

The vast majority of our laboratories that use animals in their work try to cover up for their failure to meet basic standards in animal care. Official investigators are misled by the blatant lies laboratories churn out. Basic standards laid down in laws, regulations and contracts are not met, and most of the funds that are allocated to keep the animals in good health to meet those basic standards are stolen by members of the laboratory staff and their superiors.

More often than not, the medicines which are supposed to be procured to maintain the health of the animals never reach them. There is often only a paper transaction, that is, an order is given for necessary medicines and payment disbursed, but few of these medicines for the animals ever arrive at the institution. Sometimes, even those few medicines that do arrive are siphoned off for reselling for criminal gain. Those few appropriate medicines actually available are often totally inadequate for the number of animals housed.

Many researchers fail to use anesthetics or analgesics to relieve pain among the animals. They often

Labs or Torture Hovels? Crime and Corruption in Science Labs

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Awaiting disposal : rats and rabbits killed after experiments.

claim, without justification, that using them will interfere with the validity of the experiment that they are carrying out. Approved humane methods of

euthanasia should be used with animals in cases where it is required, such as sodium pentathol and other barbiturates. However, instead, in most labs the staff bludgeon these animals to death or cut their heads off. This is a common practice because the labs can pocket more money that way. If the anesthetic agents and postoperative analgesics are not available in the lab's stock of medicine, it is almost certain that they are using the more cruel and unacceptable methods.

The animals that are experimented on are required to be procured from breeders registered with the CPCSEA (Committee for the Purpose of Supervisor and control of Experiments on Animals). However instead, most animals found in the laboratories have often just been



Stanley Medical College: rabbits lying moribund in utter filth and squalor.

rounded up from the street or procured from illegal sources. Often an animal is listed as having been bought from a registered breeder at a high price but in actual fact it has been taken from an illegal supplier or brought in by Class IV staff for far less, and the difference in cost has been pocketed by the lab staff and their superiors. There are often no records of the sale available either with the breeder or with the lab with regard to the purchase price of the animal. In many institutions the budget kept aside for procuring animals is totally exhausted for personal gain.



Maulana Azad Medical College, Delhi : rabbit in filthy cage no food or water since the attendant did not report on duty. The tray at the bottom filled with fecal matter.

Some experiments on animals are not carried out in the lab or even on the premises of the institute. For instance, the CPCSEA found that an elephant that was supposed to be protected and was supposed to be living in a sanctuary was actually being illegally used as a research animal. Sometimes animals that are supposed to be cared for in one lab are actually being subjected without authorisation to experimentation in another institute or at another place.

Every institute is required to maintain a record of the experiments that it is performing and the number and species of animals that have been permitted for that experiment by the IAEC (Institutional Animals Ethics Committee) that is, each project's title and the animals required for that project according to the protocol forms which have been approved by the IAEC. The researcher cannot modify his experiments with reference to the objectives, procedure and duration of the experiment, or the species and numbers of animals required, after the proposal has been passed by the IAEC,

unless he gets approval via a modification in his submission.

When an inordinately high number of animals are being purchased it can usually be concluded that the buyer is retaining a percentage of the money allocated to buy the animals. This happens mostly in the purchase of small animals (mice, rabbits) as they multiply faster. Thus, the purchaser could have placed an order for 200 animals but actually purchased only 100 and bred another 100.

The researcher may also use more animals or less than the number allotted in the IAEC protocol, or use animals of a different species. This may mean he is not following the protocols for which he has received permission but is carrying out experiments of an altogether different and perhaps misleading nature than have been approved. This has actually happened in a college repeatedly. Nevertheless, the researchers were able to proceed without being stopped. In the same institute animals were issued to researchers whose projects had not

been cleared. In another institute, one researcher was actually found to have 111 monkeys whereas she had been authorised to use only 25.

Most labs do not have adequate health care facilities. A review of the health cards will reveal that the animals are not being monitored on a regular basis. Some institutions do not allocate sufficient staff to look after the animals, and the few staff available are not properly trained. The improper care of the animals is reflected in certain behavioural symptoms. These range from cannibalism, excessive

infections, high mortality rates, including among newborns, high rates of abortion, poor condition of fur, presence of maggots, infected wounds, general severe weakness, etc.

An animal house should have specialised laboratories in specially maintained areas for surgery, intensive care, necropsy and postmortem, radiography, preparation of special diets, treatment area, diagnostic laboratory, and containment facilities for required equipment. If hazardous biological, physical, or chemical agents are used, there should be a receiving and storage area for food and bedding, pharmaceuticals and medicines, space for administration and supervision, showers, sinks, lockers and toilets for personnel, an area for washing and sterilisation equipment and supplies, an autoclave for equipment, food, and bedding, and separate areas for holding soiled and cleaned equipment, for repairing cages and equipment, and to store wastes prior to incineration or removal. These facilities are rarely available.

