

National Health Research Strategy



**Directorate General of Health Services
Ministry of Health and Family Welfare**

with technical assistance from



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Bangladesh National Health Research Strategy has been developed to promote the practice and conduct of research that contributes towards the improvement of the human health and welfare in Bangladesh. It attempts to create a framework and environment for health research to contribute effectively to health development, and for evidence to lead to strategy formulation. It constitutes an important tool, which in the long term should contribute to the improvement of our health system and inform interventions geared towards a better life for all Bangladeshis.

The research needs for Bangladesh require to be coordinated, to facilitate a coherent national health research machinery that contributes to equitable health development. The document is based on health research experiences, knowledge, expertise, available literature, various country experiences and a variety of national and internationally accepted standards and practices in health research.

A dedicated group of experts were involved to ensure development of this strategic document and made constructive recommendations towards its development including all the research organizations and institutions which are ready to ensure that this strategy is implemented.

We appreciate and thank health research strategy drafting committee, review and editorial committee and individuals who have contributed to '**National Health Research Strategy**', either by taking part in working groups, endorsing with comment and peer review or by participating in consultation through meetings and individual submission.

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1.1. Introduction

Research is conducted in Bangladesh as an optional endeavor without an appropriate universal enabling and proactive mandatory approach and practice that is deserved in deep rooted professional culture. There are inconsistencies between the existing setup, strategy, personnel, knowledge, skill and attitude in this behalf.

In Bangladesh a large number of government departments (Ministry of Health and Family Welfare, Ministry of Science and Technology and different organizations under other ministries *etc.*) support health research. Research work is carried out in public medical colleges, national institutes, BSMMU, IEDCR, NIPSOM, ICMH, NIPORT, IPHN, IPH, BIDS, BCSIR, independent research organizations/institutes such as ICDDR,B, BCPS, BIRDEM, Heart Foundation, general universities and international organizations like WHO, UNICEF, UNFPA, WB, in many other academic institutions, pharmaceutical industries, NGOs like BRAC and by a variety of private organizations.

The Bangladesh Medical Research Council (BMRC), an autonomous organization was established under the Ministry of Health and Family Welfare, is the nodal agency responsible for health research in Bangladesh. The Mission of the Council is to create effective and quality health care facilities for the whole population of the country by promoting health research through strengthening of research facilities & training and dissemination of research results. The main activities of the Council include: organization, promotion and coordination of scientific research in various fields of health science, training of manpower in health research and dissemination of research results for proper utilization. In addition to BMRC, the Bangladesh Council for Science and Industrial Research (BCSIR), Bangladesh Atomic Energy Commission (BAEC), Bangladesh Bureau of Statistics (BBS) and the University Grants Commission (UGC) are some of the other agencies financing health research.

Health has been accepted as a fundamental right of all people by the constitution of the World Health Organization (WHO) and in the International Declaration of Human Rights. The fundamental right to life enshrined in the constitution of Bangladesh, includes the fundamental role of health as an integral component. Bangladesh is investing in health and health research, but so far a Health Research Strategy has not been formulated formally. In view of the importance of health and the need for research to provide evidence for maintenance of health and for formulating rational health care policies, it is essential that a Health Research Strategy is laid down to channel efforts and funds in right direction. In order to formulate the strategy it is necessary to examine relevant existing national and international policies and review briefly the current status of health research in Bangladesh.

1.2. Health Research and Development

Health is a key factor in national prosperity on the other hand, disease has no national boundaries. At the same time major scientific breakthroughs hold the promise of more effective prevention, management and treatment for an array of critical health problems. Poor health and more broadly poverty and vulnerability, have never received as much genuine political attention as in the recent past. The inherent danger in the powerful and inexorable forces of globalization, and similarly with the revolutionary applications now arising from new genetic understanding, have potential to accentuate inequality. While their fruits are enjoyed by those nations and groups with the means of access, they are generally not available to the world's poor who, instead, progressively crowd the margins behind barriers that are ever more difficult to penetrate. Despite overall gains in health since Independence in 1971, in many instances, health inequities between rich and poor, have widened. New and reemerging problems have undermined gains, and accidents, injuries, mental health problems and non communicable diseases such as cardio-vascular diseases, metabolic disorder and cancer pose new challenges. Even as Bangladesh tries to cope with the long standing challenges of population growth, under-nutrition, maternal and infant mortality, shortage of health workforce such as nurses and technologists. Bangladesh is facing widespread arsenic contamination of drinking water which is a major public health problem. Globalization, trade reforms and the focus on intellectual property rights are additional pressures for Bangladesh to face. The paradigm shift for the twenty first century is the choice between an inclusive world focused on health problems that afflict the vulnerable, or a growing marginalization of those with the greatest burden from the means to improve their situation.

