

Scientific experiments on animals

[Environment](#), [Animals](#)



Introduction

Almost Two years ago some people work for animal rights (who work against vivisections) attacked a Neuroscientist who works in California University by setting a fire in his car, which was parked in front of his house (Guardian 2009). This shows that many people do not appreciate the essential advantages of experiments on animals and its help in the medical field. Do the advantages of animal testing outweigh the disadvantages and allow us to carry out the procedures on animals? Many would say that experiments on animals are useless as the response of humans might be different to animals in some cases. However, it seems clear that testing drugs on animal before using them on human has played a huge role in developing vaccines against many diseases. Moreover, many treatments depend on animal testing because other testing methods aren't advanced enough. This essay will argue how animal testing is necessary for human clinical trials.

It is undeniable that experiments on animals have brought many new findings in the field of medicine for, example they have developed vaccines that can protect people against many diseases for instance, polio, rabies, measles and rubella and many other findings. According to Paul E and Paul J (2001), Scientific and medical researches on animals are justified, it is obvious that animal testing is justified by the benefits that these researches bring to our society such as progressing knowledge as well as improvements in disease analysis, diagnosis, and treatment. Another reason to justify carrying out experiments on animals that people can sacrifice animals and eat their meat and use their fur and skin to produce whether clothes fabric or

domicile's needs. In 2002, 808 millions chicken was slaughtered as well as 23 millions turkeys and 20 millions ducks for people to eat (House of Commons Environment, Food and Rural Affairs Committee). It is obvious if people can sacrifice animals to feed themselves and avoid starvation, they are capable of making experiments on them to protect themselves of destruction by having a disease, which may threat their lives.

Animals are not only used for testing drugs in laboratories before being approved for curing their disease. Also scientists can do further researches about genetics by removing or adding the gene into the series of DNA, so that the disease could be cured. For instance, pigs cannot digest a chemical compound which called phosphate that exists in their food, therefore, their faeces can be toxic and destructive to the environment since phosphate helps plants to grow so quickly which affects streams or rivers by chocking them and cause a huge damage to the ecosystem. Then some genes of mice has been inserted into some pigs to enable them to digest phosphate and make them less polluted and the result of this experiment has shown a success (BBC, 2011). It seems reasonable clear that this experiment has helped to protect our planet of many catastrophes as flood which leads to unpolluted atmosphere. Valon C. (2007) states, " in vivo mutations are studied with transgenic animals (animals with foreign target gens) using molecular genetic techniques". As a result, doctors would be able to understand the origin of the disease and they could discover a different solution to avoid diseases, instead of operations or taking drugs. It is well known that there are too many years of investigation left until the genetic techniques would be completely developed. In the meantime, we should

carry on testing on animals for improving the humans and animals health future.

Critics usually claim that statistics shows that the number of patient who has cancer increased over the previous years despite the scientist researches; therefore, this shows that their researches on animals are ineffective. RSC members, 2007 illustrate that breast cancer is one of the largest diseases that based on animal researches and over 42, 000 patients are diagnosed every year in United Kingdom and over 80 percent of them are surviving over the past five years. This would be the evidence that animal testing has appreciably developed cancer treatments. Another field, which based on animal testing, is vaccinations, which protect men of many lethal diseases. Nowadays, vaccines exist to prevent some harmful diseases as meningococcal and it is capable of preventing most its types (RSC members, 2007). It is undeniable, that all human need vaccines to avoid having some harmful diseases, which threat their lives or their ability as polio and meningococcal.

In addition, testing drugs on animal before humans trial can help to cure many other diseases beside cancer and essential example would be polio which threats the ability of our children. Peters S, 2005 introduced the procedure of Salk from the beginning of his experiment with monkeys until humans. At the beginning of the 1950's after Salk success of curing monkeys of the polio by vaccines, he was ready to pass these vaccines to humans and it was in secrecy. Salk took blood from polio patients to identify the types of antibodies they had to vaccinate them with vaccines of the same types of

their antibodies to see whether the result would increase their antibody levels or not. Salk stated “ since the subjects already has antibody and were immune to another paralytic attack ... the experiment would be as safe as it could possibly be”. The antibody level in each subject demonstrated a considerable increase when blood samples were taken only some weeks after injection with the vaccine; therefore, the experiment was not only safe but also was successful. After that, Salk prepared himself to move into new step which he would vaccinate people who don't have polio and this experiment was in secrecy as well because it was more dangerous than the first trial. Fortunately, the subjects' antibody level showed an increase so that the second trial was successful too and it could develop immunity against poliovirus. It is obvious that Salk has brought contentment to many children who had this disease as well as to their families when he achieved the vaccinations against polio. Nowadays, everybody can see vaccines against polio everywhere such as schools and health centers. Therefore, if Salk had not carried out these experiments on monkeys, he would have not created the vaccines against polio.

In conclusion, the use of animal testing in laboratories might went far from its purposes, such as testing cosmetic products which make people stand against it. This has created an issue that made the view of animal testing has been regarded the same, without considering its benefits when it becomes the only way to create new vaccines, treatment ways and medications and has the evidences that is the only way to survive too. To avoid the misunderstanding of animal testing, governments should impose rules and measurement for animal testing and create departments that

study the cases whether it needs animal testing or other sufficient methods with less casualties. This can change many people's opinions about experiments on animals because many people are against it due to the wrong use of animals as in the cosmetic field. In addition, education regarding the benefits of animal testing and where it becomes unnecessary should reach the society to avoid the misjudging of those scientists who gave their life to insure the struggle of human race.

References

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