

Veterinary Education in Malaysia



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Faculty of Veterinary Medicine

Introduction

- ❑ The state of Penang was the first state in Malaysia to employ a government veterinary surgeon sometime in 1888
- ❑ In 1920, Y.M. Tengku Abu Bakar of Johore was the first Malay veterinarian to qualify from Western University and the first Chief Animal Husbandry Officer in the country
- ❑ During this period (1900's) the profession was mainly served by veterinary graduates from Australia, Canada, India, Pakistan, UK and USA



Veterinary Education

- ❑ The Faculty of Veterinary Medicine, Universiti Putra Malaysia (UPM)) was established in 1972 with the first student intakes to enroll Doctor DVM in 1973
- ❑ The first batch of 14 DVM graduated in 1978
- ❑ The programme is fully accredited by the Malaysian Veterinary Council (MVC) and the curriculum in-line with the AVBC, RCVS, and OIE requirements
- ❑ The graduates of the Faculty are almost assured of job placements upon graduation, and admission into the programme is highly competitive



Veterinary Education

- ❑ In 2009, Faculty of Veterinary Medicine, Universiti Malaysia Kelantan (UMK) was established as the second veterinary school in the country with first batch of students was graduated in 2014
- ❑ Malaysian Veterinary Council (MVC) is the statutory body for accreditation of DVM programme and keeps the register of licensed veterinarians in Malaysia
- ❑ Both DVM programme from UPM and UMK is accredited by MVC



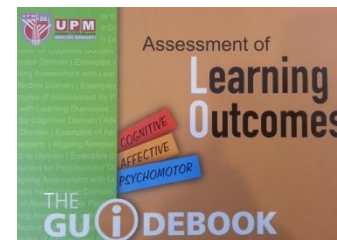
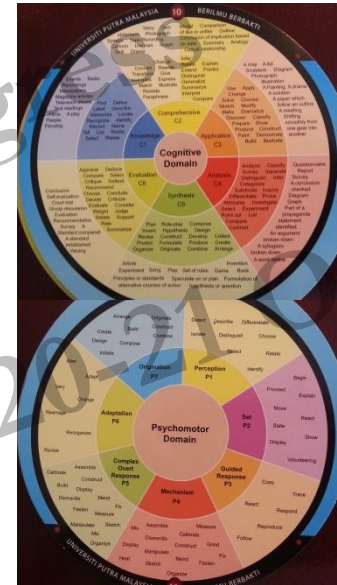
Veterinary Curriculum

- ❑ The DVM programme curriculum is based on the British, Canadian, Australian and American system with a balance of medicine and production based on the socio economic status of the country mainly agriculture and agro-based industry
- ❑ Curriculum revision is done every 5 years with feedback from industry, employer surveys, forums with industry, external assessors and examiner and required approval by various committees such as MVC, Advisory Committee, Senate and Ministry of High Education



Veterinary Curriculum

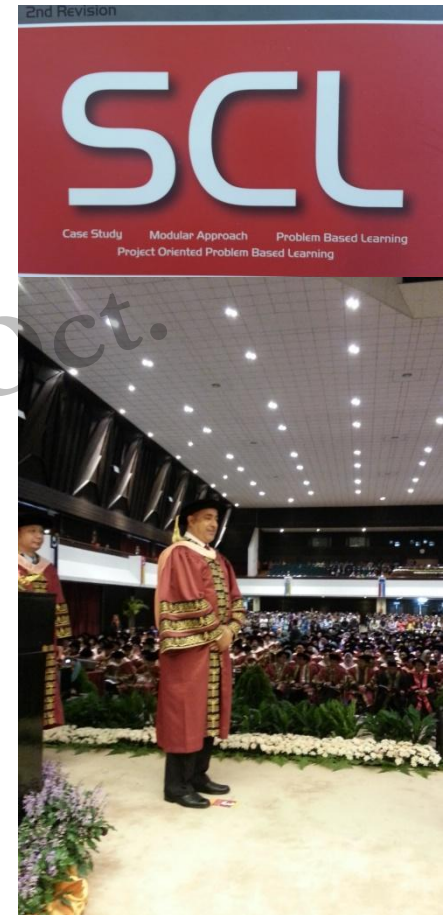
- ❑ The curriculum emphasis on learning outcomes based on teaching and learning taxonomy: cognitive domain, psychomotor domain, affective domain, social domain and soft skill elements
- ❑ Assessment is by objectives-based evaluation (OBE): that centers on the specification of objectives and the measurement of outcomes, and produce a day-one competency graduate



