HEALTH RESEARCH

Department of Health Research,
Ministry of Health & Family Welfare
Government of India
NEED FOR GREATER THRUST ON HEALTH RESEARCH

• Main Mantra: Knowledge generation and affordable technology development, adaptation and deployment for preventive, promotive and curative purposes

• 1. Scientific breakthroughs: key to effective prevention, management and treatment for critical health problems

• 2. A well defined health research system enables evidence based public health choices, in the most cost effective manner

• 3. Strong processes and regulatory systems required to ensure no misuse of technology and research, especially of vulnerable sections of society
Research to achieve National Health Goals

• Working Group identified 12 key challenges pertaining to triple burden (communicable, non-communicable and trauma) of diseases to achieve MDGs.

• 12 challenges include: Maternal and child health (high morbidity and mortality – during pregnancy, at birth, early life); unknown fevers; drug resistance; intestinal and respiratory infections in children; various water borne diseases; inadequate progress on gender related issues; drug resistance; genetic disorders; Integration with AYUSH; slow progress in disease burden studies, health systems research, health economics, socio-behavioural research; access of health care to marginalized groups/sections; sub-critical human resource.
Current situation

- Lack of adequate infrastructure/manpower
- Low funding/priority
- Inadequate regulatory structures
- Inadequate coordination & translational mechanisms

Status of Research
Current situation

- New and re-emerging diseases
- Decline in mortality and fertility rates, and ageing of the population
- Health inequities between rich and poor have widened
- Increasing burden of chronic diseases, Epidemiological and Demographic transition
PRIORITY AREAS

• STRENGTHENING RESEARCH INFRASTRUCTURE

• STRENGTHENING HUMAN RESOURCES & CREATING AN ENABLING FRAMEWORK FOR RESEARCH

• EFFICIENT RESEARCH GOVERNANCE & REGULATORY FRAMEWORK
PRIORITY AREAS

• DEVELOPMENT OF CENTRES ON POLICY RELATED & CROSS CUTTING AREAS

• TRANSDISCIPLINARY & TRANSLATIONAL RESEARCH & IMPLEMENTATION OF RESEARCH LEADS
PRIORITY AREAS

• ESTABLISHMENT OF EFFICIENT MECHANISMS FOR SELECTION, PROMOTION, DEVELOPMENT, ASSESSMENT & EVALUATION OF AFFORDABLE TECHNOLOGIES

• CREATION OF EFFICIENT MECHANISMS FOR INTERSECTORAL COORDINATION AND NATIONAL/INTERNATIONAL COLLABORATION
PRIORITy AREAS

• OPTIMUM USE OF INFORMATION TECHNOLOGY USING THE NATIONAL KNOWLEDGE NETWORK

• STRENGTHENING OF ICMR INSTITUTES; STRENGTHENING OF AYUSH INSTITUTES; ESTABLISHEMENT OF NEW SPECIALIZED CENTRES AND EXPANSION OF EXTRAMURAL PROGRAMME

• RESEARCH PRIORITIES TO BE GUIDED & FOCUSED ON PROBLEMS OF TRIBAL & OTHER MARGINALISED COMMUNITIES /GROUPS
Promotion and Guidance on research governance

• Putting in place appropriate Acts, Guidelines, regulatory authorities and structures to evaluate and recommend technologies, programmes, studies etc
• Enactment of an Ethics Bill and the establishment of the National Bioethics Authority,
• Creation of National Health Research Forum and
• Establishment of mechanisms for benchmarking, mapping, accreditation etc of health research institutions
INFRASTRUCTURE

• UPGRADATION OF ICMR CENTRES

• ESTABLISHMENT OF NEW ADVANCED CENTRES IN SELECTED AREAS (DHR/ ICMR/ IN COLLABORATION); UNIVERSITIES/ OTHER INSTITUTIONS.

• STRENGTHENING OF MEDICAL COLLEGE RESEARCH INFRASTRUCTURE

• ESTABLISHMENT OF RURAL CENTRES

*Need to augment quality of existing centres & to ensure geographical & subject spread of new centres*
## Human Resources

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Fellowships for training/ &amp; post doctoral fellowships:</td>
<td>Researchers in identified advanced fields</td>
</tr>
<tr>
<td>Scholarships at PG level:</td>
<td>Support for producing human resources in newer areas</td>
</tr>
<tr>
<td>Young Researcher programme</td>
<td>To encourage young students for Research</td>
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<tr>
<td>Special training Programmes</td>
<td>In specified areas</td>
</tr>
<tr>
<td>Mid-career research fellowships</td>
<td>(faculty development)</td>
</tr>
<tr>
<td>Start up grants</td>
<td></td>
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<tr>
<td>Continuous medical Education</td>
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**Need:** To develop a cadre of trained and skilled human resource for health research
**TECHNOLOGY FOR SURVEILLANCE and DIAGNOSIS**

Establishing a net-work of laboratories for diagnosis of the viral and other infectious diseases

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apex laboratories</td>
<td>NIV and NC DC</td>
</tr>
<tr>
<td>Regional laboratories</td>
<td>North, South, East, West, Central and North-Eastern</td>
</tr>
<tr>
<td>State level laboratories</td>
<td>In each State &amp; Union Territory, preferably in Govt. Medical College/ hospital</td>
</tr>
<tr>
<td>District level laboratories</td>
<td>200 district level labs: to cover a cluster of 3-4 districts in public or PPP mode</td>
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</tbody>
</table>

*Surveillance network for Non Communicable Diseases*
Inter-sectoral coordination

To bring together basic, translational, and clinical investigators, networks, professional societies, industry etc to facilitate development of programs and research projects

