

Animal testing and research

[Science](#), [Biology](#)



Animal Testing and Research The use of animals in understanding diseases and their control by use of vaccines cannot be overstated. For instance the development of vaccines depend solely on the acquired immune system, this provides an opportunity to pass some of the crucial but risky stages of developing vaccines in animals since they mimic human beings in important aspects like antibody response to antigen (Grayson and Library 134). This is called immunological response. In fact, of all the three phases of developing vaccines, it is only in the last phase that the testing is done on human beings-the clinical stage. Animals thus provides medium for prerequisite test to prove the efficacy of the vaccine in question in human beings.

Notwithstanding, the belief has been informed to construe that substitutes of the animals are available for the same (Grayson and Library 145). Initially, animals testing were done without any consideration on the life sanctity of the animals, suffering of the animals either was not considered an issue as the main concern was the study. Fortunately, with the enactment of laws regarding the animals, the animals' rights have been established to ensure that just like human beings they are protected. The establishment of the laws necessitated research on possible alternatives that were not animals which includes; synthetic skins called corrositex, computer modeling, improved statistical design and the Murine Local Lymph Nodes Assay (LLNA) (Grayson and Library 167). The efforts to avoid the use of actual animals in research is aimed at what is dubbed three Rs; Refinement, Reduction and Replacement (Grayson and Library 172). The sole purpose of involving animals in testing the efficacy of drugs is to reduce the number of drugs that are tested on human beings. Drugs can only be tested on humans after it

has passed the animals models, this means that any drug that fails to meet the required standards do not reach the human trials. These standards may be that they do not elicit enough immune response or proved to be poisonous and is notorious of killing living cells. In such a case, the drugs trials will halt at animals testing (Grayson and Library 197). To ensure humane treatment of animals certain guidelines have been put in place to help practice care for the animals. This includes; for a research to be done that involves the use of the animals, a clear purpose of the study must be given and there must be a proof that the objectives aims to find a solution that is beneficial to the society. The study must also provide substantial grounds to believe that the use of the animal justified. Before the research begins, a qualified animal's health officer must analyze the protocols of the study. A consent has to be given authorizing the study to commence based on the stated protocol. The individuals dealing with the animals must show proofs of conversancy in handling, housing and care to the animal under the study (Grayson and Library 204). Institutional Animal Care and Use Committee (IACUC) in a body that was instituted to look into it that matters related to animals more so research are done in a manner that are consistent with the established guidelines for such. It promotes the welfare of the animals involved in research and those that might be violated in some other ways. This is aimed at ensuring that the three Rs are implemented thus alleviating pain and repeated use of the animal in a study (Grayson and Library 235).

Animal welfare act is a collection of guidelines for all the animals regarding their use for research, association and for purposes of food i. e. hunting and

harvesting. It is aimed at checking the welfare of the animals to ensure safety and tranquility in the animal kingdom (Grayson and Library 298).

Work Cited

Grayson, Lesley and British Library. *Animals in Research: For and Against*. London: British Library, 2000. Print.