| SCORING RUBRIC FOR SOFT SKILLS ATTAINMENT | | SCORING RUBRIC FOR SOFT SKILLS ATTAINMENT | |
|--|--|--|---|
| AFFECTIVE DOMAIN - TEANGING (DQ0191- PENGURUSAN TAMAN) | | AFFECTIVE DOMAIN - TEANGING (DQ0191- PENGURUSAN TAMAN) | |
| A1 Receiving | A2 Responding | A3 Valuing | A4 Organizing Values |
| Accepts the importance of the task and responds accordingly. | Agrees to work in a team without being directed. | Appreciates and agrees to work in a team without being directed. | Values the importance of the task and responds accordingly. |
| A1 Receiving | A2 Responding | A3 Valuing | A4 Organizing Values |
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Veterinary Curriculum

- ❑ The approach in teaching and learning focus on **student centered learning (SCL)** such as problem based learning (PBL), case study, modular approach, project oriented problem based learning (PoPBL), computer assisted learning (CAL) and independent project
- ❑ **Post graduate training** such as Master and PhD programmes, **internship** and **residency** programmes, **specialists** as well as **lifelong learning** and **continuous professional development** are encouraged to the graduate to enhance their competency and meeting the profession challenges globally



Transformation of Veterinary Education

- ❑ Veterinary education in the country is in a process of transformation to address issues of globalization and changes in scenarios such as **One Health**, biosecurity, bioterrorism, transboundary diseases, exotic animal medicine, economic, entrepreneurship, leadership, information technology, halal, food safety and food security



Transformation of Veterinary Education

- ❑ **Stakeholders expectation** such as day one competency, soft skills, communication, global recognition, international accreditation, animal behaviour, welfare, ethics, public education and environment friendly as well as **specialization** such as post graduate, internship, residency, specialists and lifelong learning and continuous professional development are equally important in veterinary education
- ❑ The curriculum is critically reviewed and the veterinary school is prepared for **international accreditation**



International Accreditation by AVBC

❑ AVBC has set the following 12 Standards for Accreditation

1. Organisation
 2. Finances
 3. Facilities and equipment
 4. Academic and support staff
 5. Admission and progression
 6. Students and learning support
 7. Curriculum
 8. Assessment
 9. Pre-and para-clinical animals and related resources
 10. Clinical skills development
 11. Continuing and higher education and research
 12. Outcomes assessment
- ❑ *Version 2.1, February 2015* © Australasian Veterinary Boards Council Inc. (AVBC)
 - ❑ Initial contact in Dec. 2014 during AVBC meeting in Melbourne Australia
 - ❑ AVBC Accreditation Committee FVM, UPM
 - ❑ SER was submitted to AVBC on 5 May 2016
 - ❑ Consultative Site Visit on 5-8 September 2016
 - ❑ Final Visit / Audit in 2017

Quality Management System

- ❑ In July 2000, the Faculty was awarded the comprehensive MS ISO 9001:1994 certification that encompasses undergraduate and graduate studies, research, administration, continuing education, and professional and veterinary hospital services
- ❑ In December 2011, UPM was awarded the comprehensive MS ISO 9001:2008 certification
- ❑ In April 2010, UPM awarded Certificate of Self-Accreditation Status from Malaysia Qualifications Agency (MQA)
- ❑ In 2008, the Faculty was accredited with MS ISO/IEC 17025:2005 for veterinary laboratory services
- ❑ In September 2014, University Agricultural Park (TPU) was awarded Malaysia Good Agriculture Practice (MyGAP)
- ❑ In 2016, NCO MyOHUN was awarded the ISO 9001:2008 certification



