

UNIVERSAL MEDICAL COLLEGE RESEARCH CENTER
an association with universal medical college & hospital ltd



UNIVERSAL MEDICAL COLLEGE
research center



Universal Medical College Research Center (UMCRC)

1. Background:

Universal Medical College Research Centre (UMCRC) was established at the beginning of January 2017. The objectives of this research centre are to identify problems and issues related to medical and health science. It also determines the priority areas in research based on health care needs, goals, policies and objectives as well as country perspective. This research centre operates under the guidelines of the ministry of health and family welfare as well as the Bangladesh Medical Research Council (BMRC).

UMCRC organizes and promotes scientific research in various fields of Medicine, public health, reproductive health, nutrition and food safety with specific reference to primary health care needs at the community level for the application and utilization of such results of health researches.

UMCRC is a private research organization and an integral part of Universal Medical College which runs under the umbrella of Universal Medical Studies and Research Foundation. The working principle of this research centre is on a not-for-profit basis.

2. Vision:

The vision of the UMCRC is to create effective and quality health care facilities for the whole population of the country by promoting health research through strengthening the research facilities, Training and dissemination of the research result. The main activities of this centre include organization, promotion and coordination of scientific research in various fields of health science and training of manpower of health research and dissemination of the research result for proper utilization. In addition to that this centre is a centre of coordination among the government sectors that are involved in health research like WHO, UNICEF, health Partners like World Bank and other development partners and some other agencies financing health research.

3. Objectives:

The main objective of the centre is to:

- a. To do Research:** The main aim of the center is to do research. Since the research cannot be conducted without skilled manpower we also train the human resource required for research. It develops the research protocols, selects the topic, implements the research in the areas required for the present or potential problems. After the completion of the research, the result is disseminated and published in a local or international journal. The dissemination is net-based.
- b. Train the human resource required for academic and scientific research:** To do quality research, this centre also trains the human resource required for the research. The training focus on data analysis, scientific paper writing, thesis writing, methodology of research, ethical issues that might come during research. Such training session is

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conducted by UMCRC in its centre for five days long. However, the length of training duration also depends on the understanding level and need of the participants.

- c. **Publication:** The obtained result from the research will go under the publication unit and the research is made ready for publication. The publication will be a research bulletin every 4 months, monthly newsletter. The publication unit will also equally focus on the bibliography.
- d. **Establishment of Digital Library:** UMCRC has a digital library with modern facilities for net surfing, online the research result. It now has access to the online journals required for literature review. This library also helps in enhancing global and national networking.