1.3. Health Research and Evidence Based Health Policies

It seems quite obvious and apparent that a strategy should be evidence based, especially as scarce resources are to be utilized in implementing the policies. There is therefore an urgent need for a Health Research Strategy aimed primarily for generating information coordinating all concerned stakeholders and using it for determining national priorities for implementing health programs.

1.4. International Initiatives

In 1990, the Commission on Health Research and Development proposed a set of strategies through which the potential of research could be harnessed to accelerate health improvements and to overcome health inequities throughout the world. The concept of Essential National Health Research (ENHR) was enunciated by the Commission to describe the health research (and the health research capacity) on which each developing country should concentrate. This incorporated two approaches: (i) Research on country specific health problems necessary to formulate sound policies and plans for field action; and (ii) Contributions to global health research aimed at developing new knowledge and technologies to solve health problems of general significance, which are also relevant to the population of the country.

The Commission also recommended that at least 2% of national health expenditure should be invested in ENHR, and that at least 5% of project and program aid for the health sector from development aid agencies should be earmarked for research and research capacity strengthening. As a consequence of the above recommendations, the World Health Assembly, in 1990, adopted

Resolution WHA 43.19 calling for member states of the WHO to undertake health research appropriate to national needs.

In 1993, the World Bank, in collaboration with the WHO, outlined the priorities in *Investing in Health* (World Bank 1993). A follow-on Conference in Ottawa, co-sponsored by IDRC, WHO and the World Bank, resulted in three major initiatives, one of which was an examination of issues relating to and redirecting investment in equity oriented development to health, led by the World Bank.

Another initiative emerging from the Ottawa Conference was an *ad hoc* review of health research priorities (with WHO as the Secretariat), which resulted in a five-step systematic approach being suggested for resource allocation for strategic health research. The third initiative was the establishment in 1997 of the Global Forum for Health Research (GFHR). The GFHR has since identified the inequities in health research financing, where 90% of the investment in health research addresses the problems of 10% of the worlds population (The 10/90 Gap).

A relatively recent development is the growth in the number, size and financial outlay of philanthropic foundations and international NGOs. While their stated aims and objectives cannot be faulted, in several instances there is cause for concern on their limited or narrow agenda, the likelihood of their diverting national focus or influencing the thrusts and direction. This could be detrimental to the national interests, thus reinforcing the need for national policies.

In Bangladesh while most of the agencies funding research have plans in general linked to the HNPSP and RPIP (2003-2011), a coordinated Health Research Strategy which could guide planning and implementation is not yet in place. Some of the conflicts and failures of Bangladeshi health research endeavors can be attributed to the absence of such an overarching strategy.

Over the past decade or so, there is substantial evidence to suggest that national governments of several countries increasingly recognize that health research has the potential to help reduce the impact of many health problems faced by their populations, and thus contribute to national development. Resource allocation in health research being an investment (not an expenditure) deserves more attention to achieve health development. Much more investment is needed for a new, innovative approach to research on health systems. It is a timely effort, as we are in the early days of a new century and millennium, when Bangladesh is poised to take its rightful place in the global village, that a strategy spelling out the critical role of health research in the country's development is adopted.

1.5. Health Research Challenges

Given the achievements made, the constraints faced and the concerns felt, the challenges before the country in so far as health research is concerned are:

1. Reducing the inequities in health between various segments of the country.
2. Determination of the priorities at national, divisional, district and upazilla levels.
3. Addressing certain current issues, such as demographic and epidemiological transition and their implications for human health, modern biotechnology (including genomics, human genetics and new drug development), environmental and ecological impact on human health, as also emerging and reemerging diseases.

4. Integration of health research system with the national health development plans.
5. Linking of academic research (thesis, dissertation, treatise etc.) with the mainstream of national health problems and research in a consistent continued process.
6. Formulation of adequate ethical guidelines for human subjects and improvement and harmonization with internationally accepted guidelines and principles of ethics.
7. Linkage of Bangladeshi health research system to global, regional and other national research systems.
8. Attainment and retention of a critical mass of researchers in various disciplines affecting health.
9. Sensitization for research among policy and strategy makers, planners and managers, health workers, community groups and others.
10. Financing health research and actions to achieve targets, from both internal and external sources.
11. Availability of resources for research (human, financial and infrastructure) and judicious use of national priorities.
12. Resource allocation and monitoring.
13. Access to national and international research literature and knowledge base, both as contributors and as users.
14. Development of closer links between the research community, health services managers and policy makers to facilitate the utilization of research results in practice, decision making and strategy formulation.
15. Threats posed and opportunities offered by globalization.
16. Creation of research culture within policy makers, managers, researchers and communities to value research, and a research environment which will be supportive of scientists and science.

