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Corresponding Author:
Dr. Hafiza Asma Hafiz, Bahawal Victoria hospital Bahawalpur abbasiasma971@gmail.com

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TRENDS OF PARTICIPATION IN RESEARCH PROJECTS AMONG MEDICAL STUDENTS

AUTHORS:
1. DR. MUHAMMAD ARSLAN SAJJAD, TEACHING HOSPITAL, DERA GHAZI KHAN
2. DR. HAIDER SHAHEEN, CITY HOSPITAL GILGIT.
3. DR. HAFIZA ASMA HAFIZ, BAHAWAL VICTORIA HOSPITAL BAHAWALPUR

ABSTRACT:
Medical research (or biomedical research), also known as experimental medicine, encompasses a wide array of research, extending from “basic research” (also called bench science or bench research), – involving fundamental scientific principles that may apply to a preclinical understanding – to clinical research, which involves studies of people who may be subjects in clinical trials. This cross-sectional study was conducted among medical students of different medical colleges. Name, age, gender, participation in different research projects and required skills were noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. There were 50 medical students in this study. There were 25 males (50%) and 25 females (40%). The mean age of the students was 20.12±1.67 years. Out of 50 students told that 46 students told that they have never participated in any research projects and that they don’t know much about this. Four students told that they had some knowledge of it and they participated in their community medicine research. There four students belonged to fourth and final year.

Keyword: Research Participation
INTRODUCTION:
Research is "creative and systematic work undertaken to increase the stock of knowledge". It involves the collection, organization, and analysis of information to increase understanding of a topic or issue. A research project may be an expansion on past work in the field. Research projects can be used to develop further knowledge on a topic, or for education. To test the validity of instruments, procedures, or experiments, research may replicate elements of prior projects or the project as a whole.

The primary purposes of basic research (as opposed to applied research) are documentation, discovery, interpretation, and the research and development (R&D) of methods and systems for the advancement of human knowledge. Approaches to research depend on epistemologies, which vary considerably both within and between humanities and sciences. There are several forms of research: scientific, humanities, artistic, economic, social, business, marketing, practitioner research, life, technological, etc. The scientific study of research practices is known as meta-research.

Medical research (or biomedical research), also known as experimental medicine, encompasses a wide array of research, extending from "basic research" (also called bench science or bench research), – involving fundamental scientific principles that may apply to a preclinical understanding – to clinical research, which involves studies of people who may be subjects in clinical trials. Within this spectrum is applied research, or translational research, conducted to expand knowledge in the field of medicine. Both clinical and preclinical research phases exist in the pharmaceutical industry's drug development pipelines, where the clinical phase is denoted by the term clinical trial. However, only part of the clinical or preclinical research is oriented towards a specific pharmaceutical purpose. The need for fundamental and mechanism-based understanding,
diagnostics, medical devices, and non-pharmaceutical therapies means that pharmaceutical research is only a small part of medical research. The increased longevity of humans over the past century can be significantly attributed to advances resulting from medical research. Among the major benefits of medical research have been vaccines for measles and polio, insulin treatment for diabetes, classes of antibiotics for treating a host of maladies, medication for high blood pressure, improved treatments for AIDS, statins and other treatments for atherosclerosis, new surgical techniques such as microsurgery, and increasingly successful treatments for cancer. New, beneficial tests and treatments are expected as a result of the Human Genome Project. Many challenges remain, however, including the appearance of antibiotic resistance and the obesity epidemic (1-3). The objective of this study was to see the trends of participation of medical students in different research projects.

MATERIAL AND METHODS:
This cross-sectional study was conducted among medical students of different medical colleges. Name, age, gender, participation in different research projects and required skills were noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. The quantitative variables were presented as mean and standard deviation. The qualitative variables were presented as frequency and percentages.

RESULTS:
There were 50 medical students in this study. There were 25 males (50%) and 25 females (40%). The mean age of the students was 20.12±1.67 years. Out of 50 students told that 46 students told that they have never participated in any research projects and that they don’t know much about this. Four students told that they had some knowledge of it and they participated in their community
medicine research. There four students belonged to fourth and final year.

DISCUSSION:
Medical research is highly regulated. National regulatory authorities are appointed in most countries to oversee and monitor medical research, such as for the development and distribution of new drugs. In the United States, the Food and Drug Administration oversees new drug development; in Europe, the European Medicines Agency (see also EudraLex); and in Japan, the Ministry of Health, Labour and Welfare. The World Medical Association develops the ethical standards for medical professionals involved in medical research. The most fundamental of them is the Declaration of Helsinki. The International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH) works on the creation of rules and guidelines for the development of new medication, such as the guidelines for Good Clinical Practice (GCP). All ideas of regulation are based on a country’s ethical standards code. This is why treatment of a particular disease in one country may not be allowed, but is in another. Original research, also called primary research, is research that is not exclusively based on a summary, review, or synthesis of earlier publications on the subject of research. This material is of a primary-source character. The purpose of the original research is to produce new knowledge, rather than to present the existing knowledge in a new form (e.g., summarized or classified). Original research can take a number of forms, depending on the discipline it pertains to. In experimental work, it typically involves direct or indirect observation of the researched subject(s), e.g., in the laboratory or in the field, documents the methodology, results, and conclusions of an experiment or set of experiments, or offers a novel interpretation of previous results. In analytical work, there are typically some new (for example)
mathematical results produced, or a new way of approaching an existing problem. In some subjects which do not typically carry out experimentation or analysis of this kind, the originality is in the way existing understanding is changed or re-interpreted based on the outcome of the work of the researcher (4-6).

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