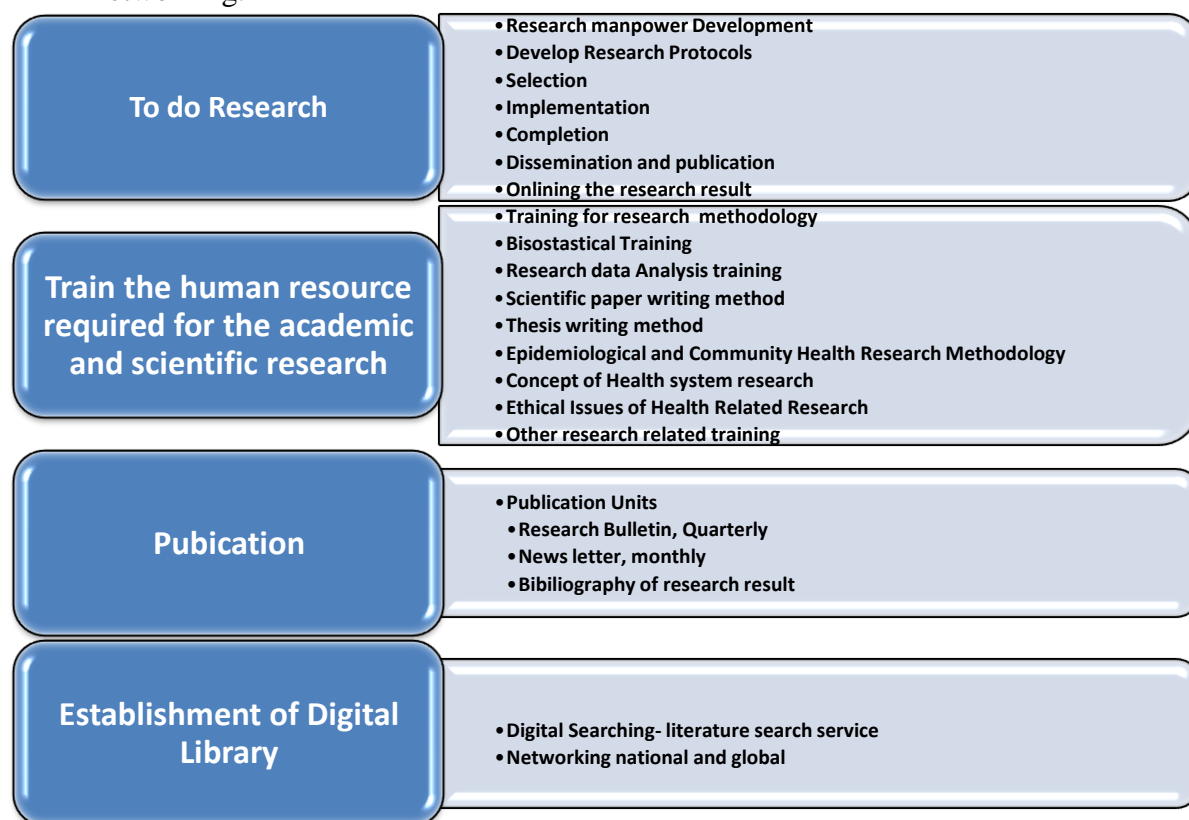


Chart 1

4. Institutional Framework

Institutional Bodies: The institutional framework consists of major 8 different committees. The members of these committees have been set as per the rule of the Bangladesh Medical Research Council and Ministry of Health and Family Welfare.

4.1. Advisory Committee (consists of the following fifteen members):

President, Bangladesh Medical Research Council
Head of National Institute of Population Research and Training
Head of Bangladesh Bureau of Statistics

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Director General of Health Services

Prof. Pran Gopal Dutta

Prof. Abul Faiz

Prof Syed Atiquel Haque

Dr. AKM Jafarullah

Prof. Mahamudur Rahman

Prof. Akter Hossain

Prof. A M Zakir Hussain

Dr. Mostafa Zaman

Dr. Naznin Anwar

Prof. Bayezid Khursid Riaz

Dr. Mahmud-uz-Jahan

Dr. Md. Sharif

4.2. Management Committee: (consists of eleven members)

Mrs. Priti Chakraborty, Chairman

Engr. Dilip Kumar Paul, Vice Chairman

Prof. Ridwanur Rahman, Member Secretary

9 executive members

4.3. Operational Organogram:

Research Professor (Chief Research Scientist)

Research Associate Professor (Research Associate)

Research Assistant Professor (Research Assistant)

Research Lecturer

Research Instructor

Research Statistician

Support Staff

The above manpower will be recruited and promoted as per University guidelines.

4.4. Administrative Organogram

Research Advisor

Research Director

Research Deputy Director

Research Assistant Director

4.5. Technical or Scientific review committee: (consists of 7 members)

4.6. Ethical committee: (consists of 7 members)

4.7. Training and Education Committee (consists of 7 members)

4.8. Project Selection Committee (consists of 7 members)

4.9. Institutional Review Board, IRB (Consists of 7 Members)

4.10. Editorial Board (consists of 7 members)

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- 5. Training and Human resource development areas:** We also train the manpower in the following sector:

5.1. Research Methodology

5.2. Biostatistics

5.3. Research Data Analysis

5.4. Scientific writing and thesis writing

5.5. Epidemiological and community health research methodology

5.6. Concept of health system research

5.7. Ethical issues related to health research

5.8. Other Medical Issues like BCC

5.8.1. Risk factors like tobacco, smoking

5.8.2. Communicable Disease (CD) (Common, emerging, re-emerging, new outbreak)

5.8.3. Non Communicable Disease (NCD)

5.8.4. Environmental issues

5.8.5. Maternal and child health-related issues

5.8.6. Food, nutrition and food safety

5.8.7. Injuries and road safety

5.8.8. Occupational health and industrial health safety

5.8.9. Primary health care problems and others

5.8.10. Behavioural research on health promotion and health education

5.8.11. Research related to Climate Change

5.8.12. Research related to Medical & Nursing Informatics & Education

5.8.13. Clinical Trial

5.8.14. Operational Modalities of Finances

All the funds of this institute will be deposited in a scheduled bank as a reserve/general fund and it will be operated with three signatories like a) Chairperson/Chairman b) Vice Chairman C) Head of research of UMCRC. Among the three signatories, two signatories' signatures will be necessary to draw the money. Of which the signature of the Head of research of UMCRC will be mandatory. In the case of withdrawal of money (more than BDT. 5000), a passed regulation will be necessary.

6. Priority of the research areas:

The centre focuses on the present health conditions in the nation and abroad and acts the needful. The center's subject of interest is to focus on the following mentioned topics and subtopics (Chart. 2). However, the researches are ongoing as per the current needs and demands.

6.1.Communicable diseases: Our study is based on any kind of past, existing all communicable diseases.

- i. **All Infectious Communicable Diseases:** Malaria, Filariasis, Dengue and other emerging communicable diseases that threaten human health need innovative research for prevention and control.

6.2. Non Communicable disease: UMCRC conducts research on the global burning issues and also the root causes, risk factors associated with non-communicable diseases.