Health is also now recognized as a fundamental and integral part of national development and a factor that promotes equity. A clearly defined Health Research Strategy therefore is the basis for maximizing the return on investment in this important field.

2.1. Goals

To generate and communicate knowledge that helps to form the national health plan and guide its implementation, and thus contributes, directly or indirectly, to equitable health development in the country. To adapt and apply knowledge generated elsewhere to national health development; and to contribute to the global knowledge base on issues relevant to the country.

2.2. Underlying Values

2.2.1. Health research as an investment

Health research should be considered as a necessary investment for health as well as overall development. Its value as an investment for a healthier population and as a means for cost-beneficial services is recognized and acknowledged.

2.2.2. Equity

A commitment to addressing the problems of the vulnerable segments of the population, in order that the benefits of research are accessible to them.

2.2.3. Ethics

A commitment to the ethical practice of health research. The current guidelines will be periodically reviewed and given legislative approval.

2.2.4. Self-reliance

Self-reliance in financing, human resource development and upgradation of infrastructure and the sovereign right to determine priorities and set out strategies.

2.2.5. Ownership

All stakeholders in the research process will have the right to participate in and have access to the outcomes of the research. The rights of individual citizens to be aware of and participate in sharing the fruits of research shall be protected.

2.2.6. Solidarity

A spirit of solidarity will be promoted among all the stakeholders in the Bangladeshi Health Research.

2.3. Development of A Research Culture

It is essential to inculcate a research culture among all concerned within the health sector, in order that the value of research and of researchers is recognized, and a supportive environment for research is created at all levels.

2.4. Inter-sectorality

The essentiality of inter-sectoral cooperation in health and development will be recognized, and made more effective and meaningful.

2.5. Partnerships

Partnerships within the country, and outside would be essential to derive the maximum possible benefit from research endeavors. While strengthening and expanding partnerships the sovereign rights of the country will be protected.

Health manpower producing institutions should be integrated in such a manner that academic and research should be highly complementary and supplementary because just based on mere epidemiology and operational research self reliance cannot be attained.

Research should be linked with economy and market so that the fruit of research can be translated into products of earning for the national exchequer.

2.6. Accountability

Researchers, managers, strategy makers and decision makers will be accountable. The criteria for accountability will not only relate to monetary matters, but also include research quality and translation of research into action.

3.1. Purpose

**Provide an enabling framework
for the conduct of research that improves
human health and well-being in Bangladesh**

The health research strategy for Bangladesh is located in both global and local socio-economic contexts, and seeks to respond proactively to the challenges of the millennium. It attempts to create a framework and environment for health research to contribute effectively to health development and is envisaged as an integral part of long-term health development aimed at improving health and quality of life of all Bangladeshis and reduces inequalities within the system. The research system should be based on a series of shared values with clearly defined and articulated goals.

An agreement on the values will lead to an improvement in quality, effectiveness and efficiency of the research system. The system needs to integrate the concerns and views of the community and policy makers, managers, basic and community based researchers and the national and global research priorities.

3.2. Mission

To promote research that contributes towards the improvement of human health and welfare in Bangladesh.

3.3. Goals

The strategy articulates a number of goals to fulfill its mission:

- To develop a national health research system that contributes to equitable health development.
- To promote innovation in health and health related service delivery.
- To advance through research knowledge that underpins health and equitable quality health care.
- To develop a coordinated, well funded agenda for research.
- To nurture talent and develop capacity to conduct research and utilize its findings.
- To encourage uptake of research-based knowledge into the health care system.

3.4 . Objectives

- To create a framework for a health research system that would improve the quality, impact, effectiveness and efficiency of conduction of research.
- To facilitate the integration of research in the health system through establishing the setting of research priorities as a corner stone of the system.
- To ensure equity by linking finances to national priorities.
- To utilize monitoring and evaluation as a strategy tool to improve the quality and impact of research.
- To build research capacity in all its facets within the community, health services managers, research institutions and decision makers.
- To develop a communication strategy that will established mechanisms for the dissemination of information and ensures that benefits of research are systematically and effectively translated into practice.
- To establish links and partnerships both locally and internationally between those involved in health, funding of research, researchers, research institutions and users of research in public and private sectors.
- To promote innovation and improve competitiveness in health and health related service delivery.

3.5. Operating Principles

3.5.1. The National Health Research Plan

A National Health Research Plan shall be developed based on a transparent priority setting exercise involving all stakeholders. It will be a rolling plan, to be reviewed and updated annually in the form of an annual operational plan.

