

Commentary article

Benefits and outputs for veterinary education following five years of close collaborations between Chattogram Veterinary and Animal Sciences University, Bangladesh and University of Bristol, UK

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1. INTRODUCTION

Over the last five years, collaborations between our universities, Chattogram Veterinary and Animal Sciences University (CVASU) and Bristol Veterinary School, have involved multiple veterinary education projects. These have led to research studies, workshops, new course materials, conference presentations, and peer reviewed journal publications and the initiatives have helped to promote and enhance veterinary education in Bangladesh and internationally.

2. CLINICAL SKILLS

The first collaborative project was in January 2019 when a team from Bristol ran a 2-day workshop at CVASU to promote approaches to clinical skills teaching that will benefit animal welfare and enhance student learning and skills. Veterinary clinical skills training is evolving rapidly around the world with an increasing interest in opening clinical skills laboratories and using different models in teaching. The workshop was supported by a travel grant from the charity Universities Federation for Animal Welfare (UFAW) and OIE Twinning Veterinary Education Twining Project between CVASU

and Tufts Cummings School of Veterinary Medicine, USA. It was attended by 40 delegates representing eight of the veterinary schools in Bangladesh and the only veterinary school in Sri Lanka, as well as local field veterinarians and the Chief Veterinary Officer (Central Veterinary Hospital in Dhaka) for Bangladesh. During the visit, the first clinical skills laboratory was opened at CVASU, and the initiative has led to several further projects.

Following the workshop, a study was undertaken to identify the most important clinical skills for veterinarians in Bangladesh as the information would help prioritize the development of clinical skills learning resources, including models for the clinical skills laboratory (Clinical Skills Centre). An initial list of skills was created from national and international sources, such as accreditation standards. An online survey was then used to get input from veterinarians (n=215) and final-year students (n=115) on the importance of each skill for new graduates, resulting in a ranked list. The most important skills included injection techniques, animal handling, clinical examination, and basic surgical skills. The study has been published (Paul et al., 2023) and the

project won an award for ‘Internationalising Veterinary Education’ at the Veterinary Education Symposium in Nottingham, UK (July 2022).

A further project is currently being supported by the university and a charitable donation to open an additional fully equipped clinical skills laboratory at the farm-based campus of CVASU in Hathajari. The team is developing a range of learning resources including online pre-work modules for students (in Google Classroom), clinical skills models, instructional materials for teaching, and will introduce assessments using Objective Structured Clinical Examinations (OSCEs).

3. INTERNSHIP (WORK-BASED LEARNING)

Two studies have focused on work-based learning (WBL), which is commonly known as the final year internship in Bangladesh. The first study (Sattar et al., 2023) was supported by a grant from the American Association of Veterinary Medical Colleges (AAVMC). A survey was used for students to provide feedback on their experiences. The findings were further explored in focus groups with students, recent graduates, teachers, and placement providers. It was clear that during the internship students were able to observe, assist with, and perform a range of valuable clinical and professional skills. Future recommendations included reviewing placement selection and time allocation, improving communication between all stakeholders, building further collaborations with placement providers, and managing the administrative requirements for the programme. The second study (Mohsin et al., 2023) focussed on factors that impact the effectiveness of the communication systems during WBL i.e., between the universities, placement providers, and students. Surveys and focus group discussions were conducted with all relevant stakeholder groups. The results highlighted opportunities to enhance communication, including greater use of electronic and social media tools, and identified ways that some aspects of the existing system could be improved to optimise the internship's contribution to student learning and capitalise

on the benefits of the programme for all involved.

4. PROFESSIONAL SKILLS

Professional skills are part of Day One Competences published by national as well as international accreditation bodies, but veterinary schools in Bangladesh have limited associated teaching within their existing curricula. Therefore, a study was undertaken to identify the most important professional skills for veterinarians in Bangladesh (Chisty et al., 2023). It involved focus groups with teachers and students from CVASU and other veterinary schools, practitioners who supervise students during the internship, recent graduates, and clients. All groups considered that professional skills were essential for a successful veterinary career. Analysis of the data identified specific skills as communication, ethical conduct, teamwork, career awareness, finance and entrepreneurship, lifelong learning, time management, and self-appraisal. The project team won the award for ‘Internationalising Veterinary Education’ at the Veterinary Education Symposium in Edinburgh, UK (July 2023). The results were also used to guide the development of a 1-week blended learning course at CVASU that combined online pre-work and in-class seminars and plenary talks. It was piloted with final year veterinary students and received enthusiastic feedback. A new project, involving an international team from Ireland, Romania, Grenada and Bangladesh, and funded by AAVMC, is exploring how professional skills are taught and assessed at veterinary schools around the world, with a focus on challenges and opportunities around sustainability within the curriculum.

5. OTHER PROJECTS

The teams at CVASU have been, and continue to be involved in other veterinary education collaborations and projects. For example, an open-access online course on evidence-based veterinary medicine (EBVM) was developed by an international team with the support of Royal College of Veterinary Surgeons (RCVS) Knowledge. It consists of a series of online modules based on the five As (Ask, Acquire, Appraise, Apply and Assess) with worked

examples and quizzes. In a study, feedback was gathered from stakeholder groups using a survey and interviews. This led to an updated version of 'EBVM Learning', an online conference and development of case examples (Sellers et al. 2021). Another project has recently been funded by AAVMC and MSD. It brings together a team from UK, The Netherlands, Argentina and Bangladesh who are developing case-based learning on antimicrobial prescribing in farm animals for veterinary students.

6. CONCLUSION

In conclusion, the CVASU veterinary education research and development team have fostered highly successful collaborations, have received international and locally funded grants, and have been recognized for their initiatives won several prizes at national and international conferences. How collaboration is beneficial and the team and skills in educational research and development continue to grow and will support the ongoing progress in veterinary education locally, nationally and internationally.

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