• Translational Research Projects
• Trans-disciplinary projects
• Research studies
• Funding of Joint Projects
• Comparative/cost effectiveness analysis for public health choice and development of guidelines/protocols for prevention, promotion, diagnosis and treatment of diseases & transdisciplinary protocols
Mechanisms to evaluate the health research undertaken by various scientific departments including ICMR

To establish a mechanism for coordination between the academic and the industry

To develop and fund projects jointly developed in coordination with other departments of MOHFW (AYUSH; HFW; Aids control); Agencies like DST, DBT, DARE/ICAR, DSIR/CSIR, Department of Space, Ministry of Environment & Forest, National Disaster Management Authority, DRDO, National Knowledge Network etc. keeping in mind trandisciplinary & integrative research
Resources required: People, Money, infrastructure:

For the strategies and schemes that have been detailed the requirement of funds would be to the tune of Rs 15,000 crores for a five year period. In addition Rs 1000 crores (500 for infrastructure & 500 for projects) to be kept for integrative Research
Regarding the recommended amount of Rs.15,000 Crores for Twelfth Plan:

Eleventh Plan Outlay for DHR was:
- ICMR: Rs 4496 crores
- DHR (apart from ICMR): Nil

Recommended outlay for Twelfth Plan:
- ICMR: Rs 8500 crores
- DHR (apart from ICMR): Rs 6500 crores
- Total: Rs 15000 crores

DHR created in 2008 (mid plan) with new functions and work allocation

To bridge major gaps in infrastructure and human resources for health Research, and fulfill the mandate of DHR, Rs 6500 crores is minimal

To meet the challenges of the changing epidemiological and demographic transition, Rs 8500 crores minimal requirement for ICMR

Thus, Rs.15,000 crores for the targets spelt out and finalized after thorough consultations during last three years is bare minimum

Budget for Health Research, needs to go up from approx 2% of health budget to atleast 5%
RESPONSE TO COMMENTS ON THE WORKING GROUP REPORT

• **Assessment of the financial performance** of DHR has been carried out

• Allocation was only for ICMR and the DHR was created afterwards

• Against the requests for different years, only Rs 2117 crores were approved/ released

• Utilisation has been nearly 100% (barring NE)

• Many programmes could not be taken up as the budget approved ultimately was much lower than requested every year
Intramural studies by ICMR Institutes:

- The performance of the individual ICMR institutions has been reviewed and is a part of the detailed document submitted to the Planning Commission.

- The Working Group Report focused only on the achievements in different areas/diseases as more than one institution was working on the same thing in complimentary aspects or covering different geographical areas, e.g. eight ICMR institutions are contributing on tribal health; five institutions are working on JE/AES; six institutions are working on TB research of which two are National Reference Laboratories.
RESPONSE TO COMMENTS ON THE WORKING GROUP REPORT

Synergy:

• The Department has started with a major emphasis on creating a synergy with other departments for product/technology for research formal mechanisms established.

• Areas for joint development and action have already been identified.

• These Groups will oversee the programmes in this direction in the Twelfth Plan as well.
RESPONSE TO COMMENTS ON THE WORKING GROUP REPORT

• Coordination in the Indian System of Medicine (AYUSH) is a part of ongoing research activities

• ICMR has structured programmes with Department of AYUSH as well as CSIR to work on the Indian Systems of Medicine

• This point will be incorporated in the document: A separate centre dedicated to integrative research will be created
Emphasis on local solutions:

- Department of Health Research works with the main goal of empowering the institutions and strengthening the human resource in the periphery for finding effective locally acceptable for various health issues.
- Three of four new schemes developed aim at creating a capability for research and intervention at the local level.
A strong monitoring and evaluation system for implementing the vision of research will be required and such mechanisms will be emphasized in the action plan.
The suggestion of having a single body for technology assessment and development for medical technologies is well taken. However, it needs to be emphasized that in order to avoid conflict of interest – as developer and for recommending decisions for the country separate independent bodies are desirable.
Thank you
Health research: determining factors

- Availability of infrastructure
- Availability of human resources
- Availability of guidelines / acts & other regulatory structures
- Availability of funds for health research in the public and private sector
- National priority given to health research / Priority in private and public sector including medical colleges
- Intersectoral priority in medical research including epidemiology, basic research, clinical research, public health research
- Intersectoral coordination for research & translation to products
- Use of research findings for evidence based planning & prioritisation
11th PLAN OUTLAY FOR
DEPARTMENT OF HEALTH RESEARCH

Rs in Crores

<table>
<thead>
<tr>
<th>ICMR</th>
<th>4496.08</th>
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<tbody>
<tr>
<td>ICMR &amp; IRR</td>
<td>200</td>
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## ELEVENTH PLAN OUTLAY

### Rs in Crores

<table>
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<tr>
<th>FINANCIAL YEAR</th>
<th>PLAN</th>
<th>NON PLAN</th>
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<tbody>
<tr>
<td>2007-08 (as part of demand 46)</td>
<td>176.65</td>
<td>90</td>
</tr>
<tr>
<td>2008-09</td>
<td>420</td>
<td>111.75</td>
</tr>
<tr>
<td>2009-10</td>
<td>420</td>
<td>186</td>
</tr>
<tr>
<td>2010-11</td>
<td>500</td>
<td>160</td>
</tr>
<tr>
<td>2011-12</td>
<td>600</td>
<td>160</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2116.65</strong></td>
<td><strong>707.75</strong></td>
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- **No outlay for DHR**
- **Outlay for ICMR: Rs 4696 crores**