Veterinary Education

- ❑ The admission of student in Malaysian veterinary schools is very competitive and only highly qualified candidate with good academic achievements and high interest in the programme such as first choice for the programme will be successfully enrolled into the programme
- ❑ Currently, only about 100 and 40 places are available for new national student intakes in Faculty of Veterinary Medicine UPM and UMK, respectively, and about 5-10% full-fee international or overseas students which is over and above of the national student intakes



Veterinary Education

- ❑ Recent trend shows that females dominate the veterinary programme in the country
- ❑ Many Malaysian enrolled their veterinary programme in the veterinary school in the regions and a few in the west due to the high competitiveness of veterinary programme in the country



Veterinary Education

Undergraduate

- **DVM**

- ✓ 5 years programme (186 credits hrs)
- ✓ Accreditation of DVM programme
Malaysian Veterinary Council (MVC)

Post Graduate

- **PhD, MVSc & MS**

(more than 32 fields of studies)

- **MVM**

(13 fields of study)

- **Internship & Residency (MCVS)**

Academic (80) & non-academic staff (198)

| | |
|-----------------------|------|
| ➤ Professor | 14 |
| ➤ Visiting Professor | 3 |
| ➤ Adjunct Professor | 2 |
| ➤ Professor Emeritus | 3 |
| ➤ Fellow Consultant | 1 |
| ➤ Associate Professor | 18 |
| ➤ Senior Lecturers | 34 |
| ➤ Tutors/TAM | 11/8 |

- ✓ Undergraduate students (UGS): **514**
- ✓ Academic staff (ACS) : **80**
- ✓ Ratio ACS:UGS – **1:6.43**
- ✓ Support staff (SS) - **198**
- ✓ Ratio of (ACS + SS) : UGS – **1:1.85**
- ✓ Ratio of ACS:SS – **1:2.48**

DVM Students

✓ DVM students - 514

DVM1(94), DVM2(105), DVM3(118), DVM4(89), DVM5(108)

✓ Foreign students - 10 (2%)

Fiji (2), Sri Langka (2), India (1), Singapore (1), USA (1), Mauritius (2), Japan (1)

✓ DVM graduates since 1978 - 2016 (1691) (78%)

1978 (14) & 2016 (101)

Awards

✓ FVM - 51 Excellence Academic Awards

✓ UPM - 7 Excellence Academic Awards



Post Graduate Students

| No | Country | PhD | MVSc | MS | MVM | Total |
|--------------|----------|-----------|-----------|-----------|----------|------------|
| 1. | Algeria | 0 | 1 | 0 | 0 | 1 |
| 2. | Malaysia | 24 | 26 | 61 | 6 | 117 |
| 3. | India | 1 | 0 | 0 | 0 | 1 |
| 4. | Iran | 2 | 0 | 0 | 0 | 2 |
| 5. | Iraq | 28 | 3 | 1 | 0 | 32 |
| 6. | Libya | 1 | 0 | 1 | 0 | 2 |
| 7. | Nigeria | 25 | 2 | 6 | 0 | 33 |
| 8. | Oman | 1 | 1 | 0 | 0 | 2 |
| 9. | Pakistan | 5 | 0 | 1 | 0 | 6 |
| 10. | Somalia | 1 | 0 | 0 | 0 | 1 |
| 11. | Sudan | 2 | 1 | 0 | 0 | 3 |
| 12. | Yemen | 1 | 1 | 0 | 0 | 2 |
| TOTAL | | 91 | 35 | 70 | 6 | 202 |



| No | Programme | Intakes 2014/2015 |
|--------------|-----------|-------------------|
| 1 | PhD | 16 |
| 2 | MS | 15 |
| 3 | MVSc | 14 |
| 4 | MVM | 0 |
| Total | | 45 |

| No | Programme | Graduated in 2014/2015 |
|--------------|-----------|------------------------|
| 1 | PhD | 9 |
| 2 | MS | 8 |
| 3 | MVSc | 7 |
| 4 | MVM | 5 |
| Total | | 29 |

