Discuss – whether or not we should use animals

Environment, Animals



The use of animals for medical research is a debatable issue with some claiming that for the benefit ofscience, medical research needs animals and testing on animals is a necessity for the progress of science. Others argue that it is unethical to use animals and any other form of life as some of this research would involve killing of the animals and this is completely unacceptable even for the sake of progress of science. Other alternative methods to killing and using animals should be used for research and study and animals should not be directly used, abused and killed. In fact people advocating protection of wild life and related policies are against the capture and indiscriminate use of nature's resources even if it is in the grab of betterment for humanity. This essay deals with both sides of the debate showing the advantages and disadvantages of using animals for testing for betterment and advancement of medical research.

Part I

Whyanimal testingis plausible and can be used

In most cases, most pharmaceutical companies try new drugs on animals first and also try new chemicals or use animal anatomy to understand human anatomy. Many people believe that medical research as practised by big pharmaceutical companies use animals unethically for business gains and profits. The medical companies have their own research and development units where new drugs are initially tested on animals, especially rats or guineapigs and the effects of these drugs are then generalized on to humans a many clinical symptoms of animals are similar to what is expected in humans.

Thus if new drugs are not effective or have adverse impact on animals, the same could be presumed in case of humans for the same drug. This generalization factor is important as companies and scientists claim that they use animals to understand the effects of drug on humans or simply to understand the structure and functions of human by studying animals as it would not be possible to study humans and their body parts directly and it would also be completely wrong to apply new drugs or use new medicines for illnesses on humans directly without knowing what effects these would have on the body.

In fact although before releasing a new drug in the market, companies conduct clinical trials on volunteers after testing these on animals and volunteers get paid for this. Yet the ethical aspect of this, or trying new drugs on humans is again debated but then this is the way medical research has to work otherwise new drugs will not be tested. It is again controversial whether new drugs could be tested artificially say with technical or robotic manipulation and whether drugs could be used on humans directly without testing on animals. How ethical would that be and thus there are two points here that touches on ethical issues.

In the first case, animal testing would be unethical and yet testing medicines directly on humans without testing on humans would again be unethical as adverse consequences can directly affect human volunteers. For this reason it is almost necessary to test new drugs on animals first before testing them on humans as long as there is no suffering to animals and as long as there is some general research progress expected from such tests.

Most people consider animal testing acceptable within limits. In one study by Fenwick and Fraser (2005), drug regulatory reviewers and pharmaceutical industry experts and scientists were interviewed to explore different perspectives on obstacles and opportunities of replacement, refinement and reduction or the three Rs in drug research and development (Fenwick and Fraser, 2005). The study found that most scientists and researcher generally tend to support the use of animals in medical research and suggested that the level of animal use is acceptable in pharmaceutical industry and replacing the use of animals would not be a feasible idea.

Part II -

Why animal testing is unethical and should not be used

In the study above by Fenwick and Fraser (2005) the three Rs have been considered as necessary in changing animal research. However this could be implausible as there are obstacles to applying the replacement or refinement of animal testing as there is a lack of non-animal alternatives and other alternatives may not fulfill the needs for statistical validity and industry. Also regulators could depart from certain patterns of animal use and in some cases commercial objectives are more important than following the three Rs. Less animal-testing could also jeopardize human safety according to some.

However three Rs with replacement and refinement in testing could mean genetically modified animals and better animal models with drug use on gene actions and changes. The re-use of animals and using sufficient number of animals are also some of the issues. In some cases regulatory studies are

combined so that animal data is minimized yet fulfill regulatory requirements.

Fenwick and Fraser (2005) suggested that following the three Rs would be in accordance with industry priorities and validation of alternative methods would also be necessary. Greater consensus would be required in certain areas of disagreement related to animal testing according to the authors and these are issues related to death and re-use of animals and also whether pilot studies and alternative methods would contribute to reduction in the number of animals (Fenwick and Frazer, 2005).

Thus animal use and testing is consider unethical due to matters related to death and reuse of animals and the use of too many animals could also be reduced with better more advanced tests that would require fewer samples and could be done more efficiently.

Part III -

Summary of both the views

Thus as seen, there are many reasons for which animal testing could be useful or even unethical. Death of animals would be suggesting against it and medial progress and usefulness for human drugs would be the strong points. It is important to develop alternative methods of testing that could replace the use of animals in medical research and according to Wilcox (1998), the USFoodand Drug Administration or FDA is committed to facilitating the development and validation of new testing methods that could reduce or minimize the use of animals. The international science community has been challenged to develop and discover methods that could

obviate the need for animals for extrapolation to human situations and conditions in case of pharmaceutical research.

The appropriate mechanisms of toxicity and hazard and safety decisions should be known and the FDA is focused on protecting publichealthby successfully integrating science and social causes. The agency's broad regulatory responsibilities relate to understanding the use of vaccines, drugs, blood supply and medical devices as also veterinary drugs and animal feed. The FDA has been in regulating the principles and alternatives of animal testing in medical research.

The FDA tries to identify the gaps between industry and academia especially in terms ofcommunicationor data gaps and methods gaps and supports in developing new research data and methods to find alternative methods of testing for drugs aiding in the regulatory decision making process. Wilcox (1998) suggests that a new paradigm introducing new and validated testing methods for the FDA scientists is emerging and this is responsible for application and acceptance of regulations in testing.

A study by Williams et al (2007) investigated the use and impact of animal testing for research and teaching purposes and the awareness of these regulations among public and the opinions related to this. In a study by Williams et al, an independent telephone study was conducted to collect information on awareness and interest in the use of animal testing for medical research and whether individuals have confidence in such regulations and principles.

The study obtained data from 750 individuals in NZ and 33% of the respondents expressed interest in the issue with 39% interested in animal testing for research and 21% showed interest for teaching purposes. Most respondents between 68%-72% suggested that animal testing would be acceptable if there is no unnecessary suffering to the animal and that regulated within the principles of medical research.

However most people felt that animal research would be completely justified in case of research on life threatening and debilitating illnesses such as cancer and would also be justified when testing cosmetics and products that can do little or no harm to the animals. 8% of the respondents knew something about regulations dealing with animal testing in medical research.

Williams et al (2007) thus suggested from the study that majority of the individuals were not interested in the issue although most who did accepted that animal testing is completely acceptable as long as there is no unnecessary suffering or in case of minimaladversity or in case of medicines for life threatening illness. Thus there may be certain social opinions on the use of such drug trials on animals considering the seriousness of the research and the results expected.

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