

VETERINARY MEDICINE IN THE UNITED ARAB REPUBLIC

by
Kenneth S. Preston, D.V.M.*

One cannot help but be impressed when studying the pictorial representations carved and painted in the tombs of the ancient pharaohs, kings, and nobles, with the importance which animal health played in the development of civilization cradled in the Nile valley four to five thousand years ago.

Egypt's civilization was never an urban one. It was agricultural and this basic reality affected the development of its religion, beliefs, administration, arts, and language. Indeed, it affected every aspect of life. The animal story written in so many places, in hieroglyphics and in fascinating pictures tells of animal breeding, milking, slaughtering, dystocia problems, and methods of restraint. These animals not only furnished food and draft but were sacred in many of the beliefs of the early Egyptians. They were more than mere totems or symbols but were considered repositories for beneficent or dangerous forms of divine power and for that reason the Egyptians believed that the animal creatures deserved attention and care. One can safely say that the art of the practice of veterinary medicine was developed by the Egyptians during the early dynastic periods. Following this marvelous period of development the Empire collapsed and it was not until twenty-

eight hundred years later that formal attention was turned to veterinary medicine.

In the year of 1827, the first veterinary school was located at Rashid in lower Egypt. Mohammed Ali, who was the Turkish ruler at this time, invited two French veterinarians, Hammon and Breneau, to come to Rashid to establish a veterinary school and to treat the sick animals which were used in the rice mills. With the help of an Italian translator, and an Arabic translator from Al-Azhar University, these two veterinarians were able to decrease the mortality rate of the animals but were not successful in establishing the school. The progress of the first school was handicapped because the teaching conditions were poor; quarters were not suitable; drugs were not available, and there was little support from local authorities. One year later the school was transferred to Abu-Zaabal near Cairo.

It was a common practice during this period to attach the medical school and veterinary school. This practice was particularly true in Germany and Italy. For this reason, Dean Klot Bey of the Egyptian Medical School suggested such an arrangement would be an economical plan for the veterinary school. His plan, however, was not accepted and the veterinary

* Dr. Kenneth S. Preston is currently Chairman of Ambulatory Clinic, Department of Veterinary Clinical Sciences, College of Veterinary Medicine, at Iowa State University. He has spent one year in Egypt as a Fulbright Lecturer for the Department of Veterinary Surgery, University of Cairo.



New buildings now house the Department of Veterinary Medicine and Surgery—University of Cairo.

school remained independent. The new school was well equipped with lecture rooms for anatomy and pharmacy as well as residential quarters for students and staff. A hospital was designed to accommodate 110 animals. These new facilities attracted students and the enrollment was increased from 50 to 122. Additional European professors were appointed to the school. By 1836 the course of study was increased to five years and admission to the school was limited to either holders of the Secondary Education Certificate or graduates of the School of Languages. The courses studied were chemistry, surgery, clinical pathology, hygiene, medicine, pharmacology, and therapeutics.

In 1837, the relatively new school was moved to Shoubra, Cairo so it would be near the government stables. In spite of the fact that new stables were constructed, and the new school was located near a need for veterinary medicine, student enrollment decreased and the standard of teaching became low because Hammon and many of the other European professors returned to their countries.

The School of Agriculture was affiliated with the veterinary school in 1845 and veterinary medicine enjoyed several years of renewed interest and improved standards. However, during the reign of Abbass I, the school was closed for financial reasons. From 1875 to 1901 Egypt was without formal veterinary education. The spread of Rinderpest incited the Egyptian authorities to have another look at veterinary medicine and on March 23, 1901 a veterinary school attached to the Health Department of the Ministry of Interior was established with the idea of educating individuals capable of combating cattle plague. From that time until now, veterinary medicine has been an established entity fluctuating from the Ministry of Agriculture in 1914, to the Ministry of Education in 1921, and to the Faculty of Medicine in 1935. This association was discontinued in 1938 and in 1946 the School of Veterinary Medicine was given the status of a Faculty by the University Senate. A new curriculum was approved (this paved the way for the present standard of veterinary education) in 1954, two years after the revolution.

