B Pappin suggested to the committee that a Technikon-based theoretical course combined with 36 hours per week practical training in private practices should be introduced. It was envisaged that nurses who had already been trained would eventually become involved in the practical training to lessen the burden on practitioners. A questionnaire revealed that although practitioners were interested in principle, they were not in favour of providing the in-service training because of lack of facilities and time, combined with their fear of losing their

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nurses at the completion of the course. The local Technikon was also considered but lacked the necessary facilities to offer such a course.

The committee finally recommended that the course should become a fulltime, 2-year university diploma course. A draft syllabus was drawn up and submitted to the executive committee of the SAVA. The SAVA approved and requested the University of Pretoria to introduce such a course. This was eventually approved with the proviso that apart from the employment of 3 new lecturers – 1 specifically for the training of veterinary nurses and 1 each for teaching Anatomy and Physiology – there would be no further financial implications for the University.

As Dean of the Faculty, Hofmeyr then formally approached the South African Veterinary Board (now the SA Veterinary Council), of which he was Vice-chairman, to gazette regulations for the registration of veterinary nurses. This was done in 1973 under the Veterinary Act (Act No. 16 of 1933)¹ (C F B Hofmeyr, Faculty of Veterinary Science, University of Pretoria, pers. comm., 1988).

The course was to be named 'University Diploma in Veterinary Nursing' (DipCurAnim). For 10 years the nurses were awarded their diplomas under this name. In 1988, however, the Committee of University Principals decided that Latin names should be reserved for degree courses only. The name of the course was therefore changed to DipVetVerpl/DipVetNurs. However, both DipCurAnim and DipVetVerpl/DipVetNurs certificates are valid.

The syllabus of the course was approved in 1976 and the 1st students were admitted in 1977. A maximum of 30 students was to be selected annually. Only female students would be admitted. To become eligible for selection to the course, a candidate needed a matriculation exemption certificate with a minimum pass mark of 40 % in higher grade Mathematics as well as in higher grade Science or Biology, or 50 % in standard grade Mathematics and standard grade Science or Biology. In addition a minimum aggregate mark of 60 % was needed as well as proficiency in English and Afrikaans.

The 1st year of the curriculum comprised the pre-clinical subjects of Anatomy (including Histology and Embryology), Physiology, Zootechnology (now Veterinary Ethology), Laboratory Technique, Microbiology, Parasitology and Pharmacology as well as General Nursing. In the 2nd year the subjects were more clinically orientated and included Medical, Surgical and Gynaecological Nursing, Theatre Practice, Anaesthetics and Radiography. The lecturers who taught the veterinary students also lectured to the nursing students in English and Afrikaans at the Onderstepoort Faculty of Veterinary Science of the University of Pretoria.

Clinical work at the Faculty, work in private practices and

compulsory weekend and vacation duties were part of the syllabus. The practical and theoretical examinations were weighted equally and candidates could choose whether they wanted to be examined in English or Afrikaans. Nursing students were expected to wear a prescribed uniform and professionalism was emphasised. They worked in the same clinics as the veterinary students, which promoted the idea of teamwork. As the course was the only one offered in South Africa, the standard could be kept at a constant high level.

After qualifying, the veterinary nurses obtained a university diploma and had to register with the SA Veterinary Board¹. In addition, they had to wear the registered epaulettes and badges of the Veterinary Nurses Association of South Africa when this Association came into being in 1978 after the 1st group of veterinary nurses qualified. They were entitled to be addressed as 'Sister'.

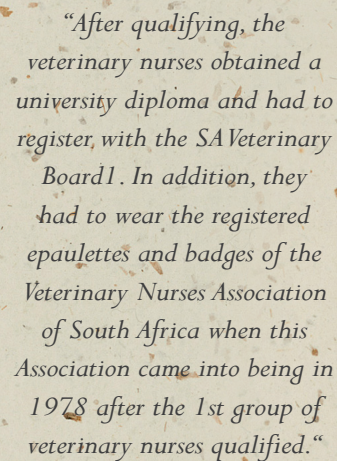
Initial teething problems

The afore-mentioned University proviso regarding funding created many difficulties that had to be overcome. No provision had been made for the new students in the Pretoria University hostels at Onderstepoort. In those years most students did not own cars and as the other hostels were situated 20 km and further away the students had to find private lodgings in the neighbourhood. In the mornings one saw these young girls arriving for classes on bicycles, by thumbing lifts or by walking. It took a lot of persuasion and planning before they were eventually admitted to the Onderstepoort hostels, albeit initially only during the semesters. During the university vacations the residences were closed. As the nursing students were expected to work in the Onderstepoort clinics during the vacations, they had to find temporary lodgings. It took many more years before they got full

residence in the hostels.