Many labs are not willing to use their funds to invest in these required facilities and resort to various methods to cover up. For example, an experimental room may be shown in the layout but may turn out to be a room with a table without proper equipment for physical restraint of animals for examination that is not kept in a sterile condition. If the laboratories and experimental rooms are in a different building than the Animal House, the means of transport is often incorrect. It is traumatic for the postoperative animals to be carried from building to building.

Equipment should be available to control temperature and the relative humidity should be regulated throughout the year for large and small animals by appropriate methods. Excuses are often proffered by institutions to cover up their shortcomings. If the excuse is given that the air conditioner is not in place because it has only recently gone for repairs, then often inspectors find they need to check if the air conditioner really exists, or, if it does exist, has it actually been installed in some other location (in a senior official's house, for example).

A high rate of mortality with the onset of seasonal change (if large numbers of adult or neonatal mice die in the month of June) might mean their deaths are due to respiratory disease, dehydration or starvation. In the winter months animal deaths may occur too frequently from pneumonia or other bronchial conditions. All this indicates poor maintenance of optimal ambient temperatures and sometimes inappropriate availability of equipment for the season of year.

If there is a back up generator the purchase vouchers of fuel should



Maulana Azad Medical College : rabbit with a gash on its head. This is the experimental room which should be sterile.

indicate the extent to which it is being used. If there was no or very little fuel bought for a generator in the summer months in areas of power cuts, this could mean that the generator is not being used appropriately.

If there is no air conditioner and the institute is using only fans, then there should be a sufficient numbers of fans and large screened windows for cross ventilation to maintain air movement - especially for cats, dogs and primates - but this is not recommended for small rodents. They need but often do not receive strict monitoring of their dark and light cycles – fluctuation in light intensity through the windows disturbs their body mechanisms.

A common phenomenon in the labs that lessens staff work and saves them money is keeping animals in overcrowded conditions. In this way they can purchase fewer new cages. The proper materials for constructing the cages are also not used. These should conform to CPCSEA specifications. Most of the time the cages are broken, rusted or painted a

silver colour to save money by making them look as though they were made of stainless steel.

The waste trays of rabbit cages are often found choked with accumulated waste, mites, and fungus, including rabbit fur -- a clear sign of neglect. Cases of corrosion from urine are also frequent.

Laboratories are quite negligent with regard to the quality and the manner of presentation of food to the animals. Food is often found mixed with fecal matter and urine. This is often a sign, for large animals, that the food is being negligently thrown to them from the top of their cages. Most instances of

cannibalism among rats are found in trays kept on top shelves because attendants are often too lazy to make the effort to go up there to fill their hoppers and bottles with food and water. There is often connivance between the animal house staff and the contractor or person buying the supplies to bill for more food than is actually fed to the animals and then pocket the difference.

The bedding of the small animals needs to be changed every morning. Long periods of unchanged bedding leave stains on the walls of the tray and an unbearable smell which does not disappear even if the bedding is changed at some later time. The bedding should not be soggy from either urine or leaking water bottles. In some institutes the bedding material used is waste paper. The paper is put in the cage without being shredded, which bulks it up and makes the cage very crowded; very little space is therefore left for the animal to move about.

No institution can contract or undertake to perform contract research or experiments on a contract



Water was given in hoppers fixed outside the cage, monkeys were expected to scoop up water in their hands from inside the cage and drink it: we found some monkeys without fingers who could therefore not even drink water properly. On examining the water was found infested with worms. The monkey was almost totally hairless from a skin disease

basis for pay on behalf of any other establishment or research or educational institution, except with prior permission of the CPCSEA. There is, however, no similar restriction on collaborative research undertaken if stated to be without monetary benefit, and solely for the purpose of scientific advance and human welfare. In most cases, contract research is camouflaged as collaborative research.

It is often cheaper for a firm to do animal testing in India. The researchers for whom the animal testing is being done are prone to claim that they cannot reveal the chemical composition, herbal formulations, polymers and other drug delivery vehicles they are using in their animal experiments. This is an additional and unmonitored danger for the animals used.