6.2.1. Cardiovascular diseases

6.2.2. Diabetes Mellitus

6.2.3. Cancer

6.2.4. Obstructive lung Diseases

6.2.5. NCD risk factors like Tobacco, salt restriction, obesity etc

6.2.6. RTA and injuries, Drowning

6.2.7. Other Non-Communicable Diseases like Arsenic Health Problem and emerging non-communicable diseases

6.3. Occupational and Environment Health: Along with the advancement of time, the new issues of working environment, safety, security are also being issues. Therefore, to address the diseases and conditions associated with the work and work environment. UMCRC conducts research focusing on industrial safety, occupational diseases.

6.4. Epidemiological and community health and other basic science areas:

UMCRC also focuses on the community, community's health and epidemiological study of diseases. It conducts research that has a direct/ indirect relation to the community and its people. The center also conducts researches in all basic science areas.

6.5. Safe Motherhood and Child Health: Developing countries like Bangladesh are always under the burden of maternal and child mortality and morbidity. As maternal and child health are global issues, we also equally focus on research related to maternal and child health so that we can aware the people about the root causes of mortality, morbidity as well as launch the program to promote their health. Family planning and other reproductive health issues reflect maternal health so the centre is aware of research in these areas also.

6.6. Food Nutrition and Food Safety: About 795 million people of the 7.3 billion people in the world, or one in nine, were suffering from chronic undernourishment in 2014-2016 (The United Nations Food and Agriculture Organization, 2016). According to United Nations (2015), about 21,000 people die every day of hunger or hunger-related causes. As food is the basic needs of a living being so its safety and proper handling are most important. Often, knowingly or unknowingly, we do not handle food in a safe manner which later ends up questioning the health of individuals. Therefore we also conduct research based on food, nutrition and food safety.

6.7. Health systems: UMCRC has also kept the "health system" research of any country on a priority list as all the health policies, regulations have a direct relation to the health progress of the same country.

6.8. Other Related areas: Along with the change of time, people and lifestyle have also been changes. The advancement of technology, activities of human beings and modernization have directly and indirectly affected mother earth. The effects of global warming, pollution, deforestation could be easily seen and felt these days. With the same trend, each year the new diseases like Ebola, swine flu, bird flu leave the health system threatened. Researches show that there has been more antimicrobial resistance in human beings these days. On the other hand, natural calamities like a tornado, volcano eruption, and earthquakes are being faced by people in different corners of earth each year destroying millions of lives and property. Therefore UMCRC also studies such components to find the root causes, the severity of effects and management of such problems in future. Climate change, any environmental ecological change, effect on health is one of our targeted research areas.

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Communicable	<ul style="list-style-type: none">• Infectitious Diseases
Non-Communicable	<ul style="list-style-type: none">• Cardio Vascular Diseases and risk factors associated with it like: Tobacco• Chronic Respiratory Diseases• Diabetes mellitus• Cancer• Others
Occupational and Environmental health	<ul style="list-style-type: none">•Arsenic•Industrial safety•Occupational Diseases•Others
Community	<ul style="list-style-type: none">• Epidemiological Diseases• Community Health• Others
Safe motherhood	<ul style="list-style-type: none">• Maternal Health• Child Health
Food and Nutrition	<ul style="list-style-type: none">•Food Saftey•Food Adultration•Others
Health system	<ul style="list-style-type: none">• Health system Overview
Others	<ul style="list-style-type: none">•Health Impact due to climate change and other environmmetal change•Disaster management•New Emerging Diseases

Chart. 2

7. Research work modalities:

For collecting the data and relevant research information, in different tires of Health Care delivery system, the center besides its principal office will work in the following levels:

1. **Level One:** At the community level or primary health service delivery level, 7 sentinel centers in 7 divisions (community, primary Health care centers will be included). And any cross-sectional areas of the country as desired for research.

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2. **Level Two:** Secondary health care centers, district-level health services centre (district hospitals)
3. **Level Three:** Tertiary level health service delivery level, Medical universities, Medical college hospital, specialized health institute, and special health services providing areas.

8. Research Result Dissemination

Thus conducted research result will be disseminated as



Chart 3

9. Funding required for the project research:

Self Institutional Funding: At present, the researchers conducted under the UMCRC are self-funded. Universal Medical Studies and Research Foundation bears all the necessary costs associated with such researches. However, in future, we expect some national and international organizations for inclusive or blended funding in this centre.

- a. Government of Bangladesh:
- b. Ministerial Funding
- c. Operational plan Funding from DGHS
- d. BMRC
- e. Health partners
 - I. WHO
 - II. UNICEF
 - III. UNDP

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IV. UNESCO

V. Other UN agencies

f. Developing Partners

a. World Bank

b. International NGOs

c. National NGOs

d. Other international Partners

10. Conclusion:

This non-profitable research center is developed as an integral part of Universal Medical College in the private sector. Though it is in the private sector, the centre is well equipped with a full pledge centre in the perspective of research-related health manpower and other research logistics. The centre is operated under the guideline of Bangladesh National Health Strategies. All committees and regulations were formed under the regulation of the Bangladesh Medical Research Council under the Ministry of Health and Family Welfare of Bangladesh. The research result which will be generated by this centre will play an important role in the achievements of the health-related goals of the SDGs and to address the existing health problems at the national and international level.