Faculty Awards

- ✓ FVM - Best Thesis for PhD, MVSc and MS & Best MVM Students
- ✓ UPM – Best PhD and MS Thesis



Research

5 top research areas of the Faculty

- ✓ Veterinary Biologics and Pharmaceuticals
- ✓ Ruminant Diseases and Herd Health Management
- ✓ Diagnostic Technology on Animal Diseases
- ✓ Veterinary and Comparative Oncology
- ✓ Animal Model in Biomedical Research

2 new research programmes

- ✓ Edible Bird Nest Swiftlet: Production, Health and Product Quality
- ✓ Zoonotic and Emerging Diseases

Research findings are incorporated in courses in the DVM and postgraduate programmes and also used as important resource material in student centered learning such as case studies and PBL

Final Year DVM project

CoE - Swiftlets

Emerging Swiftlets Industry in Malaysia

RC (CoE) - Ruminant

Ruminant Health and Production

RC (CoE) - Wildlife

Biology, Health, Captive Breeding and Conservation

CoE - Vaccine and Therapeutic (IBS)

Conventional and new generation of vaccines and rapid diagnostic kits

Research Programme – 14

Veterinary Schools

- ❑ There is a significant disparity in universal recognition of the veterinary qualification from veterinary schools between the major blocs of the developed and the developing countries.
- ❑ Graduates from veterinary schools in developing countries are not widely recognized, and they and their countries may therefore be at a significant disadvantage
- ❑ It is urgently needs to develop a long-term strategy toward global recognition of the veterinary qualification



Veterinary Education

- ❑ There is a society expectation that veterinarians everywhere will all have graduated at the same standard and have the same basic competencies or at least meeting the minimum standard and competencies
- ❑ These competencies must enable the profession to deliver the wide range of expertise and services required today and in the foreseeable future



Veterinary Education

- ❑ Currently, some regional blocs of accreditation operate around the world, and they encompass a significant proportion of the veterinary profession. The major accrediting bodies are based in North America, Europe, the United Kingdom and Australasia namely;
 - ✓ the American Veterinary Medical Association (AVMA)
 - ✓ European Association of Establishment for Veterinary Education (EAEVE)
 - ✓ Royal College of Veterinary Surgeon (RCVS) and
 - ✓ Australasian Veterinary Boards Council (AVBC), respectively



Veterinary Education

- ❑ The World Organization for Animal Health or *Office International des Épizooties* (OIE), has recently shown great interest in harmonizing veterinary programme in the world
- ❑ Four OIE global conferences on veterinary education were conducted: first in Paris France in 2009, second in Lyon, France in 2011, third in Foz de Iguazu, Brazil in 2013 and the fourth in Bangkok Thailand in 2016
- ❑ In addition, many meetings were conducted sub-regionally by OIE regional offices



Veterinary Education

- ❑ In Asia, the establishment of Asian Association of Veterinary School (AAVS) in 2000 and South East Asia Veterinary School (SEAVSA) in 2010 is partly aimed in harmonizing of veterinary school education in the regions by setting of minimum requirement for the veterinary school in the region and towards establishment of Regional Veterinary Accreditation Board



Professional Services



The University Veterinary Hospital (UVH)
Veterinary Laboratory Diagnosis (VLSU)
CENTRAS (The Centre for Tropical Animal Production and Disease Studies)
Consultancies and Extensions
Laboratory Animals Resources
Animal Facilities



