

Ethical Issues in Research using animals



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Activity

- Which animals do you use in your institution for research

- _____

- _____

- _____

- Any religious or cultural issues around certain animals?

- _____

- _____

Transporting an animal.....



Are these ethical?



Use of animals in scientific and medical research

While controversial, it is an unavoidable fact that animal research has allowed the development of **medicines** and **vaccines, surgical techniques** and **advanced scientific understanding** in many areas.



Why the concern on animals?

- Incidences in which use of animals in research has resulted in controversies.
- Some scientists labeled Nazis or terrorists after using animals in their research.
- Labels in certain countries on products “Not tested on animals”
“Cruelty free”
- Animal advocates and animal protection societies believe that much current use of animals in research morally unjustified

Background to animal research

- Animal research is necessary for medical progress and therefore human health.
- Most animal research involves harming the animal subjects, provoking ethical concerns.
- Animals not autonomous and hence need additional protections
- Non harmful & harmful research with animals

Should animals be used as research subjects?



Animals should not be used for research - why?

1. Animals have rights!
2. Animals surely deserve to live their lives free from suffering and exploitation.
3. Animals are not ours to:
 - eat
 - wear
 - experiment on
 - use for entertainment
 - abuse



People for the Ethical Treatment of Animals

<http://www.peta.org/>

Do Important Ends Justify Harmful Means?

- Some argue that no need to use animals since all therapies must be tried on humans before they can be accepted for clinical practice.
- Rather than torment animals just go direct for humans (with appropriate protections).
- But at times animal research yields data useful to humans thereby reducing the risks to the humans in phase I and II.
- Animal research involves using animals for others benefit (without their consent) and to use animals as such reduces them to tools thereby disrespecting them.

Animals' Moral Status

-various views

- The view that animals have no moral status: The only reasons to protect animals' interests are human-centered reasons.
- The view that (sentient) animals have moral status: Animals' interests or welfare have some intrinsic (independent) moral importance.
- The Equal-Consideration Approach: We should give animals' interests as much moral weight as we give our *comparable* interests (e.g., the avoidance of suffering).
- The Sliding-Scale Model: we should give animals interest moral weight depending on cognitive, and social complexity

Questions

- Does death itself harm the animal??
- What constitutes well being for an animal?
- Who protects the animals
 - IRB
 - SPCA
 - Vets Associations
 - Researchers

Guidelines on research involving animals

- International guiding principles for research involving animals : Geneva: CIOMS ; 1985

Principle 4 – “Investigators and other personnel should never fail to treat animals as sentient and should regard their proper care and use and the avoidance or minimisation of discomfort, distress, or pain as ethical imperatives”.

What principles does AREC follow?

Follow 3Rs principles:

Replacement: Use alternative, non-animal methods to achieve the same scientific aim e.g. cell lines or combination

Reduction: Use statistical methods so that a smaller number of animals are required e.g. 5 in each group or change of strategy

Refinement: Improve the experiments so that animals do not suffer e.g. consult with veterinarian, established humane endpoint, manage pain.

ACUC application

- Qualifications of the PI/ applicant- **does he have the necessary skills?**
- Aim & objectives - **Are the specific aims, hypotheses and research questions clearly identified?**
- Experimental design – **Is the experimental design of the project in line with aim and objectives of the proposal?**



ACUC application

- Animal number – Is there adequate statistical or technical justification for the number of animals requested?
- Justification – Does the protocol adequately justify the use of live animals?

ACUC Application

- Pain, discomfort & distress - Has pain, discomfort and distress to the animal(s) been minimized or avoided to the fullest extent possible?
- What is the end of the trial? -Humane endpoint.
Death is not an endpoint.
- Benefit vs harm to animals - Is the harm to animal reasonable in relation to potential benefits of the proposal?

What are our obligations in animal research?

- Be aware of regulations and institutional policies
- Follow regulations and international guidelines
- Set up necessary structures (ACUC) and policies
- Follow the 3Rs
- Improve welfare of the animals

Conclusion

- Animal research very important in promoting human health
- Need to recognise the important roles the animals play in research
- Compensate the animals through improved living conditions and hygiene.
- Efforts to reduce the amount of suffering.
- Research should have value.
- Highly social animals need to be provided with extensive access to members of their own species.
- Some animals require special protections eg endangered species such as chimpanzees to avoid extinction.
- Killing needs to be as painless as possible (authorised experts)

Thank-you

