

Animal Ethics Committees: a veterinary practitioner's point of view

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After nearly 35 years as a practising veterinarian I was approached in August 2003 to become a veterinary representative on the University of Western Australia's (UWA) Animal Ethics Committee (AEC). UWA is the organisation in Western Australia that receives 80% of funding from the National Health and Medical Research Council (NHMRC) for medical and related research and as such attracts many well qualified and highly motivated researchers with high expectations and challenging projects.

UWA is Western Australia's oldest and financially, most well endowed tertiary educational institution. My initial thoughts were that this could be a very challenging position. There are lots of academics, some with a long history of academia but my concern was how pragmatic and practical will they be? There is a lot of academic language, new concepts, complex applications – this could be harder than I thought? What do I know about mice and rats anyway?

As usual in these situations I resolved to not worry about things I had no control over and make sure I knew everything I was supposed to be advising upon. There were several initial questions:

- What is the structure of the committee?
- How does it operate?
- Who is it responsible to?
- Why do we need an ethics committee anyway?
- Where does it sit in the hierarchy of the Institution?

What is the structure of the committee?

There are four categories of membership.

1. Veterinarians (Category A) who have experience relevant to the activities of the Institution. Veterinarians who lack this experience must familiarise themselves with the biology and clinical characteristics of the species of animals used.
2. Persons with substantial recent experience in the use of animals in scientific or teaching activities (Category B) generally entail possession of a higher degree in research. They are generally researchers employed by the AEC's own institution and so sometimes have a conflict of interest when their own projects are being assessed for approval.
3. Persons with demonstrable commitment to, and established experience in, furthering the welfare of animals, who are not employed by or otherwise associated with the institution, and who are not involved in the care and use of animals for scientific purposes (Category C). Veterinarians with specific animal welfare interest and experience may meet the requirements of this category.
4. Persons who are both independent of the institution and who have never been involved in the use of animals in scientific or teaching activities, either in their employment or beyond their under-graduate education (Category D). These members should be viewed by the wider community as bringing a completely independent view to the AEC, and must not fit the requirements of any other category.

In addition to the above, the institution should appoint to the AEC a person responsible for the routine care of animals from within the institution. This is not mandatory.

The Chairperson should either hold a senior position in the institution, or if an external appointee, be given a commitment by the institution to provide the necessary support and authority to carry out the role.

The Chairperson should possess the following attributes:

- an ability to bring impartiality to the task;
- the skills to manage the business of the AEC;
- an ability to communicate, negotiate and to resolve conflict; and
- an understanding of the ethical and welfare issues involved in the use of animals for scientific purposes.

How does the committee operate?

Researchers submit a completed application form to the Animal Ethics Office where it is added to the list of other applications to produce an agenda for the next meeting scheduled. These new applications for research are received from highly qualified scientists, world-leading in their field of expertise. They have been signed off by the Heads of School or Deans and are then scrutinised by the committee to assess their worth before being allowed to proceed. Once approved permission is granted to conduct the research using the specific conditions detailed in the application.

All applications must satisfy the Three Rs—Replacement, Reduction, and Refinement.

Replacement – means that techniques that totally or partially replace the use of animals must be sought and used wherever possible

Reduction – only the minimum number of animals can be used sufficient to satisfy scientific and statistical validity.

Refinement – animals must be suitable, be accommodated properly, have pain and distress alleviated. Animals should be transported, housed, fed, watered, and used under conditions that meet species-specific needs. The best available scientific and educational techniques must be employed and researchers are competent in used procedures. Projects should be designed to avoid both pain and distress; if not possible pain or distress must be minimised. Pain management and or anaesthesia should be used where appropriate and be suitable for each species.

“Death as an endpoint” must be avoided.

Each application must be “stand alone” so all details of techniques should be detailed in every application.

Who is the AEC responsible to?

The AECs have to work within the guidelines of the “Australian code of practice for the care and use of animals for scientific purposes.”

Thus the AECs are primarily responsible to the animals and their proper care. They also owe responsibility to the institution, the funding bodies, and the researchers.

They should act in the best interests of all parties to resolve conflicts and investigate non-compliance.

Why do we need an AEC?

