



ANKARA UNIVERSITY
FACULTY OF VETERINARY MEDICINE



RE-VISITATION SELF-EVALUATION REPORT

EAEVE

ANKARA, MARCH 2018



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INTRODUCTION

FVMAU was visited on the 2-6 November 2015 by the ESEVT in accordance with the “Budapest” SOP - May 2012, Stage 1. ESEVT Visitation Team identified major and minor deficiencies which was written in their report and according to these deficiencies and their observations, the Committee of ECOVE concluded on 11 May 2016 in Uppsala, that lack of the function of the hospital facilities and the isolation units were considered to be a Major Deficiencies, leading to a Stage 1 “**Non-approval**” status. In order to analyze the best way to correct the related deficiencies, Faculty Accreditation Committee along with other committees (Strategic Plan Development and Tracking Commission, Teaching and Education Coordination Committee, Mobile Clinics Commission, Animal Welfare Commission, Animal Hospital Board of Directors, Emergency Clinics Commission) put great effort.

Since 2015, FVMAU has been fully committed to the correction of major and minor deficiencies, pointed out by ESEVT Visitation Team.

In this Revisitation Report, efforts and factual information related to these deficiencies and ESEVT indicators are presented.

1. CORRECTION OF THE MAJOR DEFICIENCIES

1.1. MAJOR DEFICIENCY 1: Inadequate hospital facilities for small and large animals

During the visit of the EAEVE team, the FVMAU Animal Hospital was under renovation and reconstruction. The clinics were operating from temporary premises. The Team regarded the clinical facilities as inadequate and a potential major deficiency. The Faculty was suggested to ensure the new Hospital fully functional as quickly as possible.

1.1.1. Factual information

The buildings in the FVMAU campus were considered as “protected area” by the Ministry of Culture and Tourism, Ankara Cultural Assets and Museums General Directorate. Therefore, in order to initiate the renovation project, necessary permissions were primarily obtained for further restoration and renewal processes. The renovation of the FVMAU Animal Hospital, some parts of which were under construction during the visit of the EAEVE team, was completed and the Hospital started in full service in February 2016 (Annex I). This renovation was held in two stages:

The first stage, covering Small Animal Surgery Clinics, Operating Halls, Diagnostic Imaging Unit, Clinics and Labs of Animal Reproduction & AI, Large Animal Clinics, Isolation Unit, Wildlife Rehabilitation Unit and Medical Gases Unit was completed in February 2016.

The second stage, which consisted of Small Animal Internal Medicine Clinics, Emergency Clinic, Hospitalization and Intensive Care Units, Veterinary Pharmacy Unit, Central Diagnostic Laboratory (CDL), Main Medical Depot, Registration Desk and Public Relations Unit was completed and started their operations in September 2017.

During the construction process, three major changes made in the originally planned project were indicated below:

- The Department and Clinics of Obstetrics and Gynaecology, which was initially planned to be located in the main Hospital building, was later decided to remain in its former building.

- The Emergency Clinic was moved to a larger area than originally planned in the project. The Clinic now has 4 examination rooms, 1 operating room, 1 x-ray room, 4 hospitalization rooms rather than 1 examination, 1 operating room and 2 hospitalization rooms as in the initial project. It serves 7/24 hours for small, large and wild animals health.
- The Clinical Skills Laboratory (CSL), which was designed for teaching and assessing students at all levels, providing an ideal setting to practice clinical skills before using them in real clinical settings and previously expected to be implemented inside the Hospital building, was moved to another individual building inside the campus. The pre-planned hall on the project for CSL was a monospace room, which was later thought to be an insufficient area to practice. The building in which the laboratory is now located has a larger area and more rooms, to let the team design individual laboratory stations inside. For the time being, the CSL has one Surgical Operation Unit (100 m²), one Radiodiagnostic Unit (20 m²), four different simulation stations including Cardiopulmonary, CDL.

CDL was moved to the main Hospital building, having direct access to the registration area by a pneumatic transport system, which allows fast and safe delivery of the samples through the units. The lab is serving the Animal Hospital of FVMAU, governmental bodies, private clinics and individual clients. Within this laboratory; diagnostic tests, including toxicology, microbiology, parasitology, biochemistry, physiology and pathology are provided. CDL is certified by the Ministry of Food, Agriculture and Livestock.

Examination rooms and operating halls of the Hospital have access to centrally distributed medical gases (oxygen, 4 and 7 bar pressured air, nitrous oxide), vacuum system and anaesthetic gas scavenging systems. All units are continuously air conditioned from 10 individual ventilation plants; especially the isolation units having their own scavenging systems.

The Veterinary Pharmacy Unit was reorganized inside the Hospital, located near the registration desk, in order to serve for clients of the Hospital where both prescription and over-the-counter veterinary medicinal products are available. Pharmacists work closely with the Hospital staff to ensure a comprehensive treatment plan that will get the patients

healthy, as quickly as possible. FVMAU is the only Faculty in Turkey to employ a pharmacist in a Veterinary Hospital.

The capacity of Wild Life Unit was expanded with extra two rooms making a total of four which is not restricted to birds of prey as indicated in the previous SER Report but also fox, deer etc.

The number of laboratories of the Artificial Insemination Department were increased along with the examination units (Ultrasonography, Cardiology, Gastroenterology Rooms etc.) of the Internal Medicine. Paddock and traway system will be implemented in the external open court of the Large Animal Unit, which was recently approved by the Restored Office for Construction.

The reorganized Hospital has also been equipped by a hospital management software. A new barcoding system was integrated to the software for recording and tracking of medical stock and samples from laboratory modules. An authorized contact person responsible of the updating of data for each unit has been assigned. Training and meetings were organized for the proper using of software by the staff. All vets and internship students use this database during their duties at the Hospital.

A new legislation has been prepared by the Board of FVMAU for management of the newly designed Animal Hospital. According to the legislation, new positions, which were not existed before have been defined for the Hospital; including a Chief Physician, 2 Vice Chief Physicians, Board of Directors, a Hospital Administrator, two technical staff (one for general maintenance and one for medical gases and air conditioning/recycling systems), two secretaries, one supervisor for information and public relations and all these positions were assigned.

A third stage of renovation has been decided by the Cooperation of the Rectorate of Ankara University and the Board of FVMAU; and with the new budget determined, the environmental design project of the Hospital was put into effect. Within the scope of this project, the work of renovating the courtyard of the Large Animal Clinics has started and planned to be completed by mid-January 2018. The rest of the project, involving general environmental arrangements and minor needs (like furniture, small restorations etc.) have been planned to be finalized until summer 2018.

Today, the Hospital is occupying approximately 6300 square meters of covered area, being the largest Animal Hospital of Turkey. All units (advanced diagnostic imaging, intensive care, isolation, hospitalization, emergency, physiotherapy, electrophysiology, animal behaviour, in vitro fertilization and cryopreservation) are fully operated and serving at their finally decided locations, in order to offer excellence in animal care and client service to the community of Ankara and surrounding cities as well as to promote educational opportunities for students.

1.1.2. Comments

The hospital has been structured and operated with the existing resources in a short time, thus completely rectifying the major deficiency.

At its current state, hospital facilities are sufficient for the training of the current number of students; where they are exposed to real clinical patients and emergency cases for small animals; meanwhile still improvements are required for large animals.