3.5.2. Priority Setting

A priority research agenda will be developed based on national needs, for health to be a vehicle of equity and development and in accordance with certain national and global norms and practices.

3.5.3. Responsiveness

Current and emerging issues such as demographic and epidemiologic transition, emerging scientific developments such as modern biotechnology (genomics, human genetics, new drug development, stem cell research), health system research, health economics, behavioural and social issues, emerging and reemerging infections, *etc* .and the priorities of the national health plan will guide the research agenda.

3.5.4. Integration

The integration of the national research plan with the priorities and aspirations of society is essential for the ready utilization of the results of research. The linkages of the health system with communities, upazilla, district, division and national level is essential for developing the data bases necessary for research and service priority setting and decision making. The generation of this data shall be a priority.

3.5.5. Multi-disciplinary Linkages

Health research, in addition to the field of health, inter-sectorally encompasses education, environment, ecology, social and behavioral sciences, population, agriculture, trade, commerce, along with the physical, chemical, biological and mathematical sciences. This multi-disciplinary nature will be reflected in the national health research plan.

3.5.6. Socio- behavioral Sciences and Health Economics

In order to make meaningful health policies, plans and programs and to make medical technology useful and accessible to the community, it is essential to understand the community's perception of health problems, health services and health care providers. Social and behavioral sciences and health economics are integral to health research and will be actively fostered.

3.5.7. Focus on Vulnerable and Disadvantaged Populations

Equity in services and development shall be the cardinal principle in the health research system. There shall be a special emphasis on vulnerable groups, e.g., women, children, adolescents, and the aged who remain in the periphery of society and the larger health sector. Data on expenditure on health on these sectors, problems on delivery of health care and the potential impact of innovations in public sector financing and resource generation such as user fees, and the economic burden of disease in vulnerable groups and its impact on national development are key issues.

3.6. The Private Sector in Health Research

The private sector, pharmaceutical industry, biotechnology and biomedical technology oriented industries, private educational institutions, hospitals and nursing homes, research foundations and institutions, private practitioners, NGOs and community based organizations (CBOs, e.g., BMA, OGSB, BSRO) working on a not-for-profit basis, are now major stakeholders in health care research and delivery. The National Health Research System recognizes their important role in health research and shall foster their participation in the system as partners.

3.7. International Linkages

In the current global scenario international collaborative efforts are recognized as one of the factors in successful research because of the complementarity of technology transfer, capacity building and access to diseased populations. There are a large number of potential partners and in the choice of partners the priorities of the National Health Research Plan and national interest shall be paramount. Linkages with international research centers shall be further developed and strengthened keeping national interest, identity and sovereignty supreme.

3.8. Ethical Research

Maintaining ethical standard shall be mandatory in conducting all research involving human subjects by following Ethical Guidelines for Biomedical Research. The National Research Ethics Committee shall review the guidelines from time to time. Facilitation of training in research ethics shall be the responsibility of BMRC.

3.9. Targeted Financing

Government of Bangladesh will ensure equity in resource mobilization and allocation of public funds. It shall endeavor to ensure that the allocation and expenditure on health research is at least 2% of the total health expenditure under revenue budget. The Government will make arrangement to allocate more than 5% of WHO and other UN Agency Country Budget to health research. Any program or project under development budget will earmark at least 5% of the total allocation for Research & Development activities. The Government will negotiate with the pharmaceutical companies in the country (both national and multi-national) to allocate 50% of their research allocation to be operated by the BMRC following their goals and objectives with due recognition. International funds will also be mobilized in keeping with the national priorities.

3.10. Monitoring and Evaluation

To ensure that resources are used efficiently and in line with agreed priorities there is a need for continuous monitoring and evaluation. BMRC and DGHS will further strengthen their procedures for reviewing proposals, monitoring ongoing projects and research reports. BMRC and DGHS will develop explicit policies and procedures for evaluating the output and impact. Indicators will be developed to monitor the development and effectiveness of the health research to capture the contribution of research in reducing inequities. Direct indicators of national development, would serve as indirect indicators of the efficacy of health research as a vehicle of development.

A coordinated, coherent national health research system, that contributes to equitable health development through improvement in quality, effectiveness and efficiency of research.

Investing in improved health is essential for global economic development. The World Bank's World Development Report 1993: Investing in Health (World Bank 1993) argues that the most important contribution to advancing the broad vision of health is to reduce the burden of disease and disability. The report further focuses on the contribution of research in reducing this burden of disease.