Arguments I have heard over the years as to why AECs are not needed:

- The people doing the research have been conducting this type of work for years. They are the world’s leading researchers in their field.
- These committee people do not have the intellectual capability of understanding what is to be achieved.
- Animals are only animals so do not need to be treated with respect.
- The institution has very little in financial resources, there are greater needs elsewhere, and so little money is available to support the work of the AEC and its office.
- The research team can teach new members any techniques required.

These are all arguments that have a ring of arrogance and inhumanity about them that make an AEC all the more necessary. But most importantly the AEC is the insurance policy for the researchers. Any research done in compliance is OK; non-compliance can result in prosecution under the Animal Welfare Act as being an act of cruelty.

Where does the AEC sit in the institutional hierarchy?

Who is answerable to whom? Where does the Animal Ethics office fit in to the overall structure of the institution? What about the Animal Welfare Officer? How much veterinary involvement exists?

At the University of Western Australia, there is a number of staff within the Animal Ethics office that makes the process work: Animal Welfare Officer; Veterinary Advisors; Office Manager; Administrative assistants.

The Office is overseen by the Vice Chancellor (Research). However, the AEC remains a separate independent body from the institution and its decisions cannot be overruled by the University.

Our valuable Office Manager coordinates all operations including: application processing; facility inspections; meeting agendas and minutes; and liaison between Researchers, University and Animal Ethics Office. She is assisted by 2 clerical assistants.

Role of the veterinarian?

At the University of Western Australia we have recently appointed a veterinarian for the first time to the position of Animal Welfare Officer. This has proved an inspiring choice as professional veterinary knowledge is now available to researchers through either her or any of the other veterinary advisors.

Any problems (unexpected deaths, anaesthetic problems, excessive weight loss, etc.) now have professional help just a phone call away.

UWA has always had a veterinary advisor but in times past it was thought to be low priority so the position was only part time.

Recently veterinary advisor staff numbers have risen from 1 part-time to 5 totalling 3 full-time equivalents. They are operating in both the Animal Ethics Office and Animal Care Services. One position is a specialist veterinary anaesthetist. Today the veterinary profession is at the forefront of medical research, clinical practice and surgical technique development within the medical profession under the umbrella of One Health.

The veterinarians help develop the Standard Operating Procedures (SOPs). This is done in conjunction with the Animal Care services staff and in the University of Western Australia's case a Category C member who ran the Murdoch Veterinary School farm for 35 years so is a wonderful resource. SOPs are written and reviewed before being finally endorsed by the entire AEC.

Every 3 years a small committee of 2-4 experienced AEC members representing the various

categories spends several days interviewing committee members, researchers and attending an AEC meeting. Their report is submitted to the AEC and the institution with various recommendations. These recommendations are then acted upon (or rejected).

But to return to those heady days of 2003. The great day arrived for my first meeting. Projects were presented and discussed, approved or sent back for editing or amendment. Some of the applications ran to 70+ pages of closely reasoned arguments, complex concepts, and statistics only a mathematician with post graduate qualification could understand. And they were full of cut-and-paste errors, spelling and grammatical errors, errors in the maths and much of the committee's time was wasted on non-ethical matters.

Several erroneous assumptions had been made by me:

1. The applications had actually been read by the people supervising the researchers or even by the researchers themselves.
2. What I thought about words with specific meanings was not correct, e.g., "aseptic technique" to me meant a complex behaviour resulting in sterile surgery. To some researchers it means they have washed their hands before entering the building!

As the meetings continued it was apparent that there needed to be greater veterinary input – we were dealing with animals after all.

There needed to be a change in thinking by the researchers, committee and institution. The funding model for animal research needed investigation. The funding models for institutions need modifying.

It is not my intention today to cover these topics but they are important planks in the research administration that need addressing in Australia.

In recent years in Western Australia the role of veterinarians as welfare officers, veterinary advisors and anaesthetists has been a major catalyst in the transformation of the professionalism of animal research within our institutions.

It has taken many years of hard lobbying by AEC members and External Triennial reviews but the benefits are showing through with acceptance by researchers that there are skills they lack and some other professions actually do know more than they do!

Summary

The AEC process is a necessary, complex function of animal research independent of the institution it represents.

More sophisticated funding models for research need to be pursued to achieve better outcomes since there are often insufficient funds for the maintenance and equipping of laboratories where the research is taking place.

Greater acknowledgement by the scientific community of the role and benefits of other related professions, e.g., veterinarians, in research will produce better outcomes.