1.1.3. Suggestion of improvements

The number of qualified support staff and veterinarians are expected to be increased in the hospital section and attempts were made by Rectorate Personnel Office for this requested positions.

The further organizational projections of veterinary hospital should be put in the agenda of strategy commission.

1.2. MAJOR DEFICIENCY 2: Inadequate isolation facilities

1.2.1. Factual information

The Isolation Units were re-designed to provide the highest quality of care to infectious patients and reduce exposure risks to other patients at the Hospital. Construction of the Units was completed at the beginning of 2016, within the first stage of the Animal Hospital Renovation Project.

Isolation Units, located near the courtyard of large animal clinics of the Animal Hospital, totally have 4 separate isolating rooms used for companion animals, small farm animals and large animals. There is an examination room, a locker room and a toilet/shower area inside the Unit.

The units have an individual air conditioning system with HEPA filters both at the junction of cycled air and at scavenging chimney. The rooms have negative air pressure inside.

The physical environment regarding waste management of the units was constructed. Preparation, cleaning, disinfection of the facility was maintained in accordance with SOP's.

1.2.2. Comments

Faculty has dedicated tremendous effort to compensate this major deficiency related to isolation units and to have completed the units in a short period is regarded as a great success.

1.2.3. Suggestions of improvements

Guidelines are already put for the isolation units; meanwhile practical instructions about isolation, biosecurity and hygiene procedures are going to be provided to the new staff members and the students in clinical rotations in the following years. This training plan is currently under evaluation to be given in a multidisciplinary perspective.

2. CORRECTION OF THE MINOR DEFICIENCIES

According to the Standard Operating Procedures (SOP) of the EAEVE and the Guidelines to revisits, FVMAU focused on the minor deficiencies identified by the ECOVE.

The faculty has founded a commission to work for the correction of these minor deficiencies. Each working group gathered in an agenda and following the verification/outlining of the current status and suggestions for corrections, Faculty Executive Committee enforced for the necessary precautions and operations. The factual information about these deficiencies, comments and suggestions are as follows:

2.1. MINOR DEFICIENCY 1: Insufficient equine caseload

2.1.1. Factual Information

After Stage 1 Evaluation in 2015, agreements with stakeholders (private sector, governmental bodies, universities etc.) for improving equine caseloads were renewed. The protocol with “Jockey Club of Turkey” was also renewed including transportation of animals to the faculty and weekly onsite visits of intern students. A new protocol was signed with the Ministry of Health, Public Health Agency, and a Hyperimmune Serum Production Unit was established in Experimental and Applied Research Farm (EARF). According to the protocol, veterinary support service is provided for horses in sera production. These sera producing horses were transferred to a special unit in EARF so that the students are able to practice as well. In order to increase mainly the equine and large animal case, the preliminary negotiations between the General Directorate of Agriculture, Military Equestrian Training Centre and Private Equestrian Clubs around Ankara were completed (Annex II).

Our recent protocol with Turkey Jockey Club (TJC) has increased the total equine case number and allowed students to have more hands on practice in the equine field. Three hours practice once a week in the hospital of TJC allowed the students to improve themselves in practices. Official veterinarian in TJC is in close contact with the professors in the clinical departments; which does not only allow the student to practice

the case daily, but follow up the same case to further observe the success of the treatment. TJC is equipped with modern radiology unit (including X-ray, endoscopy, ultrasounds) and laboratories; allowing the racehorses to be checked regularly. An average of 100 horses are admitted to the hospital and 7 veterinary surgeons, 5 technicians, 2 laboratory technicians and 2 radiology technicians are currently working.

As a result of these efforts, the total number of extramural equine cases increased from an average of 9 to 118 (an increase of approximately 13x) over the 3-year period.

2.1.2. Comments

After Stage 1 Evaluation FVMAU made considerable efforts to increase the equine caseload. The number of equine caseload is expected to increase further in the following years as a result of long term effects of the agreements and protocols with stakeholders. Besides, the special facilities for equine hospitalization and Isolation Unit established within the Hospital will contribute to the increase of the number of equine caseload.

2.1.3. Suggestions of improvements

The activities to be realized within the scope of the agreements should be continued without interruption. The number of agreements should be increased in the following years due to the close contact with Ministry of Food, Livestock and Agriculture. Involvement of horse farms in teaching can be encouraged. The Faculty can buy some new horses in order to teach the examination and treatment of horses within practical education.

The high number of students per class should be limited by the The Council of Higher Education (CoHe) in order to improve the level of training and to access higher educational standards.

2.2. MINOR DEFICIENCY 2: Increasing necropsy cases regarding equine and large animals

2.2.1. Factual Information

In spite of all efforts of FVMAU, the total number of necropsies per student is unfortunately still under required numbers (Table 2).

Table 2. The number of necropsy cases including equine and food producing animal in recent three years*

Animals / Years	2015	2016	2017	Average
Horse and donkey	2	7	6	5
Cattle	21	17	12	16,67
Small ruminant	30	25	41	32
Pig	2	0	0	0,67
Other animals	2	-	6	2,67
Total	171 cases			57,01

R18 indicator = $\frac{\text{n}^{\circ} \text{ necropsies food producing animals+equines}}{\text{No of students graduating annually}} = 0.38$

No of students graduating annually

2.2.2. Comments

As it is indicated in the previous title, the number of horses in Turkey is unfortunately getting decreased in recent years (Graph-1). On the other hand, increasing number of cattle and meat importation has caused significant overall decrease in the cattle breeding. Both of these situations caused negative reflections in the number of necropsy cases related to food producing animals and equines (Tables-3 and 4). Thus, R18 indicator of the FVMAU is limited in 0.58. However, the number of total necropsy cases is higher compared to the previous SER report.

2.2.3. Suggestions of improvements

A continuing effort to increase necropsy case numbers is suggested for collecting cadavers from private breeders, association of dairy cattle and association of breeding

cattle breeders.

Collaboration between other foundations, and stockholders of horse and cattle farms should be more encouraged.

2.3. MINOR DEFICIENCY 3: Updating teaching methods and restructuring the examination system

2.3.1. Factual Information

In order to fulfil the OIE Competencies “Day 1 Graduates”, faculty board on education put effort to define the outcomes and the competencies regarding the relevant content of the program with continuous update on teaching methods in order to match with the program outcomes and the learning objectives. With this aim, learner centeredness was promoted and student-centred focusing with active learning and proper usage of the feedbacks were initiated. All teaching materials were uploaded to university open course materials web page (www.acikders.ankara.edu.tr). This open course material mechanism was constructed as an obligatory system by the university for all the lecturers within the scope of Bologna Process. Lecturers are expected to provide all course materials weekly in order to receive the grant for their research projects as well as funding for conferences abroad. Students are able to download all the necessary course materials using their university access. A seminar was held regarding the “International Veterinary Teaching Methodologies” and introduction of the recent teaching materials such as iclicker and other online materials were fully discussed. Case based scenarios were applied where the active learning format was promoted with small groups enhancing social constructivism among the students in some departments and also seminar based learning was explored. As an obligatory continuous education addressed by Ankara University, around 70% of lecturers received “Intensive Teaching Methodologies” course for 2 weeks; where recent advancements in education in combination of methodologies and technologies were given by the relevant professionals (by the lecturers from the faculty of communication, technologies, ethics, etc.). In the clinics, evidence based case reports were assessed by direct observation in clinical settings, while the students are able to follow the cases offline using the hospital computerized system. Within the curriculum change “The Clinical Skills Laboratory” was founded and started education from February 2017. The teaching programme is coordinated with Anatomy, Internal Medicine, Surgery, Gynaecology and Obstetrics and Artificial Insemination Departments. In the upcoming semesters preclinical departments are planned to be included in this programme. Here,

students are able to practice on non-living materials to improve their clinical skills. Feedbacks from the students regarding this new method for learning was positive and the board of education stimulated a “feed forward” reflex to continue for the implementation of this course in the curriculum. All the simulation lectures in Clinical Skills Laboratory- CSL and Veterinary Anatomy Museum can be followed from youtube channel; where the students can also follow visual materials.

