

A UK example of balanced inquiry into the ethics of animal experimentation

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Abstract

In 2003, the UK Nuffield Council on Bioethics established a Working Party to examine the ethical issues raised by the use of animals in research. A report was published in 2005 which aimed to clarify the debate and help people think through the scientific and ethical issues that are raised. Despite the wide of views represented on the Working Party, the report includes a 'Consensus Statement', in which all acknowledged the ethical basis of the views of others and agreement on several important issues is identified. All members of the Working Party acknowledged that, as with other ethically contentious issues, any society needs to settle on a single policy for animal research. Steps therefore need to be taken to reduce as far as possible existing disagreement within society, and the Working Party sought to make unambiguous recommendations in specific areas of policy and practice in order to help to achieve this. In particular, all members accepted the moral imperative of using currently available alternatives and of developing scientifically rigorous and validated alternatives where gaps exist. The Working Party also suggested ways to improve the quality of the debate, for example, by improving the quality of information available.

Keywords: ethics, consensus, moral status, 3Rs, public debate

Introduction

Research involving animals has been the subject of intense debate in the UK and elsewhere. Too often this debate is presented in a polarised manner, differentiating only between those 'for' or those 'against' all animal research. There is in fact a continuum of views between these two ends of the spectrum.

The Nuffield Council on Bioethics is an independent body that examines ethical issues raised by new developments in biology and medicine. It has published a report, *The ethics of research involving animals* (Nuffield Council on Bioethics, 2005), which sought to clarify the debate on animal research and help people think through the scientific and ethical issues.

Materials and methods

A Working Party on the ethics of research involving animals was set up in 2003 and had 18 members. These included academic and industry scientists, philosophers, members of animal protection groups, and a lawyer. To inform our discussions, we sought advice from a wide range of experts and held a public consultation for three months. The Working Party held nine fact-finding meetings. Five of these took the form of discussions with experts and stakeholders at the offices of the Nuffield Council. Four meetings

took place at animal research facilities, where members familiarised themselves with the practice of research, and discussed scientific, ethical and legal issues with those involved in the conduct of research. We also held a three month public consultation in which people were invited to respond to a consultation document: 168 responses were received. The deliberations of the Working Party were informed by all the contributions it received and a report was published in May 2005.

Results

The moral status of animals

The debate about research involving animals is often reduced to the question of defining the moral status (or moral importance) of humans, and animals. We identified three views:

- There is something special about humans, and all humans possess some morally vital property that all animals lack (the *clear-line view*).
- There is a hierarchy of moral importance with humans at the apex, followed by primates and then other mammalian species such as pigs, dogs, rats and mice and other vertebrates such as zebrafish, with invertebrates (for example fruit flies) and single-celled creatures arranged towards the bottom (the *moral sliding scale view*).

- There is no categorical distinction between human and non-human animals, and that they are moral equals (the *moral equality view*).

It could easily be assumed that the justification for using animals for research (and other uses) depends entirely on the question of the relative moral status of humans and animals. Then the defence of animal use would be the same task as showing that only humans have moral status, or that their status is in some way 'higher' than that of animals. But this assumption might be too simplistic. Suppose it was possible to establish that the clear-line view is true and that all humans are more important moral subjects than all animals. Yet, this is not enough to show that animals can properly be sacrificed for human purposes. For it may be that although humans are morally more important than animals, they have a moral duty of *stewardship* to 'lesser' beings, rather than a right to treat them as they please.

Also, even if humans and animals are considered to be moral equals, it does not necessarily follow that harming animals in research should not be carried out. Moral equality is simply the doctrine that humans and animals are moral equals. In principle, this view could allow for the conclusion that harmful experiments should be conducted both on animals and humans.

We concluded that looking at moral status can obstruct the debate more than it illuminates it. Instead the Working Party suggested that the proper moral treatment of a being depends on the characteristics it possesses, rather than simply on the species to which it belongs. We identified five morally relevant features:

- Sentience (the capacity to feel pleasure and pain);
- Higher cognitive capacities (for example, knowledge of good and evil, possession of self-consciousness, possession of freedom and being able to act in a moral manner);
- The capacity to flourish (the ability to satisfy species-specific interests);
- Sociability (being a member of a community);
- Possession of a life (attributing value to life itself).