There were no permanent class rooms for these students either and occasionally, when all the available lecture halls were occupied by the veterinary students, their lectures had to be held under the trees. After some time, the small Physiology auditorium was allocated to the 1st-year nursing students and the 2nd-year students were permitted to use the Surgery seminar room whenever it was available.

Later, the Dean's Committee room became their classroom. However, this was so small that half the class had to sit on the floor. Their next classroom was the veterinary students' cafeteria. When, in 1987, the newly built Arnold Theiler Faculty Building became available, the nursing students had 2 small classrooms on the mezzanine floor that they could finally call their own. However, these proved to be very cramped. Fortunately large microscope laboratories in addition to lecture halls had been planned for the veterinary



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students and when it became apparent that they preferred to use these laboratories as lecture halls as well, the nursing students at long last inherited 2 proper, permanent lecture halls.

Lectures were given by lecturers from the various disciplines. The philosophy of the training of the veterinary nurses was that the veterinarian was the head of the team and should do most of the thinking and planning, whereas the veterinary nurse should be an extra pair (or 2!) of hands. She had to be trained to understand veterinary terminology and basic theory and was to be capable of helping with the various practical procedures (small and large animals). The curriculum content was adapted on an ongoing basis for each discipline as was deemed necessary.

Practical training of veterinary nurses

In the early years the practical training of the nursing students proved the greatest challenge. Practical training, especially when using live animals is a one-on-one situation and needs intensive supervision. This is time-consuming and tiring for the lecturers concerned. In the clinical departments many lecturers who were responsible for the veterinary students were also responsible for the nurses' training in that discipline.

The buildings that housed the clinics had been built in the middle 1950s to accommodate 30 veterinary students per class. Considering the fact that veterinary student numbers had subsequently been increased to 100 per class and that an additional 30 veterinary nursing students per class had to be accommodated, space was at a premium. The lecturers often became so frustrated that they banned the nursing students, especially the 1st years, from some demonstrations and even clinics.

The lecturer responsible for the nurses frequently received an SOS: 'Your little nurses' (as they were soon affectionately called) are again sitting on the lawn!' Some lecturers even thought that it was not necessary for 1st-year nursing students to work in the clinics at all, not realising that they could not be *au fait* with the clinic routine and practical procedures in their 2nd year if they had absolutely no prior contact with, or exposure to, the practical aspects of clinical work.

In 1979 the heads of the clinical departments stipulated that nursing students on duty in the Outpatients clinics were not allowed to take temperatures of patients, make blood smears, give injections or collect blood. These procedures were to be reserved for the veterinary students only. Fortunately, this philosophy changed in time when it became apparent that the veterinary nurses were valuable, very versatile and well-trained members of the veterinary team. In 1991 the situation was officially clarified when a list of the services pertaining to the profession of veterinary nurse was

gazetted⁶.

The nursing curriculum was rapidly and continually being improved and elaborated, both theoretically and practically, during those early years. The veterinary nursing students started to assist the veterinary students with ovariectomies in the student theatres in 1979. It caused quite an upheaval when the 1st group of 6 nurses, dressed in their white theatre dresses, were taken into the sanctity of the student theatres for the 1st time, but before long they were also allowed to do the pre-operative preparation of patients, administer anaesthetics and assist in the post-operative nursing of patients. In the Surgical Nursing course they were taught various bandaging techniques on large and small animals and a qualified physiotherapist gave them basic theoretical lectures and taught them practical procedures, both manually and with apparatus. In due course a dental clinic was started, the nurses being taught the use of both manual and ultrasonic tooth scaling. Later a bird clinic followed.

In the mid-1980s, a small intensive care clinic was started in the Medicine department. A qualified veterinary nurse was on duty there and 2nd-year nursing students assisted her during clinic periods. When the 1st canine parvovirus cases were diagnosed in the mid-1980s, the medicine department set up a small isolation ward in 1 of the old Medicine equine stables. This gave the veterinary nursing students an opportunity to start practising isolation (barrier) nursing. Amongst other procedures, they also learnt how to administer a blood bank in Medical Nursing.

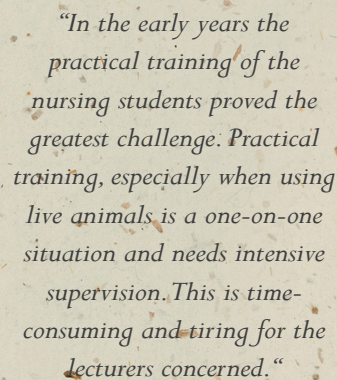
In Radiography, they were given theoretical and practical training of such high standard that they could eventually replace the medically trained radiographers who

had been employed by Radiology before the start of the veterinary nursing course.

The Laboratory Technique course enabled the nursing students to perform many tasks that save the veterinarian valuable time, e.g. making good blood smears, collecting and examining faeces samples, urine collection and examination, skin scrapings, etc. A favourite module in Gynaecological Nursing was neonatal care.