However the single most important determinant of an effective health research system is the issue of governance and leadership. Governance within the context of the health research strategy relates to the means and actions by which the broad research community organizes itself in the pursuance of its mission of promoting research that has the potential to improve human health and welfare. Weak inter-sectoral linkages between the health sector and others such as environmental affairs, education and finance, are another major hindrance to effective health research. In addition the burgeoning number of actors and initiatives within health research must be moderated by enhanced co-ordination and collective decision-making and action.

Currently, health research is conducted, managed, and financed by a diverse number of organizations with very little co-ordination, accountability and impact analysis of the research on the critical health needs of Bangladesh. A need exists for strengthening of the coordinating structure of BMRC. The national leadership and coordination structures should be based on the following key issues:

Key Issues:

1. The national leadership should be an inclusive body representing all members of the broad research community.
2. The leadership should champion health research for equity and social justice.
3. Provide advice on the research agenda and the financing of that agenda to the various funding institutions and departments.
4. The national body should receive information on the quality and impact of the research.
5. National priorities and goals should become an integral part of the international research agenda.

Institutional Set Up:

Bangladesh Medical Research Council was established in 1972 by the order of the Honorable President of the People's Republic of Bangladesh, as an autonomous body under Ministry of

Health and Family Welfare (MOH&FW). The objectives, rules and regulations of the Council were formulated by a resolution of the MOH&FW in 1974 and 1976. As per resolution of the Government, BMRC is the focal point for health research in Bangladesh. Recently BMRC has approved a new organizational structure and formulated 'BMRC Act'. Both of these are now under active consideration of the government.

The functions of BMRC are: (i) To identify problems and issues relating to medical and health care needs, goals, policies and objectives; (ii) To organize and promote scientific research in various fields of medicine, public health, reproductive health and nutrition with specific references to primary health care needs; (iii) To initiate, assist, promote and coordinate scientific research in the field of health in medical institutions and to help such institutions in developing expertise and facilities for health research; (iv) To train human resource for health research through workshops and training programs to enhance capacity to solve health problems; (v) To organize and disseminate research information through publications, research seminars, workshops and orientation courses; (vi) To arrange for the application and utilization of the results of health research.

In the health research system of Bangladesh, BMRC is the central organization for promotion and coordination of health research, while the research implementing organizations are all Medical Colleges, Post-graduate Medical Institutes, BSMMU, BIRDEM, NIPSOM, IEDCR, NIPORT, general universities, health research related institutions including NGOs etc. BMRC will fund research to be conducted by the researchers of mainly institutions and organizations, which are part of the Health Research System. In addition to funding research, BMRC will ensure strengthening research capacity and dissemination of research results involving all the stakeholders mentioned.

DGHS/DGFP will act as strategic management organization for health research and facilitate linkages among research implementing institutions, research coordinating organization-BMRC and the Ministry of Health. DGHS/DGFP will develop annual operational plan for research, allocate research budget and distribute resources for research to relevant institutions mainly through BMRC. All health research institutions and organizations will forward their technical and financial reports to the DGHS/DGFP. BMRC will forward a list of all completed research studies along with financial statements implemented by the individual investigators and all research institutions. DGHS/DGFP will develop capacity in research management to cope with the entrusted responsibility.

Ministry of Health and Family Welfare will approve research strategies, policies and plans. It will provide administrative approval for conducting international collaborative research. MOHFW will provide support to DGHS/DGFP and BMRC in research management related issues. It will facilitate utilization of research findings and transformation of knowledge into practice. MOHFW will generate research fund and allocate to different institutional level through equitable distribution.

Role of BMRC:

1. Co-ordinate health research by liaising with all research stakeholders.
2. BMRC will assist the government in the development of health research priorities.

3. Review of preliminary and final research reports and give advice on strategic implications of completed research projects and send review reports to the Directorate General of Health Services and Directorate General of Family Planning.
4. Provide advice on all health research related matters to government departments and international agencies.
5. Facilitate co-ordination among the organizations and institutions at various levels so that the health research strategy operates in a coherent manner rather than a collection of fragmented and uncoordinated activities.
6. Any health research to be conducted in Bangladesh has to be registered with BMRC as a pre-requisite for any funding (national or international).
7. BMRC would advise Government on the gaps, synergies and overlaps that exist as well as on the appropriateness of the research work, its budget, achievements and emphases.
8. The National Research Ethics Committee-NREC (functioning under the BMRC & previously named as Ethical Review Committee), should set standards, advise the Departments and the Ministry of Health and Family Welfare on the management of research ethics for Bangladesh and arbitrate on the matters of ethics.
9. The NREC will be responsible to review all clinical trials of both non-registered medicinal substances in Bangladesh and new indications of already registered medicinal substances.
10. The NREC will advise the Drug Administration in ensuring that the drugs available in the country fulfill the necessary requirements for safety, quality and efficacy and that the decision to register a drug is in the interests of public health.
11. Research issues having religious or social sensitivity should be approved by NREC.
12. International collaborative research involving Bangladeshi population will have to get ethical approval by the NREC, while the administrative approval shall be given by the Government.
13. BMRC will sponsor and co-ordinate multicentric commissioned research on areas of national importance.
14. Establishment and further strengthening of BMRC sponsored research institutions and centers for conducting research studies on national priority research areas.
15. BMRC will take initiative to enhance its in-house human capacity, create appropriate physical facilities & logistics and strengthen linkages with all stakeholders involved in health research.

