Review Article

Ethical Issues of Fair Subject Selection in the Research

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Abstract: Ethics and ethical principles extend to all spheres of human activity. They apply to our dealings with each other, with animals and the environment. They should govern our interactions not only in conducting research but also in commerce, employment and politics. Ethics serve to identify good, desirable or acceptable conduct and provide reasons for those conclusions. Fair subject selection is the first and foremost concern which must be ensured before initiating a research project. Which subjects may enroll in the research is determined by the study's inclusion or exclusion criteria. One of the important aspects of fair subject selection is to have an oversight system through International Review Board (IRB) to review to conduct the research and to have approval whether subject selection is fair or not.

Key Words: Fair subject selection, Research

Introduction: To maintain ethical regulation in clinical research involving human subjects is very much important. Medical research is subject to ethical standards that promote respect for all human beings and protect their health and rights. Some research populations are vulnerable and need special protection. The particular needs of the economically and medically disadvantaged must be recognized. Special attention is also required for those who cannot give or refuse consent for themselves, for those who may be subject to giving consent under duress, for those who will not benefit personally from the research and for those for whom the research is combined with care. According to WHO (2008), Fair subject selection can be expressed as; subjects should be selected on the basis of scientific importance, not based on convenience, vulnerability or bias[1].

Method: This is a brief article prepared as a part of the assignment in the educational activity and training on research ethics titled "Ethical and Regulatory Aspects of Clinical Research" arranged by the Bangladesh Bioethics Society (BBS), Dhaka, Bangladesh, in collaboration with the Department of Bioethics of National Institutes of Health (NIH), Bethesda, Maryland, USA, through video conferencing between October 1, 2014 and November 12 of 2014. The information gathering conducted through search was confined to 'Google', 'HINARI' and 'Pub-Med' search. Besides, some guidelines on roles and responsibilities of Institutional Review Board (IRB) were taken into consideration.

Ethical Aspects of Fair Subject Selection: There are three aspects of subject selection[2]. These aspects are:

1. Selection: determining eligibility of individual group
2. Recruitment: approaching individuals in selected group
3. Retention: retaining enrolled subject

Methods of Recruitment: Vulnerable groups should not be recruited.[2] Incentives may be offered to physicians to refer their patient to trials. Incentives may encourage investigators to enroll inappropriate subjects. International Review Board should monitor advertising and evaluate relative size of type used and other visual effects.[3]

Selection, recruitment & retention should distribute burdens and benefits properly, ensure social value of research, enhance scientific validity, minimize risks to subjects and protect the vulnerable. Though there may be conflicts between these goals in some cases. Excluding very sick person from the research may give rise to chance of decreasing of social value of research. By balancing the competing goals investigators, review committees and sponsors can minimize conflict. Circumstances should be judged for understanding so that importance of factors in that case, can be determined.[2]

Criteria of Subject Selection: Subject selection should be based on two criteria[2]:

1. Inclusion criteria
2. Exclusion criteria

Inclusion and exclusion criteria may include factors such as age, sex, race, ethnicity, type and stage of disease, the subject's previous treatment history, and the presence or absence (as in the case of the "healthy" or "control" subject) of other medical, psychosocial, or emotional conditions. Inclusion criteria are used to determine whether a person can participate in a research study or whether an individual study can be included in a systematic review. Exclusion criteria are those who cannot participate in a research study or whether an individual study can be excluded with good reason[2].

Exclusion without a good reason may be unfair or discriminatory[2]. Research should be begum with considering that everyone is eligible to ensure fairness. In determining who can enroll, the scientific goals of study should be the primary consideration. Individuals with physical and mental disability who cannot respond to scientific questions and who cannot satisfy the protocol requirements or who cannot make the required visit should be eliminated. Exclusion criteria are important in minimizing risks of research study. Subject selection should focus on enhancing benefit of study[2].

Vulnerable groups unless their participation is mandatory for scientific reason should be excluded for their protection.[2] According to Belmont report, adults should be selected prior to children.[3] Those who are less able to protect their own interest and being unable to give

voluntary informed consent, defined as vulnerable subjects. Those who are unable to consent should be excluded unless there is a compelling reason to enroll them.[2]

According to Declaration of Helsinki-2008, Medical research involving a disadvantaged or vulnerable population or community is only justified if the research is responsive to the health needs and priorities of this population or community and if there is a reasonable likelihood that this population or community stands to benefit from the results of the research[4].

Protections for Vulnerable Populations: Current Federal regulations provide additional protections and special requirements for research involving children and prisoners and instruct IRBs to be cognizant of the special problems of research involving vulnerable populations. Groups considered to be vulnerable are: children, prisoners, pregnant women, mentally disabled persons, and economically or educationally disadvantaged persons. Studies seeking to enroll vulnerable subjects must provide additional safeguards to protect the rights and welfare of these subjects.[5]

Informed Consent: When seeking informed consent for participation in a research study the physician should be particularly cautious if the potential subject is in a dependent relationship with the physician or may consent under duress. In such situations the informed consent should be sought by an appropriately qualified individual who is completely independent of this relationship[2].

For a potential research subject who is incompetent, the physician must seek informed consent from the legally authorized representative.[2] These individuals must not be included in a research study that has no likelihood of benefit for them unless it is intended to promote the health of the population represented by the potential subject, the research cannot instead be performed with competent persons, and the research entails only minimal risk and minimal burden.[2]

Review by an Institutional Review Board: Human subject research is reviewed and approved by an IRB using the following criteria: 1) risks to subjects must be minimized and reasonable in relation to anticipated benefits; 2) the selection of subjects must be equitable, with attention to the special problems of research involving vulnerable populations ; 3) additional safeguards must be included if the research involves vulnerable populations; 4) informed consent must be sought and appropriately documented if the risk is greater than minimal; 5) researchers must continually monitor the data collected to ensure safety of subjects ; and 6) the privacy of subjects must be maintained.[5]

Three Fundamental Ethical Principles[3]

1. Respect for Persons: protecting the autonomy of all people and treating them with courtesy and respect and allowing for informed consent. Researchers must be truthful and conduct no deception;

2. Beneficence: The philosophy of "Do no harm" while maximizing benefits for the research project and minimizing risks to the research subjects;

3. Justice: ensuring reasonable, non-exploitative, and well-considered procedures are administered fairly — the fair distribution of costs and benefits to potential research participants and equally.

Conclusion: Loss of enrolled subjects undermines scientific validity and wastes resources. Future research is needed to identify ways to encourage subjects to continue to participate, and retain them, without undermining their right to withdraw. Subject selection, recruitment and retention are central to the ethics of clinical research.[2] Yet, these issues have not received the attention they deserve in practice, or in the literature. Subject selection should be fair for ethical regulation of research involving human subjects. Often, subject selection is not given much thought. However, one of the principles of ethical clinical research is just that subjects should be selected for participation principally based on the scientific question. Due consideration should be given to risk, benefit and vulnerability of the subjects.

References:

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