When the new Onderstepoort Veterinary Academic Hospital was opened in 1992 there were so many clinics that had to be manned that the veterinary nursing students proved to be indispensable. In fact, during the time when the nursing students were sitting for their examinations, locums had to be employed to cope with the work.

By 1993, the 1st-year students were receiving 680 hours of theoretical training during the 2 semesters and obtained 160 hours practical experience in the various clinics of the hospital. They were also on duty there during part of the December vacation. The 2nd-year students



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received 240 hours of theory and 600 hours practical clinical experience in the hospital by doing duty in Outpatients, Isolation Wards, Intensive Care, Medicine Small Animals, Reproduction, Production Animals, Mobile clinic, Equine clinic, Radiography, Anaesthetics, Theatres, Surgery Small Animals, Dentistry/Ophthalmology and the Bird Clinic. On 'ovariectomy day', 6 or 7 nursing students were taken from various clinics to assist the veterinary students in theatre. They were even expected to be on clinic duties in the hospital during the April holidays.

During the winter vacation they gained experience in private veterinary practices, zoos and the SPCA. Students in both years were taken on various excursions to widen their professional background, e.g. a short course in telephone technique at the post office, visits to a dog beauty parlour, kennels, a 'human' operating theatre, animal laboratory units, pharmaceutical companies and firms selling instruments and other equipment. These excursions were unfortunately discontinued in the mid 1990s.

In the early years 8 clinic sisters were employed in the Hospital. Most were medically trained. In 1997, 20 clinic sisters (now mainly veterinary nurses) were employed and by 2000 this number had risen to 24, the matron being a qualified veterinary nurse (P Bland-van den Berg, Faculty of Veterinary Science, University of Pretoria, pers. comm., 2005). The role of nursing sisters in the smooth running of a clinic cannot be overestimated and the students learn by their example and instruction.

Legislation applicable to veterinary nursing

When the course in veterinary nursing was initiated in 1977 the vested rights of unqualified 'veterinary nurses', who had been working as such before veterinary nursing training started in South Africa, had to be accommodated. A 'granny clause' enabled 8 such persons to register as veterinary nurses with the SA Veterinary Board in 1978 (under the Veterinary Act 1933 (Act No. 16 of 1933)), without being required to pass an examination¹.

When the Veterinary and Paraveterinary Professions Act 1982 (Act No. 19 of 1982) was gazetted, the vested rights of persons who had been working for longer than 5 years as 'veterinary nurses', again had to be protected. This time they had to sit for a 2-part examination (a theoretical and a practical examination) with the SA Veterinary Council. Lecturers responsible for the veterinary nursing course at the Faculty of Veterinary Science set the examination and also examined the candidates' practical abilities. It was a 1-time only examination. As a result, 6 candidates (2 of whom were black females) were allowed to register with the SA Veterinary Council. Thereafter, only veterinary nurses

who had already qualified in other countries and who wanted registration with the SA Veterinary Council could apply for an examination that enabled those who passed to work as veterinary nurses in South Africa. The Government Gazette of 17 May 1991 listed the services pertaining to the profession of veterinary nurse, namely the clinical and related procedures that they are permitted to perform in the course of their duties⁶, as well as guidelines for their ethical and professional conduct⁷.

Staff matters

When the 1st group of veterinary nursing students enrolled in 1977, Sr C Muller (BCur), a medical nursing sister, was appointed to take overall responsibility for the course but she resigned at the end of 1978. Dr I Wolleschak (BVSc) succeeded her in January 1979 and continued until retiring at the end of 1993. Dr K Tutt (BVSc) (1994–1996) and Dr E Scheepers (BVSc) (1997–1999) then took over. In 1988 Sr A E Botha was the 1st locally trained veterinary nurse to become a junior lecturer at the Faculty. Following the amalgamation of the 2 Faculties of Veterinary Science (Pretoria and Medunsa) in 1999, the Department of Paraveterinary Studies came into being, headed by Prof. C M E McCrindle. Unfortunately it was dissolved 2 years later when the number of departments in the Faculty of Veterinary Science had to be reduced to 5 on instruction from the University.

New veterinary nursing curriculum

Re-curriculation of all subjects taught by the University of Pretoria was made obligatory in the early 1990s, the main objectives being to eliminate post-graduate lecture material from undergraduate syllabuses and to avoid duplication. The veterinary nursing course was revised in 1993/94. The results of a questionnaire, which had previously been sent to practising veterinarians and veterinary nursing sisters, contributed significantly to

this process. The revised course was implemented in 1995.