Priority Setting

A coordinated well funded research agenda based on shared values to underpin equitable health and development

Due to the transformation of the health care delivery system and the need to address the pressing health and development challenges in the country, it is imperative that health research priorities be determined for Bangladesh in short, medium and long term. It is vital that the country identifies priorities based on equity and social justice. The priority setting process should be an inclusive process and determined in consultation with all stakeholders.

Key Issues:

1. The broad based participation of various groups such as researchers, communities, policy makers, and the users of research must be a non-negotiable parameter of priority setting. Special attention will be given to include the poor, women, children and people with disabilities.
2. Health research priority setting must be an interactive and continuous process. Dynamic and changing nature of health and disease situations necessitate that integration and flexibility be built into the process through periodic monitoring and review of the agenda.
3. The priority setting should consider burden of diseases, socio-economic impact, political sensitivity and vulnerability of the population and ensure equitable resource input and outcome.
4. The upward synthesis of the national priorities to the global level should be pursued through articulation at regional and global forum.

Actions:

1. Conduct the priority setting process at least every 5 years with an interim review midway through the cycle.
2. The process should be initiated at district level and culminate with a national workshop.
3. The participants of the process must represent stakeholders involved in healthcare and health research. They should include community groups and NGOs, departments involved in health and development, providers of service, industry, and the researchers.

4. Health situation analysis needs to be an integral part of rational priority setting. A comprehensive model that combines amongst others, the health problem approach, health system approach and vulnerability approach should be adapted to the Bangladeshi situation.
5. The research priorities must be formally adopted through the governance structures of the different research institutions. The priorities must be formally ratified by the national government:
 - a. *Health Problem Approach*: Looks at the diseases that have the highest impact on morbidity and mortality.
 - b. *Health System Approach*: Looks at the health system as a unit and its effectiveness and efficiency.
 - c. *Vulnerability Approach*: Takes into account health problems of marginalized groups.

Ensure equity by financing national priorities

The limited human and financial resources within developing countries has led to a mismatch between funding and health needs, and the inappropriate concentration of research expertise. The poor economic performance of the poor countries has resulted in a decline in the real value of research funding. On a global scale the inequitable nature of health research is characterized by the '10-90 Gap' that is, less than 10% of health research funds was spent on 90% of the global burden of disease. The appropriate utilization of the limited financial resources is further hampered by the paucity of coherent information, gaps in information on health status of the population and unreliability of health and health related information. This information is currently collected by a variety of disparate agencies such as science councils, government departments, universities, NGOs and international donor agencies.

The Commission on Health Research for Development recommended that developing countries should invest at least 2% of national health expenditures in research and research capacity strengthening, and at least 5% of project and program aid for the health sector from development aid should be earmarked for research and research capacity strengthening.

Although on an average 5.2% of the total allocation is earmarked for research in the countries of the South East Asian Region of WHO, the distribution of resources for research in individual countries indicated distinct disparities; the research budget ranges from 2.7% to 9.4% of the total country allocation. In formulating its own programs for countries, WHO strongly advocate for allocation of at least 5% from the country budget for research and research related activities.

Key Issues:

1. The majority of national and international funds available in the country will be allocated to national priorities based on equity and social justice.
2. Financial resource flows for health research will be based on prioritization of research activities.
3. The health research governance would be respected by international collaborative efforts.
4. To reduce the 10-90 funding gap at least 2% of the regular budget and more than 5% of development budget of all UN Agencies, international organizations, donor agencies etc. will be earmarked for health research.
5. The research budget will also be utilized to promote a research culture and to strengthen research institutions and research management.

