

ICMR-INCLN National Research Priority Setting Exercise in Maternal, Newborn, Child Health and Nutrition (MNCHN)

EXECUTIVE SUMMARY

Objective

To identify research priorities in the area of maternal, newborn, child health and nutrition (MNCHN) for Department of Health Research, Government of India for prioritizing health research investment in the country.

Themes of Priority Setting

ICMR-INCLN Research Priority Setting Exercise has identified research priorities across four separate themes while considering conditions that together contribute to at least 75% of the mortality and morbidity burden:

1. Maternal Health,
2. Neonatal Health,
3. Child Health, and
4. Nutrition

Priorities were identified across four domains of research:

1. **Description:**Burden of disease, Epidemiology and Risk Factors
2. **Discovery:**Basic Science, Clinical, Public Health Interventions/ Package and Technology
3. **Delivery:**Health Policy and Systems Research (including program evaluation and implementation research)
4. **Development:**Improving the Existing Intervention (design, deliverability, affordability and sustainability)

Context

1. **Purpose:** Priority setting in maternal, newborn, and child health and nutrition for efficient and rewarding investment in research using a systematic, transparent, inclusive and quantitative method.
2. **Target Population:** Women of reproductive age (15-49 years); pregnant and lactating women, newborns (0-28 days), under-five children (0-59 months) and children (up to 18 years).
3. **Geography:** National and regional priorities (due to population, governance, social, cultural, & economic heterogeneity)
 - a. **National :** India
 - b. **Regional:**
 - i. Northern India including West Bengal
 - ii. Empowered Action Group States and North-Eastern States, and
 - iii. Western and Southern States
4. **Major Areas of Concern for Research:**Conditions that together contribute to at least 75% of the mortality and morbidity burden in Maternal, Newborn, Child Health and Nutrition in India during 2012-2013 as per the available evidence and expert opinion.

5. **Time Frame:** For the next ten years (with due consideration to unachieved Millennium Development Goals 1, 4 and 5, and National Health Mission targets and challenge of alignment of the national agenda with Sustainable Development Goals 2035).
6. **Stakeholder Constituencies** (operating in civil, public and private sectors, health and non-health sectors): Researchers, professionals, public health functionaries, policy makers, communities and their leadership, civil society, donor agencies and industries.
7. **Translation and Implementation Context:** Public and private health service & systems; National and international institutions & organizations funding research; Research environment in academic & research institutions

Method Used

The exercise has used a structured, transparent, inclusive, consultative and quantitative method called the Child Health and Nutrition Initiative (CHNRI) Method for setting the priorities.

The CHNRI method was proposed because it has a carefully developed and documented conceptual framework that is available to the public and has been validated through extensive use and acceptance in studies from different parts of the world involving policy makers, research donors, national and international organizations, and researchers in health and allied subjects. This method leverages on the concepts of crowd-sourcing and wisdom of crowds by systematic inclusion of a range of stakeholders who are direct or indirect end-users of the exercise product.

Structure

ICMR- INCLIN Research Priority Setting Exercise (RPS) in MNCHN involved constitution of four major structures:

1. The National Steering Group(NSG) for overall guidance to the RPS Exercise
2. The four Thematic Research Sub-Committees(RSCs) for finalizing the criteria for scoring the research options and identifying the priorities in the four themes
3. The Nationwide Network for crowd-sourcing of research ideas and scoring of research options
4. The Larger Reference Group (LRG) of Experts for ascribing relative weights to the scoring criteria

The project activities were centrally coordinated by the Research Priority Setting (RPS) Project Management Team at the Executive Office of The INCLIN Trust International.

Identification of Participants

The National Steering Group (NSG) was constituted with participation of ex-officio members from three key Ministries from the Government of India (Ministry of Health and Family Welfare, Ministry of Women and Child Development, and Ministry of Science and Technology) and State program managers, multi-lateral international organizations, health and nutrition research funding agencies, and invited experts, besides members from ICMR and INCLIN.

The members in the thematic Research Sub-Committees (RSC) and the nation-wide network were identified from among technical experts (academicians, clinicians, researchers, program managers) from MNCHN and allied disciplines through nomination, snow-balling

and purposive selection by reviewing CVs and contemporary literature, and consenting with due attention to regional representation.

The Larger Reference Group (LRG) was constituted with four constituencies of stakeholder viz., policy makers, program managers, senior researchers, and officials from research funding agencies.

Process

The exercise was completed over seven critical milestones:

1. Identification of Areas of Concern(AOCs) contributing to at least 75% of Morbidity and Mortality in India (18th Apr 2013):

The NSG along with the RSCs identified the four MNCHN themes and Areas of Concern (AOC) within each theme for soliciting research ideas and research questions. The AOC represented conditions that accounted for >75% of morbidity and mortality burden within each theme.

2. 1st Round of Crowd-sourcing: Pooling of Research Questions/ Ideas (Sept-Dec 2013):

Using an online software, 3497 research ideas were sourced from 498 experts(out of 1166 from 256 institutions) from the nation-wide network. These were refined onto 4003 research ideas across the four themes (Maternal Health: 1308, Newborn Health: 626, Child Health: 648, Nutrition: 1421).

3. Consolidation of Research Ideas into Research Options (Jan 2014- Feb 2015):

The 4003 research ideas were consolidated onto 373 research options through iterative refinement and collation. Each research option denoted a portfolio of inter-related research projects addressing a central idea.

4. Identification of scoring criteria (Mar-Jun 2015):

Following a thorough review of literature and extensive consultation with RSC members and international CHNRI experts, five criteria were identified against which the research options were scored. These criteria were as follows:

- a. **Answerability:** Can the research be done through ethical, transparent, well-designed, 'do-able' studies with the existing local and national capacities and or by strengthening the existing capacities through regional or global collaboration?
- b. **Relevance:** Is it likely that the research would address a high burden condition and critical gap in knowledge?
- c. **Equity:** Is it likely that the research product will address the differences in health and nutrition that are systematically associated with social, cultural and economic hierarchies, ethnicity, gender, environment and geographic disadvantages, thereby reducing inequities?
- d. **Innovation and out-of-the-box thinking to resolve complex and refractory challenges:** Does the new research have the potential for transformative change in the health system/ health care?
- e. **Investment on research:** Is it likely that the potential impact and benefits of the new knowledge on health/ nutrition will outweigh the consideration of investments on research?

5. 2nd Round of crowd-sourcing:Scoring (Jul-Oct 2015)

The research options were scored by 894 members from the nation-wide network across the five criteria over a period of four months.

6. Assigning of relative weights to scoring criteria by the Larger Reference Group (LRG) (Nov-2015- Jan 2016):

The LRG comprising of 84 members provided the relative weights to the criteria by distributing a hypothetical amount of INR 100 across the five scoring criteria according to their importance.

7. Generation of a ranked list of priority research options for endorsement by the National Steering Group (4th Feb 2016):

A ranked list priorities was generated for each of the four themes at national and regional levels by analyzing the scores obtained for each RO after the application of the criteria weights. The processes have been described above have been depicted in a flowchart overleaf.

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**ICMR-INCLN RESEARCH PRIORITY SETTING IN
MATERNAL, NEWBORN, CHILD HEALTH AND NUTRITION (MNCHN) 2013-2016
FLOWCHART OF ACTIVITIES**