The rising era in Egyptian history is placing much emphasis on educating the people to support the spirit of nationalism in an intelligent manner. Seventy-two per cent of the children in Egypt are now in school as compared to thirty six per cent a few years ago. This dynamic force of education is being related to the social and economic needs of the U.A.R. with the plan of having trained people for its predictable needs. The need for veterinarians in this gigantic plan to raise the economy and standard of living in the U.A.R. is appreciated by the Ministry of Higher Education. Two schools are presently in operation and a third is planned. In addition to the country's veterinary needs, the U.A.R. has assumed a responsible conscience to furnish veterinarians for other Arab and African states.

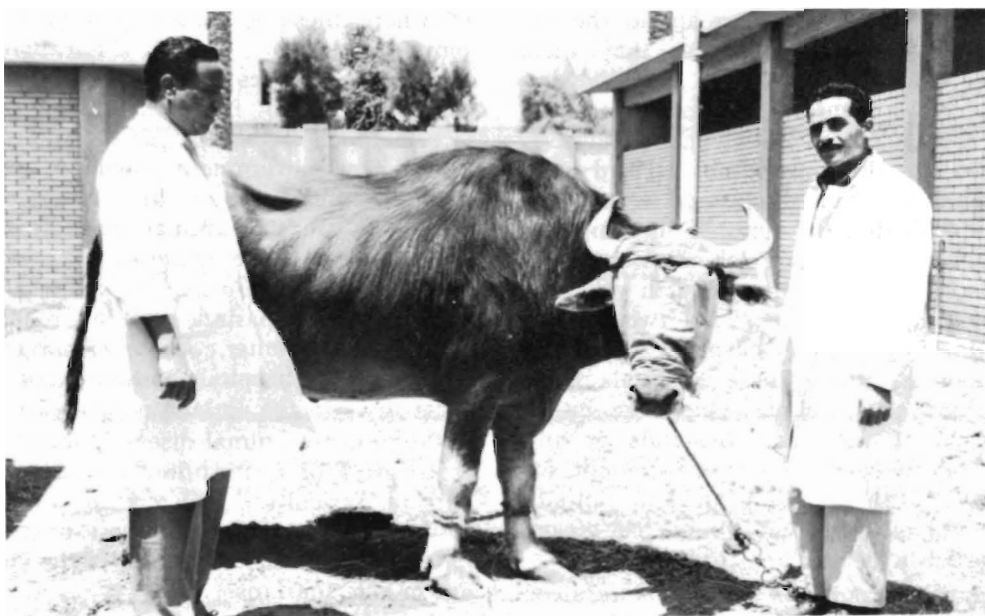
The Faculty of Veterinary Medicine, University of Cairo is the only school in Egypt now graduating students, and it is the largest veterinary school in the Middle-East and Africa. Student enrollment has made the phenomenal increase from 210 students in 1936 to 1652 students in 1963. In the last year's enrollment, 155 Egyptian girls were studying veterinary medicine. One hundred—fifteen students

come from several middle-eastern countries, namely, Sudan, Lebanon, Syria, Iraq, Jordan, Saudi-Arabia, and Nigeria.

This huge increase in enrollment has created problems in connection with the physical facilities and has placed an unusually heavy teaching load on the staff. Because of this, a new school for veterinary education has already been established at Assuit University. This school enrolled its second class of veterinary students in the fall of 1963. It is now contemplated to establish a third Veterinary Faculty in the second five year plan starting in 1965. This school will be located at Tanta or in the Delta Mansourah. With three schools in the U.A.R. the present shortage in facilities and staff at Cairo University should be diluted. The U.A.R. will be unique with these three schools because they will all occupy new buildings. Plans are underway to complete the complex of veterinary buildings at Cairo University which will occupy an area of 12 acres. At present the basic science people still teach in old buildings, but a new administration building, morbid anatomy building, and clinic for the departments of medicine, surgery, and obstetrics were completed in 1960.



Typical cases being presented to the outpatient clinic—University of Cairo.



Because of the high value of the water buffalo (Gamoosa), they are common animals in the veterinary clinic—University of Cairo.