Actions:

1. BMRC will provide support to the Government, international organizations and donor agencies on the allocation of all health research funds.
2. The allocation for health research will be raised to at least 2% of total health expenditure under revenue budget and be directed to the BMRC. Fifty percent (50%) of the allocation to be earmarked to maintain and retain institutional capacity. Of the other 50% allocation, at least 60% will be utilized for conducting research.
3. The development budget will have a component titled Research & Development (R&D) and at least 5% of the total development budget will be allocated for this component to implement programs related to research capacity strengthening and to identify, articulate, conduct and disseminate priority researches. R & D component will be implemented by the Line Director, Research & Development, mainly through BMRC.
4. The WHO, other UN Agencies and development partners will earmark more than 5% of the total country budget and extra-budgetary fund for research.
5. Research funded by the pharmaceutical companies need to be approved by the Government and 50% of research fund of pharmaceutical companies (both national and multi-national) will be arranged and negotiated to allocate to BMRC for research related activities.
6. Monitoring of resource flows and expenditure will be maintained by the Government and the capacity to monitor resource flows and expenditure will be strengthened.
7. The output and impact of research studies will be evaluated through appropriate indicators to capture the contribution of research to human development.
8. All the Directors or Line Directors will channel their research fund through the concerned Director responsible for Research of DGHS/DGFP and accordingly concerned authority will provide research funds to all related institutions, majority through the BMRC.
9. Research fund allocated to different activities under country program and extra-budgetary fund of WHO and other UN agencies will channel through the concerned Director responsible for research of DGHS/DGFP and accordingly concerned authority will provide research funds to all related institutions, mostly through the BMRC.
10. Financial norms and guidelines will be developed for transparency in resource allocation and efficiency.

Nurture talent and develop capacity to conduct and disseminate research

Strengthening research capacity is one of the most effective and sustainable ways of advancing health and development. Research capacity strengthening is a tool to help a country deal with its national health problems as effective and efficient manner as possible. It is, therefore, part of the national health system and should be integrated into a comprehensive national health plan for the promotion of health and the delivery of health services to the country.

The research capacity developed in Bangladesh over the last 38 years has been highly selective and limited. Present undergraduate (even postgraduate) medical curriculum lacks due attention on research methodology and ethical issues, which provide strong justification for training of health professionals in research and ethics. The Bangladesh Medical Research Council conducts short term training programs for multidisciplinary participants to develop capacity in health research. Limitation of resources is an obstacle to organize substantial training programs for research capacity strengthening. As a result Bangladesh lacks a critical mass of research experts. Prevailing circumstances warrant appropriate attention to human resource development in health research.

Important decisions based on objective scientific analysis of available data and on the results of well designed and executed scientific research is crucial for urgent reform in the health sector. The most powerful and sustainable means of achieving this paradigm shift in advancing health and development is through the development of research capacity .

To reap the required benefits, the range of institutions that would be developed for the implementation of the research strategy goes beyond the traditional research and academic institutions. The additional groups would include the community, NGOs, health services facilities, government organizations and industries.

Key Issues:

1. Increase the skill base in terms of the range of activities and create critical mass of researchers.
2. Increase demand for research through development of research skills and culture of knowledge-based decision making. These skills would include leadership and management, research priority setting and communication.
3. Utilize skills in multinational partnerships that address national research priorities.

Actions:

1. The Directorate General of Health Services and Directorate General of Family Planning will develop a coordinated human resource plan for research with technical support from BMRC.
2. BMRC will continue to conduct short term training programs on topics related to research methods and should venture for substantial and innovative trainings for capacity strengthening.
3. Capacity will be increased within the academic and research community, e.g., research managers, through need and competency based training programs.
4. Improve institutional capacity to manage research and increase the number and critical mass of skilled researchers.
5. Integrate research methodology curriculum in undergraduate and post-graduate medical and allied education including nursing and health technology.
6. To create a critical mass of PhDs in health research through a formal action plan.

Dissemination and Utilization of Research Result

A communication strategy that disseminates information and ensures that the benefits of research are systematically and effectively translated into practice

The true value of health research in development has not been fully realized and utilized. The lack of impact of health research in a developing country context could be attributed to two major factors. The major issue is the lack of involvement of various stakeholders in the initial planning phase and at the other end of the research cascade, a lack of communication and dissemination of the results.

Key Issues:

1. Knowledge is both a key input and output of health research. Recent advances in information and communication technologies will be fully developed and exploited to create an information culture.
2. Collaborative networks and alliances will be developed and strengthened to improve communication among the various role-players.
3. Researchers need to communicate effectively among themselves and with other stakeholders.
4. The management of information and its role in communication strategies will be strengthened.
5. The need to protect the intellectual property rights generated through research will be counterbalanced with the duty to share information in the interest of public good. In international collaborative studies due recognition will be given to both local and international partners.

Actions:

1. All research projects must include information on how the results will be disseminated and how it will be used in decision making. The dissemination of information will be funded as part of the funding of a research proposal. For dissemination of the research results all sources including press and electronic media will be utilized.
2. BMRC and research institutions need to establish mechanisms that support researchers in identifying and submitting papers to high quality referred journals.

