

But the problem of informed-consent is still there because without having the medical knowledge of a doctor, it is impossible for the patient to understand all the information available. It is bound to be selected by the doctor and the patient needs to trust the doctor that his selection is reasonable. May be the only way that the doctor for his or her part, must give the patient the opportunity to ask further questions.

In 1986 patient's charter was established by the UK Association of Community Health Councils. In 1982 Infant Bio-ethics Committee was established in United States as a result of the baby Doe controversy and the Down's Syndrome Murder in U.K. and that committee is responsible for any research on severely deformed children and when to withhold treatment to these infants.

In the 80's we witnessed the development of Test-Tube Babies, or better termed Assisted Human Reproduction⁸. It consists of artificial insemination using the husband's sperm (AIH), Gamete Intrafallopian Transfer (GIFT) and In-Vitro Fertilisation (IVF). With this technique we were able to take a fertilised ovum to a completely strange woman, and implant it, where she will carry on the pregnancy, therefore what is her status, is she the mother or is she not? To solve this problem the term surrogate mother was coined. Surrogate, in the dictionary, is a person who fills the role of another in one's emotional life as mother or father. It is emotional, not physical. Therefore, the word surrogate is not the right term, which lead to the term of gestational mother, and the real mother was called the genetic mother.

In United Kingdom, they had to rush Surrogacy Arrangement Act⁹ in 1985 and because of these developments, the World Medical Association and WHO have advised every country to have a National Ethical Committee. This Committee is representing all sections of the society and it is an advisor to government on these issues. We are witnessing the development of Assisted Human Reproduction in Bahrain but we have not heard of the establishment of National Ethical Committee.

1980's we have witnessed the discovery of AIDS and the accompanying scare, which became global and therefore, should we screen all population for

AIDS which might violate the civil liberties¹⁰? And if we do not violate civil liberties, how much public health problem we are creating as doctors? Are we giving enough information to the public about the incidence and spread of AIDS in our community and, if not, is it ethical?

Again in 1980's, should unethical research be given a chance to be published? Most of the editors in reputable journals agree that it should not be, yet some get published. A research paper, on a Pseudomonas Vaccine which was used in the prevention of infection in a severely burned patient, published in the Lancet, the trial done in New Delhi with the involvement of British Doctors. Going back to the files of these people it was found that no proper consent was taken. Again I will remind you of Mrs. Margaret Wigley and the third one is the folic acid trial in the prevention of neural tube defects in a new born done in United Kingdom and has been published in the British Medical Journal, no proper informed-consent has been obtained.

Enough for humans which has been laid many many years ago, but animals very recently came to light. The public and also the professionals did not like what goes on as far as the animal research, therefore guidelines have been laid and this is an attempt to introduce some of these guidelines to you.

The use of animals in experiments are sometimes necessary in order to understand, improve, sustain life and alleviate suffering. The following have been suggested to regulate the use of animals:-¹¹

1. The Institutional Animal Care and Use Committee

Any institution, be it a hospital, university, college, or otherwise must establish such committee, which is necessary to approve all proposals related to the use of animals. One of the members must be a vet, the other must have a knowledge about the science and behaviour of animals.

I must again emphasize that I have not heard of any institutional animal care and use committee which has been established in Bahrain.

2. Animal Model

Non-animal method like audiovisual, tissue culture, sometimes could replace the use of animals

and we should always attempt to use male and female equally in research. It has become a tradition to use males in the experiments and leave hundreds and thousands of females unattended.

3. Legal Consideration

Only animals lawfully acquired should be used in animal experiments, otherwise some people will carry on experimenting on animals of endangered species.

4. Replication and Duplication of Experiment

This should be kept to minimum, by comprehensive literature search.

5. Responsibilities of the Research Staff

Procedures on animals should be carried out only by/or under the supervision of the investigators/instructors with appropriate experience in biological and/or behavioural sciences.

6. Avoidance or minimizing of pain or distress to the animals

Some of you have seen some of the researches done on animals on T.V., it is revolting. Some of the researches on those animals are really beyond conception.

i. Surgical Procedures

Anaesthesia, analgesia or sedation should be used to reduce pain or distress unless there is scientific justification that their use is compatible with the aim of the procedure. Aseptic technique should be followed, post-surgical analgesia should be prescribed, post operative care should be followed.

ii. Drugs

Studies of drugs or other chemical agents to see their side-effects. There should be a standardized protocol which should be reviewed and approved by the full institutional animal care and use committee.

iii. Altering the State of the Animal

Altering the state of the animal which means using, habituating or addictant drugs, avoid or minimise self-injury to the animal during dependance and withdrawal syndrome.

iv. Use of Behavioural Techniques

If we use the behavioural techniques for modification of behaviour or study on behaviours we must avoid pain or distress to the animal.

v. Multiple Use Consideration

Animal should not be subjected to more than one major procedure unless it is necessary.

vi. Necessity of Chemical Restraint or Paralysis

Neuromuscular blocking agents without anaesthesia should only be used in exceptional cases unless there is no alternative and only after approval of the full institutional animal care and use committee.

vii. Physical Restraints

Restraints should be of minimal degree and duration and should be done in consultation with the person knowledgeable about the effect of different types of restraints of that particular species.

7. Alteration of Life Support System

i. Food and Water Deprivation

The period of withholding fluid and food should not exceed limits similar to those for the transport of species concerned.

ii. Sleep Deprivation

It is the worst thing to prevent human being or any animal from sleeping. Therefore physiological consequences of sleep deprivation in animals should always be considered.

iii. Significant Environmental Alteration

This means change of gravity field, temperature, noise and hibernation pattern. This should be done only with the full approval of the institutional animal care and use committee.

iv. Euthanasia

There should be an accepted guideline in each institution, organs of killed animals should be shared among investigators and instructors.

v. Disposition of the Animal

Sometimes animals are no longer needed in the lab. Then we should think about adaptation to a new environment.

8. Colleges, Universities, Graduate and Professional Schools. One should attempt all the time to use video tapes and films as much as possible if they can replace animal experiments.

No undergraduate student should be allowed to do experiments on animals by himself. He should be strictly observed and instructed. Students should know about handling and care of animals. All students should know special aspects of anaesthesia and surgery for experimental animals before conducting any procedure.

Other animals may have rudimentary speech but they do not have a language, they may speak but they will never say anything worth quoting. They will not discover nor agonize over ethical methods but we do because we must. In the animal kingdom the injured is attacked and eaten and left to die but we humans do care and we must care. Moral issues are the privilege of an existence above mere survival.

Remember not only you have rights animals do also have rights.

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