The funds that are required for maintaining the animals should be budgeted adequately in the costing of proposed research. However, due to a paucity of maintenance funds from official sources, the animals already do not have sufficient

resources allocated for them either from contract researchers or from the institute's regular budget. As a result, they suffer. Institutes also enter into programmes for breeding animals without having the necessary manpower trained to handle the procedures and without the proper infrastructure. They often even lack a clear idea as to the exact purpose of their breeding programmes. Such breeding has to be carefully planned; inbreeding and over breeding must be prevented.

The signs that reflect untrained personnel and poor care of breeding animals include:

- Animals are being bred when they are over the appropriate age for breeding - this is commonly found in our labs for monkeys. They are easier to catch when they are old. This is also true for horses, which are generally procured more cheaply from the army at the age of 17 or more;
- The normal gestation period is not completed in all animals, or a pre term caesarian section has been done without justification;

- Unnecessary repeated radiography is carried out on pregnant animals;
- Care of weaned animals is poor -- no group housing, no evidence of monitoring and environmental care;
- A breeding animal is kept with an infant in a small cage designed for one animal instead of in larger size breeding cages;
- Excessive abortions;
- Premature weaning of animals;
- *In vitro* methods are being used for routine breeding of monkeys. This is painful, unreliable, has to be repeated several times under anesthesia and can cause painful uterine contractions and is thus not considered ethical;
- Monkeys are not given enough zinc during pregnancies to reduce retardation among their infants; and
- Too many still births take place because of staff negligence, lack of timely aid, poor diet, lack of exercise, poor cage hygiene or poor experimental design.

Because of unscientific planning there is often a lower than normal fertility/ovulation rate of animals, or even cannibalism. Mortality among breeding animals and newborns is likely to indicate a poor infrastructure for breeding, insufficient diet, disease and stressful environmental conditions.

If the provision for heating and cooling appear to be in order and there is still a high mortality rate, this could mean that there is inadequate nutrition being given to the breeding animals. If the Animal House does not maintain genealogies, it means that untrained personnel are breeding unidentified animals at random which results in inbreeding and over breeding and consequently in sick and deformed animals.

Random breeding is not recommended because uncontrolled genetic variation may seriously



Stray dogs held as Beagles in small cages with only dry pellets given as food and no regular facility, Jai Research Foundation.

interfere with the precision of an experiment. If the institute is conducting biomedical research (which requires precise results, high repeatability and accurate comparisons between genealogical groups) then accurate results for such an experiment can only be possible if genetically defined animals are used. If, however, biomedical research is being carried out in a facility where there is: a) genetic contamination among the animals; b) unrecorded variations in the diet; and c) an uncontrolled environment in the animal house, then the results are bound to be far from precise.

Labs often engage in unmonitored selling of animals to one another. They often look to make money on the difference between the price of animals with known genealogy from recognised stock and second hand animals at a lower price. For example, a Beagle used in regulatory testing is worth about Rs. 25,000 and the institutes generally shuttle the dog among themselves, paying each other a lower than market price, even though multiple experimental procedures on the same animals is not legal or acceptable experimental procedure, and these animals are supposed to be released after three years in an animal house. Institute staff often seeks to illegally

recover some of the market price through clandestine transfers of animals.

Scientists should ensure that painful procedures are conducted under the appropriate anesthesia recommended for each species of animals. However, very often minor and major surgical interventions are carried out without proper anesthetics due to ignorance and sheer insensitivity. In post-operative care analgesics are often not used resulting in excessive pain to the animals during recovery.



King Edward Memorial Hospital, Mumbai: fan could not be started in the rabbit room because of all the piled up junk.

Institutes registered with the CPCSEA are required to report and carry out post mortems on animals that are found dead in the animal house without having been experimented on and of animals that do not survive the entire research study (for example, the animal dies of some known or unknown cause unexpectedly prior to the end of the experiment). Necropsy findings and disease diagnosis are to be entered into the postmortem register and reported to the IAEC. Often these post-mortems are not carried out so that the negligence of the institute with regard to provision of facilities or careless procedures would not be highlighted.

Animals not required to be killed for experimental purposes should not undergo multiple experimental procedures and must be released for rehabilitation. Sick animals should be removed from laboratories that are not following the guidelines laid by CPCSEA. The institute is supposed to take care of the expenses of rehabilitation under CPCSEA norms.

Sometimes animals are being euthanised unnecessarily after experiments to save Animal House space or the expenses of rehabilitation, and animals are being used for multiple experimental procedures. To avoid the responsibility and trouble in rehabilitating animals, often scientists will say they have designed a study that requires terminating the animal's life at the end of the study - even if it is in fact not necessary.

The animals are viewed as hostages through whom the scientists make money by manipulation of records that result in denying the animals essential food, water and a safe environment. This compromises the results of the research being conducted. □

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