A new “Undergraduate Education Legislation” has been came into force in 8th of August 2017. According to this new legislation, academic staffs’ options for the assessment of students have been varied; using Student Affairs Info System. These include oral and written examinations, quizzes, homeworks, semester presentations, lab exams, observation reports, projects and objective structured clinical examinations (OSCE).

Exam regulations in which exam requirements and procedures are laid down in Ankara University Graduate Programs Directive. This directive is updated regularly, according to the feedbacks from the students in accordance with the suggestions from the lecturers and other professionals. All lecturers are free to perform their own examination system; which could include the type (written, oral, test) of the exam but also other in-lecture performances (attendance, attention, question-answer, contribution), presentations (case based, topic based). In order to test the students’ clinical competence extensively; questions about the plausible differential diagnoses, further medical checks to be instructed and the treatment methodologies are addressed with a problem based approach and not only to test descriptive but also procedural knowledge of the students. In order to avoid memorisation, superficial-didactic learning, student passivity and spoon-feeding; lecturers are free to perform analysis of the students throughout their daily performance and reflect this data to their overall evaluations. The students are both tested in terms of practice and theoretical knowledge; at the end of a midterm a final examination is obligatory before an overall evaluation. For more, in order to revive and improve creative and synthesizing learning through examinations, as mentioned previously, lecturers attend “Education of the Lecturers”; which includes novel approaches in evaluation mechanisms.

Our Rectorate has been organising periodic practical training programme for all academic and administrative staff. This programme is obligatory for all staff and optional for our

master's degree and Ph.D. students. Lectures are composed of 7 for theoretical and 7 for practical days. Besides some of our departments (for example Anatomy) have been organising their individual orientation programme for the new attended academic and administrative staff.

2.3.2. Comments

As the university has completed a Quality Inspection by the Higher Education Quality Board; where the teaching methodologies were strictly addressed; University made efforts to improve the teaching methodologies in the faculties as well.

2.3.3. Suggestions of improvements

In order to provide clear learning outcomes and goals and to ensure a supportive learning environment; students should be given responsibility for their own learning and the outcomes of this self-learning system should be assessed systematically.

In order to improve proficiency teaching clinical skills in earlier stages of veterinary education; simulated animals could be purchased. Digital self-learning and social media platforms should be encouraged through official online sites or other personal web pages of the lecturers and projects should be supported for increasing more online-self-learning platforms.

2.4. MINOR DEFICIENCY 4: Offering laboratory services and continuing professional development courses to practising veterinarians

2.4.1. Factual Information

Central Diagnostic Laboratory provides a wide variety of biochemical and physiological diagnostic tests on working days from 8.30 am to 17.30 pm to own clinics of the faculty, and the veterinary clinicians working in private institutions and clinics. Moreover, further analyses (parasitological, microbiological and virological) of various clinical samples (blood, other body fluids, body tissues and animal faeces, etc.) are carried out by laboratories at the relevant departments of FVMAU (Tables 4-9).

FVMAU also co-operates with veterinary practitioners, other professional organisations and competent authorities in the design, implementation and quality control of continuing education programmes. For the improvement of these programmes, a committee was commissioned. The continuing education programmes organized between the years of 2015-2017 are shown in Table 10.

Also, invited lecturers within the Erasmus+ programmes are expected to give a main lecture in the faculty conference hall; where these lecture/courses are broadcasted through online servers (such as twitch.tv) throughout Turkey opened both for students and lecturers.

Table 3. Biochemical and physiological diagnostic tests offered by the CDL for the animals examined by the clinics of the FVMAU (2015-2017).

Analysed Parameters:	Year 2015	Year 2016	Year 2017
Whole blood count	147	251	219
Blood Gases			2
Amilase	10	10	6
Glucose	45	70	76
Urea (BUN)	131	160	163
Creatinine	131	153	166
Total Protein	48	79	72
Albumin	46	79	57
T.Bilirubin	24	30	45
D.Bilirubin	16	20	19
ah	3	2	8
ALP	79	124	113

ALT	107	140	143
AST	106	142	138
CK	40	106	98
GGT	41	57	57
LDH	40	41	21
Punction liquid	2	3	
Urine	2	1	4
Sodium	40	63	61
Potassium	40	65	64
Calcium	22	29	45
Phosphorus	18	25	41
Cholesterol	8	9	6
Triglyceride	3	6	4
Uric acid	2	8	14
Cerebrospinal fluid	2	1	
T4		10	9
TSH		5	5
Cortisol		7	5

Table 4. Biochemical and physiological diagnostic tests offered by the CDL of the FVMAU for the animals examined by private veterinary clinics (2016-2017).

Analysed Parameters:	Year 2016	Year 2017
Whole blood count	56	118
Blood Gases		
Aamilase	1	1
Glucose	13	37
Urea (BUN)	27	80
Creatinine	27	81
Total Protein	24	50
Albumin	14	46
T.Bilirubin	1	16
D.Bilirubin	1	3
I.Bilirubin		3
ALP	29	74
ALT	29	76
AST	30	75
CK	24	72
GGT	9	54
LDH	2	4
Punction liquid		
Urine		6
Sodium	13	39

Potassium	14	40
Calcium	11	32
Phosphorus	6	25
Cholesterol	2	2
Triglyceride		1
Uric acid		9
Cerebrospinal fluid		
T4	1	1
TSH		
Cortisol	1	

Table 5. The total number of animal specimens subjected to biochemical and physiological diagnostic tests in the CDL of the FVMAU (2016-2017).

Species	Year 2016	Year 2017
Cattle	24	131
Small Ruminant	2	37
Cat	2164	4924
Dog	2841	6202
Horse	69	86
Poultry	1	18
Pig	0	0
Rabbit	15	2
Exotic animals	0	28

Table 6. The number of parasitological examinations performed by the Department of Parasitology (2015-2017).

Species	Year 2015	Year 2016	Year 2017
Cattle	11	11	9
Small Ruminant	5	17	10
Pig	0	0	0
Cat / Dog	101	166	93
Single-Toed	0	0	1
Poultry-Rabbit	8	8	10
Exotic animals	0	0	0
Tick Species Identification	295	271	181

Table 7. The number of routine analyses and tests performed by the Department of Microbiology for the Clinics of the FVMAU (2015-2017).