What weight should be given to each of these morally relevant features in considering whether or not research is acceptable? Are they factors to be weighed against human benefit? Should they be understood as absolute limits? For example, should any use of animals that are capable of suffering be prohibited, or only the use of those that have higher cognitive capacities? Many people seem to support a 'hybrid' approach. This involves a combination of laying down definite limits (for example: 'animals with higher cognitive capacities, such as chimpanzees, should never be used in research') and

weighing up the costs and benefits of a particular action (for example: 'research that causes minimum pain to a mouse is acceptable if it ascertains the safety of an important chemical'). This approach can also be found in the UK Animals (Scientific Procedures) Act 1986.

The ethical debate comes down to disagreement on two questions: What are the definite limits? And how do we weigh the different morally relevant factors within the permitted limits? To provide answers, we need to consider at least five further related questions:

- What are the goals of research?
- What is the probability of success?
- Which animals are to be used?
- What effect will there be on the animals used in the experiment?
- Are there any alternatives?

After considering these questions, our group agreed that there was no single view to which they could all subscribe, which reflects the range of views that exists in society. Also, we found that the debate wasn't just a case of those 'for' and those 'against' animal research, as it was often portrayed in the media. Our discussions found the debate to be more complex, and that there is in fact a 'spectrum' of views. In the report, we describe four possible ethical positions, which represent points on a continuum:

- *The 'anything goes' view*

If humans see value in research involving animals, then it requires no further ethical justification (no member of the Working Party took this position).

- *The 'on balance justification' view*

Research involving animals is morally acceptable if the costs are outweighed by the benefits, but every reasonable step must be taken to reduce the harm to animals.

- *The 'moral dilemma' view*

Most forms of research involving animals pose moral dilemmas. Animal research is morally unacceptable, but so is avoiding research that could be beneficial to humans or animals.

- *The 'abolitionist' view*

There is no moral justification for any harmful research on animals that is not to the benefit of the individual animal. Humans experiment on animals not because it is right but because they can.

In the report, no single viewpoint is advocated as 'right'. Rather, the reader is invited to decide which they find to be the most acceptable.

Reaching consensus

Despite the wide range of views that exist among our members, a 'Consensus Statement' that identifies agreement on several important issues was produced. For example, they agreed that, historically, animals

have been used in a wide range of scientific research activities that have provided many benefits to society. They also agreed that a world in which the important benefits of such research could be achieved without causing pain and suffering to animals must be the ultimate goal.

All members acknowledged that any society needs to settle on a single policy for practical purposes. Steps therefore need to be taken to reduce as far as possible existing disagreement, and we sought to make unambiguous recommendations in specific areas in order to achieve this.¹

We concluded that the concept of the Three Rs and the hybrid moral position underlying the Animals (Scientific Procedures) Act 1986 (some absolute limits, some weighing of the costs and benefits) could be accepted, or at least tolerated, by all those holding reasonable views. By fine tuning the regulations, relaxing some restrictions and introducing others, more people may be able to endorse the regulations than has been the case so far. Not everyone will be able to fully support this approach, but they may be able to tolerate it as a compromise, while continuing to campaign for changes in policy.

If this approach is to count as a fair process, all involved need access to relevant information about research involving animals in order to judge whether it is justifiable. In addition, the discussion must be conducted in a fair and informed manner, to permit all reasonable participants to argue their case. Aiming to force research out of the country through the use of violence and intimidation is no solution to the complex issues raised by the research. The Working Party agreed that the threat and use of violence and intimidation by a small group of activists to pursue the case against research on animals is morally unjustified.

Scientific validity of animal research

Historically, animals have been used in a wide range of scientific research activities that have provided many benefits to society, particularly in relation to the advancement of scientific knowledge, human and veterinary medicine, and the safety of chemical products. The Working Party concluded that animals can be useful models for studying human biology and the effects of medicines in humans. However, the way in which the costs to the animals are balanced with the medical benefits needs to be carefully judged. Aside from the continuing moral debate, each type of research or testing still must be judged on its own merits on a case by case basis. The Working Party recommended that the Home Office and major funders of research should consider ways of funding and carrying out evaluations of the predictability and transferability of animal research. As far as we know, to date, this has not been

satisfactorily carried out.