The present system of teaching is European oriented. Of the 117 faculty members and demonstrators, 37 have received their advanced degrees in 17 European institutions. Three have received degrees in the United States. The rest of the teaching staff have obtained their degrees from Cairo University. As a result of this diversification in educational background, these highly trained men reflect in their lectures and laboratories the training which they received away from their parent institution. This in turn provides for the student an opportunity to receive his education from a source of knowledge that has been gained from many places. The budget for 1963–64 allows for 12 chairs, 21 assistant professors, 29 lecturers, 55 demonstrators, and 5 house veterinarians.

The course of study for a Bachelor's Degree in Veterinary Medicine and Surgery is five and one half years (11 semesters), which includes one academic preparatory year. The preparatory veteri-

nary student is enrolled in the Faculty of Science. The following courses are required for this first year—physics, chemistry (organic and inorganic), botany, zoology, european language, humanities, and Arab community. The last two courses are taught in the Faculty of Arts. The preparatory student who fails in his examinations shall be given an opportunity for re-examination in the subjects he failed. If he succeeds, he will be transferred to the first year class, and in case he fails he shall stay in the preparatory year to be re-examined in the subjects of failure, together with the new students registered in that class.

The semesters end in January and June respectively at which time final examinations are given in the courses finished at the end of each semester. The examinations are of three types: oral, written, and practical, and the student must answer in the language the course was taught. Students who fail in not more than two subjects may be transferred to the next class,

but they are required to attend the examinations of the subjects they have failed with the students of the following year. No student will be graduated who has not passed in all of the 30 courses offered in the curriculum. Third year students are required to attend two months training during the summer in slaughterhouses and veterinary laboratories of the Ministry of Agriculture. Fourth year students are required to spend two months training in veterinary hospitals during the summer months. These hospitals must be approved hospitals which are either government veterinary hospitals or animal health centers. Commencement for the graduating senior is held in January after the student has completed eleven semesters of work.

Qualified graduates who have received their Bachelor's Degree (B.V.M.&S.), can elect to advance their professional training by procuring a diploma or working toward the Doctor's Degree. Four diplomas in areas of specialization are available. They are (1) Diploma of Tropical Medicine and Animal Hygiene, (2) Diploma of Veterinary Surgery, (3) Diploma of Food Control, and (4) Diploma for Artificial Insemination. Any graduate can register in these areas of specialization which will require a minimum of one year.

A student desiring to obtain the Doctor's Degree must have graduated with at least the grade of 'good' and earned undergraduate grades of 'very good' in the subject of special study to be accepted as a candidate. At the end of the first academic year of post-graduate studies the student is examined in his main subject and two other subsidiary related subjects before he is allowed to start his research. A successful candidate will take at least two more years to complete his research and prepare his thesis which must be defended and accepted. The requirements for the U.A.R. Doctor's Degree is much the same as the American Ph.D.

When one considers that the U.A.R. will soon be graduating between 150 to 200 veterinarians annually, the question

of where these graduates will find employment seems logical. Fortunately, many opportunities for these professional people are waiting for them. Private practice, as such, is scarce. It has been replaced by government owned animal health centers. These are strategically located in areas of animal concentration. Over 250 of these centers are now in operation and 100 more are planned. At least two veterinarians will be required to staff each center, one veterinarian to care for the hospital patients and the other to make the ambulatory calls.

Programs of animal disease control and registration of farm animals by the Ministry of Agriculture will require hundreds of veterinarians. Many of these programs have not been started because of the shortage of veterinarians.

Food control, which is now receiving more and more attention, will require specialized trained veterinarians. The processing of foods of animal origin is developing along modern methods which require standards in quality and sanitation. A new, modern laboratory for food analysis has been built in Cairo within the past two years. The work is being done by veterinarians who have been especially trained in food technology.

Veterinary education needs many qualified men and women to fill vacancies in teaching positions. In addition to furnishing staff for veterinary schools, veterinarians are needed to teach animal health to students in the secondary agriculture schools and Faculties of Agriculture.

Veterinary research in animal diseases and in the production of biological and pharmaceutical products will require many more qualified veterinarians.

One can briefly summarize the present situation of veterinary medicine in the U.A.R. As a result of high standards in veterinary education, the profession is advancing rapidly. It anticipates meeting the challenges which are coming with the efforts to raise the standard of living by providing better returns and more food from the animal resources.