Basically it remained the same as before, but with the following alterations: the training in Embryology and Histology (especially microscopy) was reduced to the absolute minimum, the anatomy of fish (with dissection) and birds (with demonstration dissection) was added, while Anatomy, Physiology and Histology were integrated. More lecture time was allotted to Pharmacology. Certain modules of both Medical Nursing and Theatre Practice were brought forward to the 2nd semester as promotion courses to get the students better prepared for practical work in the 3rd semester clinics. Elementary Ultrasonography was added to the Radiography course.

By shortening the lecture periods slightly and changing certain 1st year subjects from full year to 1st semester

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courses, the theoretical content of the course was reduced so that it could be completed by the end of the 3rd semester. The 4th and final semester of the course then became a full-time clinical semester. A clinic roster was drawn up to give each student a full week of practical exposure in each of the 14 clinics. It also included a rotation of 2 weeks in a private practice, 2 weeks in 1 of the elective clinics (Anaesthetics, Herd-work, Pathology or Reproduction) at the hospital and 2 weeks' holiday. Second-year students, who were on after-hour duties in equine clinics, production animal clinics (ambulatory services) and reproduction/theriogenological clinics, were required to wear 'bleepers' so as to be on emergency call together with the veterinary students. On 1 afternoon per week students were expected to practise certain procedures under supervision of lecturers in the Equine Clinic, Radiography, Pathology, Small Animal Medicine clinics and Production Animal clinics. From 1994 onwards 2nd-year nursing students, acting as student tutors, gave a 2 hour discussion class per week to 1st-year students having problems in General Nursing. This idea was subsequently extended to include the subjects Anatomy/Physiology, Microbiology and Pharmacology.

New selection procedure

In 1995 the number of students admitted to the course was increased to 36 per year (increased to 48 students in 2002) and male students were now also eligible for selection. Matriculation exemption with a minimum pass mark in Mathematics² and Science or Biology remained unaltered but a merit count (M-count) was introduced to replace the previous aggregate mark. On a sliding scale, each matriculation subject earned a certain number of merit points, allocated according to the symbol obtained in the matriculation examination and the grade (higher or standard) passed in any particular subject.

The total merit points obtained constituted the M-count. To become eligible for selection, a minimum of 10 M-points was required. (This was increased to 12 M-points in 2005) (H M Terblanche, University of Pretoria, pers. comm., 2005). Candidates were now placed in 1 of 4 categories, namely those with matriculation exemption, but no tertiary education; those with 1 or more years tertiary education; foreign students (a limited number); and students repeating the 1st year of the course. Candidates could be required to attend a selection interview. National demographics would now be a decisive factor in the selection process.

In 1999 English became the official and only medium of instruction in the Faculty of Veterinary Science, although candidates could choose to use Afrikaans in their examinations. In the same year an Extended Programme Option was initiated. The candidate could elect, before April,

to complete the 1st year of studies in 2 years instead of 1. Only the subjects Anatomy and Physiology were then to be taken during the 1st year of study. The remaining 1st year subjects had to be completed in the 2nd year. The normal '2nd' year then followed and could not be interrupted. It thus took at least 3 years to complete the 2-year course with the extended programme. (Because some more capable students, for whom it was not intended, abused it, the extended programme option was discontinued in 2005) (H M Terblanche, Faculty of Veterinary Science, University of Pretoria, pers. comm., 2005).

Conclusion

Up to 1994 all veterinary nurses who had qualified at the Faculty were white females. By 2000, 4 Black females, 2 Black males, 1 Indian female and 1 coloured female had also qualified as veterinary nurses (HM Terblanche, Faculty of Veterinary Science, University of Pretoria, pers. comm., 2005). Since its inception in 1977 the nursing course has produced 483 well-qualified veterinary nurses who are increasingly sought after locally as well as overseas. They have proven their worth as para-veterinary professionals in private veterinary practices, the Onderstepoort Veterinary Academic Hospital, pharmaceutical and other industries, animal welfare organisations, community veterinary clinics, wildlife

organisations, zoos, research institutions, etc. Some have diversified into fields such as pet grooming, boarding and breeding establishments, animal behaviour, animal rehabilitation and the training of dogs for the blind, to name but a few, where they have adapted their knowledge to suit their working environments. As members of any veterinary health-care team they work in, they have become indispensable.

Their training has been a remarkable success story despite the serious initial problems. This is due to the dedication and commitment of the numerous lecturers over

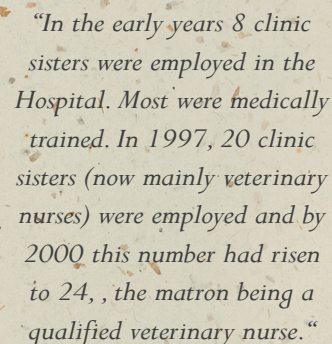
the years. The veterinary nursing profession in South Africa is a truly fitting living memorial in honour of the late C F B Hofmeyr who initiated and nurtured this profession during its initial difficult years.

Acknowledgements

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