Improving the quality of the debate

It is unrealistic to assume that all animal experiments will end in the short term. It is crucial, therefore, to create a climate in which the necessity and justification for using animals is assessed and discussed fairly, and with due respect for all views. More can and must be done by all those involved to improve the quality of the debate on animal research. We recommended:

- Clearer information should be available on how many animals of a particular species experience pain and suffering during experiments, and to what degree and for how long. Statistics on animal research should be revised to reflect this.
- Researchers at animal research facilities must find more ways to open themselves to two-way dialogue in order to improve and sustain public trust.
- Animal protection groups and organisations representing those involved in animal research should produce fair and balanced information.
- Funding should be provided by the Government to identify and carry out novel ways of achieving stakeholder engagement and public debate on issues raised by animal research.
- The Government should produce suitable educational materials on animal research for use across the curriculum

The Three Rs

Scientific efforts to reduce, refine and replace animal research can help to lessen disagreement about animal research. For this reason, the importance of the Three Rs, and especially of the need to find replacements for animals, cannot be overstated. A range of alternatives have already been developed in different areas of research. There is a moral imperative to use currently available alternatives and to develop new alternative methods where gaps exist. We recommended that:

- A thorough analysis of the scientific barriers to Replacements should be undertaken by the UK's Animal Procedures Committee.
- Published papers should include more information on how the Three Rs have been applied in the work described.
- The ethical review process should play a more active role in promoting the Three Rs.
- We endorse the UK Government's Data Sharing Concordat, which promotes data sharing within the scientific community to reduce unnecessary duplication of experiments. We recommended its effectiveness should be monitored carefully.
- If various national and international authorities require animal testing to be carried out using

different study designs, a single chemical that is marketed in a number of countries might need to be tested several times. Harmonisation of test guidelines, so that a single study design is acceptable to regulatory authorities in many countries, is a very valuable way of reducing the use of animals in safety testing. We recommended that the UK makes it a priority to identify areas in which harmonisation is difficult.

Discussion: Developments since publication

The report has been downloaded from the Council's website over 230,000 times since May 2005 (up to end of June 2007). An 8-page 'Guide to the Report' is now also available.

Since the publication of the report, there have been several developments in the debate on animal research in the UK. The Nuffield Curriculum Centre and the Nuffield Council on Bioethics have worked together to produce a range of teaching resources on animal research which are designed to fit into science and citizenship lessons. The objective of the materials is to help students make informed decisions about the use of animals in research. The resources are available to download free from the Nuffield Council's website (www.nuffieldbioethics.org/go/aboutus/externalactivitiespage_908.html).

Y Touring, the Central YMCA's national touring theatre company, has produced a play called *Every Breath*, which tackles the issues raised by animal research. The Council sat on the advisory panel for the play. *Every Breath* has now completed its third national tour of schools, reaching thousands of young people.

The Serious Organised Crime and Police Act came into force on 1 July 2005 in the UK. It contains several clauses that aim to prevent animal rights extremism, for example, making it illegal to carry out demonstrations at private residences, with the intention of causing alarm or distress. It was recently reported in the *Guardian* (30 June 2007) that, apart from in Oxford where there is still a vigorous campaign against a new laboratory at the university, attacks at the homes of academic scientists who engage in animal research have ceased.

In terms of the provision of better information, the Animal Procedures Committee (APC) and Laboratory Animal Science Association are working on system for retrospective reporting about the level of suffering involved in experiments, and the severity bands used in the annual statistics are being reviewed by the APC and the European Commission. Other organisations have recommended journals include more information about the Three Rs, and the Royal Society has changed its publication policy accordingly.

In terms of developments with the implementation of the Three Rs, the National Centre for Three Rs (www.nc3rs.org.uk) was set up in 2004. It has grown into an active organisation which funds research on the Three Rs and carries out a range of initiatives to encourage uptake of the Three Rs. It works closely with funders of research and researchers themselves. In addition, the RSPCA has organised forums for lay members of Ethical Review committees to help build best practice in the Three Rs.

Conclusion

Many varied opinions were represented and argued throughout the course of our work. A respect for the beliefs of others enabled members of the group to agree on the Consensus Statement and to make recommendations, in particular on the Three Rs and improving the quality of the debate. While it was not possible to attribute to all members the recommendations presented on any one issue, all accepted that the recommendations are valid contributions to the debate. This approach, we believe, should contribute to fair and balanced discussions among individuals and aid decision making by those in government or other official and regulatory bodies.

Reference

Nuffield Council on Bioethics (2005) *The ethics of research involving animals*, Nuffield Council on Bioethics, London, available at: www.nuffieldbioethics.org/go/ourwork/animalresearch/introduction

Footnote

¹ Several recommendations aim to improve the conditions under which animals are used. All members of the Working Party endorsed them, but the endorsement should not be taken to imply the acquiescence to animal experimentation of those members who fundamentally oppose it. Some members would have preferred the recommendations to have gone further in specific areas, but they nevertheless did accept them as steps in the right direction.