Test	Year 2015	Year 2016	Year 2017
Necropsy	3	2	13
Bacteriological Identification	245	337	215
Mycology	186	175	131
Salmonella Serotyping	20	27	5

Table 8. The number of routine analyses and tests performed by the Department of Microbiology for commercial companies (2015-2017).

Test	Year 2015	Year 2016	Year 2017
Necropsy	193	40	0
Bacteriological Identification	279	175	12
Mycology	17	36	48
Serological Tests	21443	21446	7567
Molecular Tests	1233	706	553
Salmonella Serotyping	258	329	281

Table 9. Continuing education lectures by academic personnel of FVMAU between 2015-2017.

Continuing Education Program	Partner of the FVMAU	Lectures
Certification Program for Animal Experimentations	The Ankara University Continuing Education Centre	34
	Public Health Institution of Turkey	2
	Turkish Medicines and Medical Devices Agency	1
	Gulhane Military Medical Faculty, Health Sciences University	3
	Lifelong Learning Center of the Hacettepe University	1
	Etlik Veterinary Control Central Research Institute	1
Practical training for veterinary practitioners	Chamber of Veterinary Surgeons, Ankara Region and VETA D	7
Municipal veterinary services for stray animals	Ankara Metropolitan Municipality Chamber of Veterinary Surgeons, Bolu Region Çankaya Municipality	3
Udder health and milk hygiene of dairy cows	Pınar	8
Pesticide analysis	Technical Assistance and Information Exchange Instrument of the European Commission (TAIEX)	2

Virus titration and neutralization tests	The Institute of Foot and Mouth Disease	2
Conscious use of antibiotic in veterinary medicine	Chamber of Veterinary Surgeons, Malatya Region	1
Plastination Techniques in Medicine Conference and Workshop	Brain Research Society (Turkey) Turkish Veterinary Pathology Association	3
Aquatic diseases training	Chamber of Veterinary Surgeons, Bursa Region	1
Foot and Mouth Disease	Turkish Veterinary Medical Society	1
Abuse and neglect of pets	IVSA Ankara Chamber of Veterinary Surgeons, Ankara Region	4

2.4.2. Comments

According to these feedbacks and with support from the University and student clubs, trainings in various subjects are to be implemented. Overall, continuing education programmes, are well organized and offers a broad spectre of courses to this context.

The laboratory services for the clinics of the FVMAU and for clinicians working in private institutions and clinics are offered effectively and uninterruptedly. Both laboratory services and continuing professional development courses to veterinary practitioners have positive contributions to strengthen the connections between the establishment and the profession and to increase the income of the FVMAU.

2.4.3. Suggestions of improvements

Future strategies for continuing education programmes should be established and laboratory services of the FVMAU should be expanded by effective advertises and announcements. Accreditation of the laboratories (or even analysis based) should be encouraged; where the University gives full technical and financial support. The spectre of the analysis should be increased and the placement of technical staff to the laboratories should be given as a priority. Faculty should develop and carry out training in all aspects of laboratory capacity development; where the Laboratory Directed Research and Development (LDRD) Programs should be encouraged in demonstrating proof-of-principle for a new idea or methodology or for training and developing small scale R&D to the students.

The FVMAU has a strong commitment to continuous education. For this reason, a continuous education committee should be formed to organize continuous education programmes.

2.5. MINOR DEFICIENCY 5: Reducing the undergraduate students' number

2.5.1. Factual Information

An average of 170 students enrol annually to Veterinary Education Programme (Education Programme1) in FVMAU. This number can rise to 200s with the inclusion of students enrolling by vertical and/or horizontal transfers from other faculties and/or programmes. An average of 150 students graduate annually. Along with this, FVMAU has started training in the foreign language under the scope of internationalization studies in the academic year of 2015-2016 (Education Programme2).

The total number of undergraduate students studying in Turkish programs at our faculty is 1208 and the total number of students studying in foreign language programs is 102. The overall number of undergraduate students is 1310.

2.5.2. Comments

It is seen that these numbers are too high for a standard quality education where Turkish and foreign language education is being done at the same time with the restricted number of physical training facilities and academic personnel. Even though the number of students to be accepted by the Faculty for undergraduate education is determined as 120 by the Faculty Board in accordance with the capacity of the lecture halls/number of lecturers, the admittance allowance has been higher for many years. This situation was reported to Higher Education Council (CoHE), which is the official establishment for the decision of the number of students for the admittance. However, this has not been achieved due to the political approaches and relevant legislative arrangements.

2.5.3. Suggestion of improvements

Recently, Ankara University has been classified as “The Research University” and is among the top 10 universities determined by HEC within the scope of "Regional Development Focused Mission Differentiation and Specialization Project". The reduction in the number of undergraduate students has been shown as one of the predicted advantages of being a research university. In the direction of all these developments, the administration of the faculty has prepared and presented a letter of application to the

CoHE for an appraisal to evaluate the convenience of reducing the quota of undergraduate students who will register to our faculty in 2018-2019 academic year, in order to provide an ideal higher education in the faculty (Annex III).

2.6. MINOR DEFICIENCY 6: Increasing residency programmes

2.6.1. Factual Information

Due to recent advances in Veterinary Specialization Legislation in Turkey, interest in professionalization in a specialized field is highly supported in academia, government and stakeholders. Ankara University was forefront in the formation of this proposed legislation and gave opinion to the Ministry of Food, Agriculture and Livestock. Experts with strong knowledge in their specialization with exceptional skills are seeking for a higher quality of education along with student demands; where our faculty put effort to support these residency and specialization programs. The importance of the benefits of the programs was discussed with the CoHE and the Ministry along with University Rectorate. Programs with higher priorities in the faculty; mainly focused to the clinical departments, are encouraged to initiate and support young researchers to receive Diplomat status.

Our faculty member Prof. Dr. Calogero STELLETTA (Department of Animal Reproduction and Artificial Insemination); a Diplomat of the European College of Small Ruminant Health Management (ECSRHM); is in direct contact with the College to receive students for education.

Prof. Dr. Omer BESALTI (Department of Surgery) is involved in the training by European College of Veterinary Neurology (ECVN); where he is in the Examination Stage just before Board Certification. Meanwhile, Assoc. Prof. Dr. Yasemin SALGIRLI DEMIRBAS (Department of Physiology) is under training by European College of Animal Welfare and Behavioural Medicine (Alternative Residency Training Programme) and currently working to increase the caseload.

Academicians in the Department of Internal Medicine are currently in contact to receive residency by the American Veterinary Medical Association (AVMA) in collaboration with the diplomats in the Minnesota University. Furthermore, specializations in various fields (ex. Aquatic Animal Health) are encouraged in the faculty. An informative seminar was held to explain the differences of graduate and postgraduate specialization and global veterinary training in the conference hall to lecturers.

The recently accepted (November 2017) prerequisite to become a lecturer in Ankara University; is currently obliged to an abroad specialization training minimum of six

months. This requisite was found to encourage young academicians to engage themselves to residency programs during their training abroad.

2.6.2. Comments

The Scientific and Technological Research Council of Turkey (TÜBİTAK) grants fellowships for international scientists/researchers who would like to give lectures or conduct research. As FVMAU has strong international relations for years, lecturers are asked to cooperate colleagues from European and American Colleges for developing joint residency programs involving in-house training of the residency candidates; where the guest lecturer is expected to receive support through these grants.