3. Mechanisms will be in place to access and utilize information generated in other countries.
4. Priority setting workshop will be utilized to communicate past outputs. Workshops for decision-makers will be held annually as a reporting mechanism.
5. Public understanding of research and science would be an integral part of health promotion campaigns.
6. The exchange of resources and personnel by institutions would be practiced with more regularity to increase contact and communication channels within the country.
7. A culture of informative and accurate health journalism would be cultivated with a strong emphasis on knowledge-based reporting.
8. A network of media and communication specialists in health sector need to be developed.

Research Environment

Most developing countries do not have an environment conducive to health research, Bangladesh is not an exception. Science based decision making is usually deficient in many cases and absent in developing countries, affecting the development of conducive research environment.

The creation of health research culture should begin at the levels of basic and high school education. Research practices will also be introduced as part of graduate and post-graduate education. There is also a need for recognition and to raise the profiles of researchers through various incentives and motivation. Appropriate research careers will be established. The health policy makers and decision makers will also demand evidence based information for policies and plans.

Key Issues:

1. Creating an ethos of evidence based decision-making amongst policy makers, clinicians and managers so that evidence-based decision making is widely practiced.
2. Research would be treated as a tool for health planning.
3. Provision of reward & recognition for research.
4. Research career development plan needs to be established.

Actions:

1. Develop a culture of evidence based decision making amongst policy makers, program managers as well as clinicians by increasing the number of decision-makers that have a research background.
2. Improve institutional linkages and lower persisting barriers to collaboration between medical colleges, institutions, universities and other organizations.
3. Enhance opportunities and provisions for financial assistance (travel grants, scholarships etc.) for participation of researchers in various seminars, conferences both at national and international levels to increase professional competence.
4. Ensure provision for career opportunities (promotion, placement, preference in recruitment, financial compensation, opportunities for international training, etc), in recognition of outstanding services in research. Preference will be given to young researchers for enrollment in PhD programs.
5. Provision of yearly reward and national recognition for achievements in health research.

This strategy provides an enabling framework for health research in Bangladesh. It seeks to ensure that the national research portfolio responds effectively to critical health and development challenges. In addition the strategy seeks to ensure that the evolving Bangladesh research system tackles persisting gaps in the management and coordination of health research.

This strategy:

1. Creates clear mechanisms for the re-allocation of government spending according to the health sector research priorities and needs.
2. Establishes channels for capacity building and redressing of inequities in health research. Introduces a long-term perspective for health sector research needs to introduce new management approaches to health research in Bangladesh.

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Government Approval

(English Translation)

Government of the People's Republic of Bangladesh
Ministry of Health and Family Welfare
Hospital Section-2

Memo No: MOHFW/Hospital-2/Misc.-16/07/06

Date: 05 January, 2009

Subject : Regarding Approval of National Health Research Strategy

I hereby directed to inform you that the proposed draft of **National Health Research Strategy** developed by the Bangladesh Medical Research Council (BMRC) harmonizing opinions from professionals of relevant government & private stakeholders has been approved by the Ministry.

Therefore, you are requested to take subsequent necessary measures in this regard.

Sd/-

(Nasreen Mukti)

Senior Assistant Secretary

Tel: 9556989

Director General
Directorate General of Health Services
Mohakhali, Dhaka.

Copy forwarded for necessary information:

1. Private Secretary, Secretary, Ministry of Health and Family Welfare.

Chronological Events in Development of this Document

Date	Venue	Events
29 June, 2008	IPH	Formation of Drafting Committee by the General Body of BMRC for formulation of the document.
15 July to 26 November, 2008	BMRC	Five Meetings of the Drafting Committee were held. A draft of the Document was developed.
14 December, 2008	BMRC	The draft Document was reviewed and approved by the Executive Committee of BMRC.
15 December, 2008	IPH	Workshop on National Health Research Strategy was organized by the Line Director, Planning and Research, DGHS with the participation of different Stakeholders e.g., Chairman of BMRC, President of BCPS, Line Directors of DGHS, Principals of Medical Colleges, Directors of Post-Graduate Institutes, public health experts, members of General Body of BMRC, representatives from ICDDR,B, NGOs, development partners and other related Institutions. <i>Secretary, Ministry of Health and Family Welfare was present as the Chief Guest, while Director General, DGHS chaired the Sessions.</i>
15 December, 2008	IPH	A Review and Editing Committee for the document was formed by the DGHS.
16 -21 December, 2008	BMRC	Two meetings of Review and Editing Committee were held. Final draft of the Document was prepared.
05 January, 2009		The Document entitled National Health Research Strategy (NHRS) was approved by the Ministry of Health and Family Welfare.