SIRIM
CERTIFIED TO ISO 9001

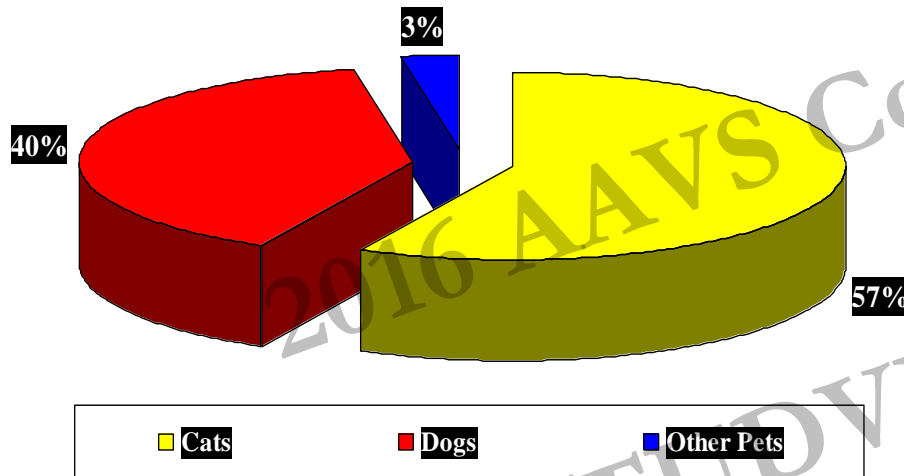


MS ISO/IEC 17025

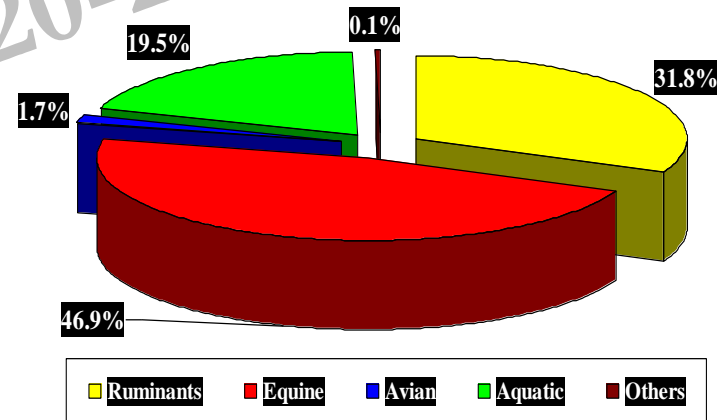


University Veterinary Hospital

COMPANION ANIMALS



FARM ANIMALS & EQUINE



✓ No of cases:

- UVH: 17,000 per year
- VLSU: 8,500 per year

CPD and Other Activities

- ✓ No Workshop/Seminar/Short Courses – 35 per year
- ✓ CPD points through MVC

- ✓ **Consultancies and Extensions**
- ✓ **Animal Facilities and Laboratory Animals Resources**
- ❖ (RMK 11 - Animal Research Centre – Animal Testing and Breeding)
- ✓ **Edupark Programme**



Students and Staff Activities

- ✓ PutraBiz@Vet
- ✓ Dogathon
- ✓ Pro-kasih
- ✓ IVSA
- ✓ Zoologico
- ✓ Silaturahim
- ✓ Ceriathon
- ✓ VetSport
- ✓ VetCamp



High Impact Collaborative Initiative

Play a leading roles

- ✓ Asian Association of Veterinary School (AAVS)
- ✓ South East Asia Veterinary School Association (SEAVSA)
- ✓ South East Asia One Health University Networking (SEAOHUN)
- ✓ The Association of Institutions for Tropical Veterinary Medicine (AITVM)



- ✓ OiE, FAO and WHO
- ✓ MoU/MoA/Collaboration – institutions and universities in United Kingdom, Europe, USA, Australia, Asia and South East Asia

Conclusions

- ❑ The veterinary education in Malaysia is recognised globally and accredited by MVC, and in the process of international accreditation
- ❑ It is in a process of transformation to meet challenges in a today borderless world
- ❑ The profession deals with health and disease in vertebrates, including human
- ❑ It has comparative medicine as its foundation and serves society as its principal purpose



Conclusions

- ❑ It needs to transform from a traditional clinical approach to one that fully serves society
- ❑ Veterinary education needs to address issues and changes in new scenarios, stakeholder expectation and specialization of the profession
- ❑ Reengineering of the profession may yet to consider critically in a near future by adopting an educational system that combines substantive undergraduate tracking, compulsory internship and designated licensure



Conclusions

- Effective and strong collaboration between veterinary schools, veterinary statutory bodies, veterinary services, veterinary associations and global players in veterinary education is a need to ensure the success of the veterinary education and profession serves to the society nationally and globally





Thank You



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WITH KNOWLEDGE WE SERVE