2.6.3. Suggestions of improvements

Formal basis for residency programs are expected to be implemented by the CoHE to encourage University Senates for permitting at least two-three year of mobility abroad (currently the academicians are allowed to have only one year of mobility abroad) of researchers/lecturers along with supportive grants.

2.7. MINOR DEFICIENCY 7: Improving ambulatory service capacities

2.7.1. Factual Information

After previous visitation in November 2015, number of committee members of ambulatory clinic was increased from 3 to 7. Within the supervision of this committee a total of 44 academic staff are on duty periodically for mobile clinical activities. Visits to the field (twice a week) are accompanied by 4 teaching staff (previously 3) and a maximum number of 6 interns.

The number of equine cases for mobile clinic has been increased within the scope of new resigned agreements with the Turkish Medicines and Medical Devices Agency, Yıldırım Beyazıt University and Turkish Armed Forces. A new case registration form was assigned for equine ambulatory services (Annex IV).

On the other hand ambulatory health services for free ranging urban animals are carried out within the scope of the agreement with Ankara Metropolitan Municipality. Similarly, wild animal veterinary services are offered by the agreement between FVMAU and The Ministry of Forestry and Water Affairs. Besides these the former protocol with Turkish Jockey Club was renewed.

In order to increase ambulatory services a new vehicle was obtained from the Ministry of Health. This vehicle is currently under renovation for its purposes with the respect to the licensing.

A regulation of FVMAU ambulatory services is being prepared. In this new regulation, standard operation procedures, working principles and methods, number and positions of staff etc. are detailed.

2.7.2. Comments

The increased number of committee member provided a more elaborative and concise approach on faculty ambulatory clinical services. The perfection of this service is improved through the regular meetings of these committee members, which have resulted in development of a workflow and method throughout the feedbacks and comments. Extramural equine cases were notably increased. Services offered are widened compromising pregnancy diagnosis, herd health monitoring, ultrasound investigations,

and hoof disease treatments. As with the new agreements (Ankara Metropolitan Municipality and Ministry of Forestry and Water Affairs), the caseloads have increased and diversified. As students are able to gain strong practical skills through ambulatory services this practice became obligatory in the training programme with no compensation.

2.7.3. Suggestions of improvements

The long-termed relationships with the owners, trainers, breeders in throughout the region were increased by the promotion from Ankara Veterinary Chamber. The promotion of ambulatory services is still under evaluation by the committee members. The medical supply and minor surgical operations kits are to be maintained for better clinical services.

2.8. MINOR DEFICIENCY 8: Improving animal welfare practices in overall FVMAU units

2.8.1. Factual Information

Exemplary animal care is provided through the members of the Animal Welfare Committee for the constitution of the new animal hospital and the renovated parts of EARF. For the assessment of welfare in the hospital, exploring the ethical implications arising from human-animal relationships and management are improved by the comments from this committee.

Postoperative rooms, ICU and hospitalization units were extended and improved for effective relief of pain and improving behavioural management.

Housing, husbandry, feeding and health conditions of EARF have been improved in accordance with biological, physiological and psychological needs of farm animals. All the buildings of EARF were reconstructed according to welfare guidelines with a modern architecture equipped with updated instruments.

All animals are checked frequently and at least once daily by the official veterinarians (three personnel) in the EARF. A new veterinarian was assigned to EARF providing better service and insurance of any welfare concern to be dealt as quickly as possible.

Animal ethics education provided by the Department of History of Veterinary Medicine and Deontology establish and disseminate objective scientific knowledge concerning relevant questions about animal welfare and works closely with the committee.

A new project was assigned with Construction Unit of University in order to improve porcine facility with better feeding and ventilation systems in EARF.

2.8.2. Comments

Reflecting the holistic understanding of welfare as the state of the animal's mind and body; an integrated approach is achieved by collaborations between investigators from different departments with different expertise/areas, including Physiology (fundamental behaviour, cognition, emotion; companion animal behaviour); Zootechny (welfare on farm and implementation of welfare solutions in clinical departments); Veterinary History and Deontology (ethics, legislations). The committee and this holistic

understanding of welfare enable the faculty to work on new public statements and participation in consultations about welfare issues along with related legislations. Therefore improvement of conditions of the animals in the faculty and outside in terms of society was reached. Animal welfare research based on understanding biological and behavioural mechanisms through research projects, enables both the lecturers and students to adapt and implement recent advancements in welfare issues and would allow for implementing research based solutions in the ‘real world’. An international workshop “Animal Abuse and Responsibilities of Veterinarians” was organized by IVSA Ankara with participation of different professions as psychologists, sociologist, criminologist, lawyer and veterinarians in cooperation with Ankara Bar Association and Chamber of Veterinary Surgeons Ankara region on 1st-2nd of April 2017. Lecturers from Portugal and Spain professionalized in animal abuse, behaviour and welfare contributed to this workshop and certificate was presented.

2.8.3. Suggestions of improvements

A recent programme was developed for the education of the students, academic and supportive personnel in the faculty hospital and EARF along with the personnel in the slaughterhouse in terms of animal welfare. This education was intended to be under lifelong learning concept, opened for further improvements along with recent regulations and technics.

3. ESEVT INDICATORS

Table 10. Raw data from the last 3 full academic years.

Raw data from the last 3 full academic years		2015	2016	2017	Mean
1	n° of FTE academic staff involved in veterinary training	177	176	162	171,67
2	n° of undergraduate students	1258	1320	1280	1286,00
3	n° of FTE veterinarians involved in veterinary training	175	174	160	169,67
4	n° of students graduating annually	146	155	156	152,33
5	n° of FTE support staff involved in veterinary training	174	170	162	168,67
6	n° of hours of practical (non-clinical) training	1162	1162	1162	1162
7	n° of hours of clinical training	1872	1872	1872	1872
8	n° of hours of FSQ & VPH training*	206	206	206	206
9	n° of hours of extra-mural practical training in FSQ & VPH	32	32	32	32
10	n° of companion animal patients seen intramurally	15703	16030	15464	15732,33
11	n° of ruminant and pig patients seen intramurally	878	636	767	760,33
12	n° of equine patients seen intramurally	106	104	45	85
13	n° of rabbit, rodent, bird and exotic patients seen intramurally	1057	1392	866	1105,0
14	n° of companion animal patients seen extramurally	0	0	0	0
15	n° of individual ruminants and pig patients seen extramurally	657	330	787	591,3
16	n° of equine patients seen extramurally	15	108	231	118,0
17	n° of visits to ruminant and pig herds	188	188	188	188,0
18	n° of visits of poultry and farmed rabbit units	36	36	36	36,0
19	n° of companion animal necropsies	412	168	256	278,7
20	n° of ruminant and pig necropsies	53	42	53	49,33
21	n° of equine necropsies	2	7	6	5
22	n° of rabbit, rodent, bird and exotic pet necropsies	656	76	93	275,0
23	n° of FTE specialised veterinarians involved in veterinary training	177	176	162	171,7
24	n° of PhD graduating annually	20	23	22	21,7

Table 11. Calculated indicators of FVMAU.



ESEVT Indicators

Name of the Establishment:		Faculty of Veterinary Medicine Ankara University (FVMAU)					
Date of the form filling:		26.01.2018					
Calculated Indicators from raw data		Establishment	Median	Minimal	Balance ³		
		values	values ¹	values ²			
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0,133	0,16	0,13	0,007		
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	1,114	0,87	0,59	0,524		
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	1,107	0,94	0,57	0,541		
I4	n° of hours of practical (non-clinical) training	1162,000	905,67	595,00	567,000		
I5	n° of hours of clinical training	1872,000	932,92	670,00	1202,000		
I6	n° of hours of FSQ & VPH training	206,000	287,00	174,40	31,600		
I7	n° of hours of extra-mural practical training in FSQ & VPH	32,000	68,00	28,80	3,200		
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	103,276	70,48	42,01	61,266		
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	4,991	2,69	0,46	4,528		
I10	n° of equine patients seen intra-murally / n° of students graduating annually	0,558	5,05	1,30	-0,740		
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	7,254	3,35	1,55	5,709		
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	0,000	6,80	0,22	-0,223		
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	3,882	15,95	6,29	-2,413		
I14	n° of equine patients seen extra-murally / n° of students graduating annually	0,775	2,11	0,60	0,180		
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	1,234	1,33	0,55	0,687		
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0,236	0,12	0,04	0,192		
I17	n° of companion animal necropsies / n° of students graduating annually	1,829	2,07	1,40	0,429		
I18	n° of ruminant and pig necropsies / n° of students graduating annually	0,324	2,32	0,97	-0,646		
I19	n° of equine necropsies / n° of students graduating annually	0,033	0,30	0,09	-0,060		
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	1,805	2,05	0,69	1,113		
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	1,127	0,20	0,06	1,064		
I22*	n° of PhD graduating annually / n° of students graduating annually	0,142	0,15	0,09	0,054		
1	Median values defined by data from Establishments with Approval status in April 2016						
2	Recommended minimal values calculated as the 20th percentile of data from Establishments with Approval status in April 2016						
3	A negative balance indicates that the Indicator is below the recommended minimal value						
*	Indicators used only for statistical purpose						

Table 12. Ratios of FMVAU due to main indicators of Veterinary Faculties.

Parameter addressed	R No.	Indicator (Ratios)	Our values	Recommended values*
Teaching capacity	R1:	No. Undergraduate veterinary students / No. Total academic FTE in veterinary training	1286 / 171.67 = 7.491	Maximum value: 8.381
	R2:	No. Undergraduate students at Faculty/ No. FTE total Faculty	1286 / 340.337 = 3.778	Maximum value: 9.377
	R3:	No. Undergraduate veterinary students / No. VS FTE in veterinary training	1286 / 169.67 = 7.579	Maximum value: 11.057
	R4:	No. of students graduating annually/ No. VS FTE in veterinary training	152.333 / 169.67 = 0.898	Maximum value: 2.070
	R5:	No. total FTE support staff in veterinary training / No. total FTE academic staff in veterinary training	168.667 / 171.67 = 0.983	Recommended range: 0.505-1.907
Types of training	R6:	Supervised practical training / Theoretical training	3034 / 2058 = 1.47	Minimum value: 0.602
	R7:	Laboratory and desk based work + non clinical animal work / Clinical work	1162/ 1872 = 0.62	Maximum value: 1.809
	R8:	Teaching load / Self directed learning	5092 / 336 = 15.15	Recommended range: 2.59-46.60
Training Food Hygiene/Public Health	R9:	Total no. hours vet. curriculum / Total no. hours Food Hygiene/Public Health	5092 / 206 = 24.72	Recommended range: 8.86-31.77
	R10:	Hours obligatory extramural work in veterinary inspection / Total no. curriculum-hours Food Hygiene/Public Health	32 / 206 = 0.16	Recommended range: 0.074-0.556
Animals available for clinical education	R11:	No. of food-producing animals seen at Faculty / No. of students graduating annually	760.33/ 152 = 5	Minimum value: 0.758
	R12:	No. of individual food-producing animals consultations outside the Faculty / No. of students graduating annually	591.3/ 152 = 3.89	Minimum value: 8.325
	R13:	No. of herd health visits /	188/152	Minimum value:

		No. of students graduating annually	= 1.236	0.326
	R14:	No. of equine cases / No. of students graduating annually	205/152 = 1.35	Minimum value: 2.700
	R15:	No. of poultry + rabbit cases / No. of students graduating annually	1105 / 152 = 7.26	Minimum value: 0.407
	R16:	No. of companion animals seen at Faculty / No. of students graduating annually	15732/ 152 = 103.5	Minimum value: 48.061
	R17:	Poultry (flocks)/rabbits (production units) seen / No. of students graduating annually	36/152= 0.236	Minimum value: 0.035
Necropsies available for clinical education	R18:	No. necropsies food producing animals + equines / No. of students graduating annually	54.33 / 152 = 0.36	Minimum value: 1.036
	R19:	No. poultry+rabbits necropsies / No. of students graduating annually	275/152 = 1.80	Minimum value: 0.601
	R20:	Necropsies companion animals / No. of students graduating annually	278.7/ 152 = 1.83	Minimum value: 1.589

*According to Budapest SOP 2012 (November 2013 values).

3.1. Factual Information

When the indicators are evaluated it is observed that indicators with numbers 12, 14-16, 20 and 21 were below minimum values, despite great efforts of the faculty to rectify the minor deficiencies. As well as, when the ratios of FMVAU are evaluated, it is seen that R12, R14, and R18 were below minimum values. The other parameters in both the indicator or the ratios lists are either above/below the minimum values/the maximum values, respectively, or in the required ranges.

3.2. Comments

Indicator no 12 & no 16 and R14: Although there seems to be a minor decrease of average of equine intramural patient from 105 to 85, a major increase (**13x**) from extramural equine patients from 9 to 118 is a significant improvement. However, regarding minimum values of Uppsala (**1.30**) and Budapest (**2.7**) SOPs, FMVAU should provide at least **2.3x to 4.7x** more equine intramural patient flow to the

veterinary hospital. On the other hand, ratios obtained (**0.77**) with the division of average number 118 by average number of graduates, 152; the value in indicator no 16 is above recommended minimum value of Uppsala SOP (**0.60**).

Indicator no 14: Although the faculty has a contractual agreement with Ankara Metropolitan Municipality on provision of health services for stray dogs, and this includes extramural visits to dog shelters, since the numbers and related ratio averages of our intramural companion animal patients are above the mean values of both Uppsala and Budapest SOPs, FMVAU did not include students with the aim of rectifying this indicator for 2015-2017. Nevertheless, FMVAU has a strategy in the years to come to include its students to mobile services for the purpose.

Indicator no 15 and R12: The faculty performed great efforts in order to increase the number of extramural ruminant patients and the related ratios, and in a way it succeeded to reach average numbers of approximately 600s (**591.3**) and a ratio of **3.89** thanks to the efforts of contractual agreements and mobile clinics. However, there is still a room for further improvement, since the minimum recommended value of Uppsala SOP is **6.29** and Budapest SOP is **8.325**. For this reason, FMVAU should provide at least **1.6x to 2x** more ruminant extramural individual patient consultations.

Indicator no 20 & 21 and R18: Although there is a slight increase with the number of necropsies compared to the first visit, FMVAU should work harder to rectify the numbers for regarding indicators and ratio. Indeed, large animal necropsies are FMVAU's main weakness. The ratio of **0.36** (R18) is too low compared to minimum recommended value **1.036** of Budapest SOP. FMVAU should perform approximately three times more necropsies of large animals. On the other hand, necropsies of poultry/rabbits and companion animals are above recommended values of both Budapest and Uppsala SOPs.

3.3. Suggestions of improvements

The faculty should plan both short-term and long-term strategies for rectifying above-mentioned values. As a short-term strategy, FMVAU should renovate the legislation for mobile clinics to increase its working hours from three hours a day to at least 6 hours a day. This move is going to double the extramural equine and ruminant caseloads spontaneously. Indeed, there is a continuing preparation of mobile clinic legislation renovation at FMVAU thanks to the Strategy Development and Surveillance Commission. Another strategy is to increase the number of agreements as well as visits to the nearby farms.

For increase of intramural equine patients, as a short-term move, FMVAU has renewed its equine transport caravan and modified another existed vehicle for the purpose. The faculty is going to employ three new veterinarians to the veterinary hospital. One of these veterinarians should be an expert of equine medicine. The projects should be planned for overall improvement in equine medicine in FMVAU. Indeed a meeting has been performed with the Project Sources Generation Commission for developing new projects in the upcoming years with the theme of equine medicine. These projects include development of preclinical diagnostic test kits for the support of both veterinary hospital and mobile clinics, training of young academic personnel in the field of equine medicine, specialization in equine medicine, etc.

The faculty has several contractual agreements with different both private and governmental institutions regarding transfer of dead large animals to the faculty for necropsies, as well as, on call services for performance of extramural necropsies in these institutions. A special vehicle can be owned for the transport of cadavers.

4. SIGNIFICANT DEVELOPMENTS IN FMVAU SINCE THE PREVIOUS ESEVT VISITATION

Strategy Plan of FVMAU

A new commission (Strategy Development and Surveillance Commission) has been constituted in 2016 for development of FVMAU strategy plan. This commission started meetings and prepared a questionnaire for SWOT analysing of FVMAU to develop the main and upcoming strategy plans. This questionnaire has been sent to all departments and data were collected. Evaluation process has been carrying out by the related commission. Another commission for academic evaluation and quality improvement was founded in the veterinary faculty named “Commission of Academic Evaluation and Quality Improvement”. This commission contributes the strategic planning process in accordance with universities strategies along with Accreditation Commission and Commission for Continuous Education. CoHE in Turkey developed an evaluation system in order to improve the quality in the universities. These commissions are expected to assure the quality of education, research and service in the faculties to complete this higher frame of quality.

Hospital management software

With respect to the feedbacks from the units of the hospital and central diagnostic laboratory, previously purchased hospital management software is updated. Training and meetings were organized for the proper using of software by the staff. An authorized contact person responsible of the updating of data for each unit has been selected. A new barcoding system is integrated to the software for recording and tracking of samples.

The Higher Education Quality Board (HEQB)

The Higher Education Quality Board (HEQB) was established within the scope of the Higher Education Quality Assurance Regulation, which was published in the Official Gazette dated July 23, 2015 and numbered 29423. There are representatives from CoHE, Commission of universities in Turkey, relevant ministries and other institutions, in this committee. The Higher Education Quality Assurance Regulation regulates the principals related to the education research activities of higher education

institutions and internal and external quality assurance of accreditation processes, accreditation processes and authorization processes of independent external evaluation institutions and the duties, authorities and responsibilities defined in this scope. Totally 12 staff from Ankara University, 8 of those from FVMAU, were chosen to become a member in the HEQB. Within the scope of the institutional external evaluation process; higher education institutions prepare an internal evaluation report every year and based on these reports, higher education institutions are included in the external evaluation process carried out by the HEQB at least once every five years. As a part of this evaluation process, our faculty members in the board, visited other universities in Turkey within external evaluation and accreditation process which led them to investigate the quality parameters to be applied to FVMAU by better or alternative approaches. Beside this national quality assurance system mentioned above, a total of 11 academic staff as one of which is the president, five external evaluation trainers, and five external evaluators has been working for a specified national organization, Association for the Evaluation and Accreditation of Education in Veterinary Institutions (VEDEK).

Mission Differentiation & Specification” of institutions

In the year 2016, CoHE requested from all universities of Turkey to prepare their mission and strategy in terms of “Mission Differentiation & Specification” of institutions. This would bring unique specialization and mission fields and finally create a competitive medium for the universities of Turkey. Within the context of this specialization strategy HEC firstly evaluated all universities and then selected ten distinguished universities as a “Research University”. It can be proudly expressed that Ankara University has been considered as one of those ten universities among the 182 universities in Turkey.

Renovations in FVMAU

Renovation and establishment of some departments’ labs in FVMAU such as Biochemistry, Pharmacology and Toxicology, Anatomy, Artificial Insemination, Microbiology, Physiology. A specified “Veterinary Bee Laboratory” was established within the Department of Pharmacology and Toxicology founded by the project “Developing probiotics from the gut microbiota of honeybee (*Apis mellifera*) as an alternative treatment in *Nosema* spp.” From the Ministry of Food Agriculture and

Livestock General Directorate of Agricultural Research Policies. This lab. works in close cooperation with other departments, universities and governmental bodies for research and training to further accommodate potential collaborations and initiates new partnerships to a better transfer of knowledge, increase competitiveness between sectors and disciplines in the bee diseases and the safety of the bee-products field. “National Reference *Salmonella* Laboratory” was established in the department of Microbiology founded by the TUBITAK guided project. A prominent improvement can be noticed in the Plastination Laboratory, the first and most improved of 3 plastination labs in veterinary profession, in terms of preparation of polyester and silicone plastination protocols. Besides workshops have been organized in this lab.

FVMAU Experimental and Applied Research Farm (EARF)

EARF is renewed with regards to research and welfare requisites. All the buildings of EARF were reconstructed according to welfare guidelines with a modern architecture equipped with updated instruments. A new Dairy Cow Unit was constituted with a capacity of up to 200 animals. This unit comprises closed and semi-closed unit was automatized manure system. In addition to 200 tonnes capacity silage container, another silage and sugar beet pulp container was built for this dairy unit. For both research purposes and student practices a new Milk Processing Unit with pasteurization, storage and yoghurt processing is under construction. The capacity of the two poultry houses with 6000 laying hens bred in both traditional and enriched means was extended to 10000 with a new enriched unit. All three poultry units are equipped with automatized ventilation system. An expert system for egg sorting in these three units with automatized transport line was established. The classification, labelling and packaging units were reconstructed in accordance with other units. Broiler Research Unit was constructed with a capacity of 400 birds; where 4-5 graduate (Master-Ph.D. Degree) students each year are able to make research in this unit. EARF trademark table eggs are currently being marketed commercially which brings a substantial input to faculty finance. Following the construction of the new milk processing unit faculty trademark pasteurized milk and yoghurt are expected to be on markets soon.

Accreditation by a National Organization

FVMAU was also a member and under evaluation of The Association for the Evaluation and Accreditation of Veterinary Institutions and Programs (VEDEK), a national organization for evaluation and accreditation of veterinary education programs and institutions in Turkey. In addition to that, FVMAU was visited (11-15 May 2015) and evaluated by VEDEK (www.vedek.org.tr). Full Accreditation by this association was achieved on 30 September 2015.

ANNEX I. Facilities of FVMAU Animal Hospital

BUILDING NO: 11 (3 floors)	
ANIMAL HOSPITAL MAIN BUILDING	
Administrative	
Academic staff office	32
PhD student study room	2
Secretary	3
Support staff	3
Office	4
Library and meeting room	2
Lecture hall	3
Waiting hall	3
Heating unit	1
Medical gases unit (O ₂ production, N ₂ O, AGSS, air, vacuum)	1
Air conditioning centre	6
Pharmacy Unit	
Pharmacy	1
Main medical depot	1
Emergency Clinic	
Examination rooms	4
Operating room	1
Intensive care unit	2
Hospitalization rooms	2
X-ray room	1
Vets office	1
Student room	1
Staff room	1

Central Diagnostic Laboratory	
Laboratory	1
Staff office	4
Small Animal Clinics	
Examination/consultation room	22
Laboratory	3
Physical Therapy	
Electrophysiology unit	1
Physical therapy and rehabilitation unit	1
Animal behaviour clinic	1
Gait analysis unit	1
Hydrotherapy unit	1
Small Animal Operating Halls	
Staff preparation room	2
Patient preparation room	1
Sterilization room	1
Reanimation room	2
Operating hall	6
Diagnostic Imaging Unit	
X-ray hall and control unit	1
Patient preparation and reanimation room	1
Endoscopy room	1
USG and Doppler USG room	1
MRI hall and control unit	1
CT hall and control unit	1
Large Animal Clinics	
Examination hall	1
Operating hall	2
Anesthesia induction and reanimation room	1
Hospitalization box	5

Office	1
Depot	1
Open air examination area and paddock	1
11 (cont'd 4/4)	
Unit for Birds of Prey	
Examination room	1
Hospitalization room	3
Isolation room	1
Large hospitalization cage	6
Staff room	1
Preparation room	1
Depot	1
Isolation Area	
Isolation room for dogs	1
Isolation room for cats	1
Isolation room for farm animals	1
Isolation room for horses	1
Isolated examination room	1
Preparation room for staff	1

BUILDING NO: 6 (2 floors)	
Small Animal Gynaecology Clinic	
Examination rooms	1
Operating hall	1
Hospitalization room for companion animals	1
Ultrasonography room	1
Clinical lab	1
Sterilization room	1
Reanimation rooms	2
Examination room for small farm animals	1
Hospitalization room for sheep and goats	2
Hospitalization room for pigs	2
Operating room for farm animals	1

BUILDING NO: 7 (2 floors)	
Department of Obstetrics & Gynaecology (administrative)	
Academic staff office	7
Research assistant office	3
PhD student study hall	1
Secretary	1
Laboratory	2
Support staff	1
Meeting room	1
Prof. Dr. Hüseyin Erk lecture hall	1
Library	1
Depot	1

ANNEX II. The List of Protocols Signed by FVMAU

1. The Protocol with Jockey Club of Turkey
2. Hyperimmune Serum Production Farm Protocol with the Ministry of Health, Public Health Agency
3. The Protocol with Turkish Medicines and Medical Devices Agency
4. Hippotherapy Horses Protocol with Yıldırım Beyazıt University
5. Haymana Farm Protocol with the Faculty of Agriculture, Ankara University
6. Lalahan Protocol with the General Directorate of Agricultural Research and Policies (TAGEM)
7. Bala Protocol with Arslanlı Ltd. Co.
8. Military Equestrian Training Centre Protocol with Turkish Military Academy of the National Defense University

ANNEX III. Translation of the “Letter to the Council of Higher Education for the Reduction of the Number of Students”

To the Presidency of Education Department of The Council of Higher Education,
27.10.2017, Ankara

Faculty of Veterinary Medicine Ankara University (FVMAU) has started training in the foreign language under the scope of internationalization studies in the academic year of 2015-2016. The total number of undergraduate students studying in Turkish programs at our faculty is 1208 and the total number of students studying in foreign language programs is 102. The overall number of undergraduate students is 1310. It is seen that these numbers are too high for a standard quality education where Turkish and foreign language education is being done at the same time with the restricted number of academic personnel.

Our Faculty is the first faculty in Turkey to be accredited by the European Association of Establishments for Veterinary Education (EAEVE), which is responsible for Accreditation of Veterinary Medicine Education Programs and Institutions in the European Union. Our faculty was re-visited by the same institution on November 2-6, 2015 and lost the approval status. It is reported that the number of students enrolled in the faculty by the expert team who carried out the visit is well above the number required for an ideal education in the faculty. Our faculty will be revisited by EAEVE on 26-30 March 2018.

Ankara University is among the top 10 universities classified as “The Research University” determined by Higher Education Council (HES) within the scope of "Regional Development Focused Mission Differentiation and Specialization Project". The reduction in the number of undergraduate students has also been shown as one of the predicted advantages of being a research university.

In the direction of all these developments, I would respectfully submit for your appraisal to inform our institution about the convenience of reducing the quota of undergraduate students who will make a new registration to our faculty in 2018-2019 academic year, in order to provide an ideal higher education in the faculty.

ANNEX IV. Horse Health Parameters Form

Horse Health Parameters Form

Owner _____ Date _____ Time _____ AM / PM

Horse _____ Breed _____ Age _____ Sex _____ Color _____

History _____

Reason for exam today _____

Findings (E) Excellent, (G) Good, (F) Fair, (P) Poor

General attitude and demeanor:

Bright, alert, responsive Quiet, alert, responsive Lethargic Mildly depressed Depressed

Comments _____

Appetite: Normal More than normal Less than normal Not eating

Comments _____

Body Condition (1-9) _____ **Skin and Coat** E G F P **Mane and Tail** E G F P

Comments _____

Movement: (*Normal, lame, wobbly, weak*) LF _____ RF _____ LH _____ RH _____

Comments _____

Head, face, throat looks and feels: *From front* Normal Abnormal *From sides* Normal Abnormal

Left eye: Normal Red Cloudy Watering Squinting Growth

Right eye: Normal Red Cloudy Watering Squinting Growth

Comments _____

Temperature _____ **Pulse** _____ **Respiration** _____ **Capillary refill time** _____

Mucous membranes Pink Pale pink Red Dark Toxic line

Pulse feels: Normal Weak Irregular **Heart sounds:** Normal Weak Irregular

Respiratory sounds: Normal Abnormal Comments _____

Gut Sounds: 0 absent, 1 fewer than normal, 2 normal, 3 more than normal Upper left side _____ Lower left side _____

Upper right side _____ Lower right side _____

Feet: Heat 0-5/Digital Pulse 0-5 LF ____/____ RF ____/____ LH ____/____ RH ____/____

Limbs look and feel: Normal Abnormal LF _____ RF _____ LH _____ RH _____

Body, neck, and back look and feel: Normal Abnormal _____

Under belly looks and feels: Normal Abnormal _____

Tail and under tail look and feel: Normal Abnormal _____

Sheath or udder looks and feels: Normal Abnormal _____

Other notes _____

Supervising Academician:

Student:

Signature:

Signature: