

Grand Challenges/Broad Goals as Relevant to The Nation to be achieved in XII Plan

High Power Committee noted the vision of Govt of India in addressing the current health challenges of persistent and new communicable diseases, increasing non-communicable diseases, emerging infections, climate change related problems with triple burden due to trauma and disabilities and need for more focussed efforts on marginalised and vulnerable population. HPC agreed that though significant achievements have been made in terms of different health indicators but lot more needs to be done in XII Plan to attain and reach near to Millennium Development Goals (MDGs).

HPC examined the report of the Working Group set up by the Planning Commission under the Chairmanship of Dr. V M Katoch, Secretary, Department of Health Research & Director-General, ICMR with Professor M.S. Valiathan as Co-Chair with membership consisting of representatives from various scientific Ministries, educational institutions, State Governments and other stakeholders to deliberate on the strategies for the XII Plan for Health Research. HPC noted the challenges identified for the XII Plan (Annexure 26).

Following detailed review of the XI Plan programmes and the proposed XII Plan activities, the HPC recommended the following grand challenges/broad goals to be achieved during XII Plan.

Strengthen efforts to eliminate diseases like Filariasis, Leishmaniasis, Leprosy

- HPC emphasized that ICMR should strengthen and undertake new research programmes that would help the National Programmes to progress towards elimination of diseases like filariasis, leishmaniasis and leprosy.

Poliomyelitis

- HPC urged ICMR to step up its activities so as to enable national certification of polio eradication by December, 2013.

Control/Management of Malaria, Dengue/ Chikungunya/Lung Fluke and HIV

- HPC recommended that ICMR, through the Vector Borne Disease Science Forum should strengthen research on insecticide resistance monitoring of malaria, dengue, JE and visceral leishmaniasis vectors which will generate susceptibility status of malaria vectors to DDT, malathion and deltamethrin in affected states. Also studies on 'Biology and Bionomics of Vectors' in various states, adequate information on role of transovarian transmission in dengue, transmission dynamics of Chandipura virus and proposed surveillance set up for monitoring of JE and Dengue vectors were considered of high priority by HPC.
- **Malaria** : HPC suggests that studies aimed at control and management of Malaria may be given due importance - identification of molecular marker(s) for relapse of malaria, alternate regimens for treatment of malaria; studies to assess changing clinical profile of

Malaria; implementation research to test the intervention model to control *An. fluviatilis* transmitted malaria in the tribal areas of Odisha along with the susceptibility/resistance status of the malaria vectors.

- HPC took note of major success in reducing the diseases burden due to Lung Fluke (paragonimiasis) infection in north-eastern part of India. HPC has desired that this problem may be taken as priority for further translational and implementation research to control and manage the disease through continued case detection by involving community and utilizing local health machinery, prompt treatment and capacity building for diagnosis of paragonimiasis by sputum examination and serological tests and integration of paragonimiasis surveillance with an aim at diagnosis and treatment through routine RNTCP and prevention through IEC campaigns in affected areas.
- HPC while appreciating the research efforts of ICMR institutes and its support to NACO for the control and management of HIV, desired that ICMR should continue to give these research programmes a priority in XII Plan.

Support in Developing Vaccines for Cholera, Typhoid, Chikungunya, Japanese Encephalitis (JE), Tuberculosis (TB), etc.

- HPC recommended that ICMR should continue to support studies aimed at generating evidence for policy for introduction of new vaccines, carry out clinical and operational research on acceptability, optimal schedule, model demonstration projects on feasibility and impact of new vaccine introduction and preparation of clinical trial sites for vaccines.
- HPC recommended that ICMR should accelerate its programme of hepatitis E vaccine; recombinant B & E vaccine candidates and issues of adjuvant and dose optimization addressed through a public-private partnership interface.
- HPC noted that the candidate JEV vaccine developed by NIV and transferred to the Bharat Biotech Pvt Ltd, has successfully completed the initial trials and nearing the goal for being used as a feasible indigenously developed alternative to any imported vaccine for JE in India. HPC expects that ICMR will make all efforts to complete this programme during next two years.
- HPC recommended that studies on comparative evaluation of efficacy of JE virus live, attenuated and killed vaccines may be undertaken on priority so as to strengthen ongoing vaccination programme of Govt of India.
- HPC encourages partnership with innovators and companies to work on Chikungunya vaccine.
- HPC appreciated that ICMR is in the process of establishing a Centre for Vaccine Preventable diseases for analysing the evidence for action for this purpose and desired that these efforts may be accelerated.

Expand Disease Surveillance System including estimating Diseases Burden

- With a view to support the control of Vaccine Preventable diseases, HPC recommended that priority may be given to studies aimed at estimating the disease burden of various diseases like meningitis, respiratory, AES and enteric infections.
- HPC suggests priority for disease burden studies like malaria, tuberculosis, malnutrition and NCDs in tribal and other marginalized communities/ sections of society.

Strengthening Biomedical Research in Medical Colleges

- HPC recommended that the ICMR Institutes should make greater efforts for conducting collaborative projects with Medical Colleges in order to mentor research culture among their faculty. HPC opined that ICMR Institutes should continue to support projects submitted by peripheral medical colleges by providing hand holding for training in research methodology and protocol development. Multicentric research projects may also be encouraged under Vector Borne Disease Science Forum, Tribal Health and zoonotic diseases.
- HPC noted that under the National Anti Microbial Resistance Surveillance Network (AMRSN) the ICMR proposes 12-15 medical colleges across the country to act as regional centers (RCs) to work with National Centers on AMRSN. HPC has desired that programme may be accorded a top priority, it may be expanded and linked to public health interventions in a dynamic mode.

Create Health Databases

- HPC recommended that Clinical Trials Registry-India (CTRI) established by ICMR and DST at National Institute of Medical Statistics, New Delhi, may be strengthened. Analysis of trends in the registration may be undertaken so as to draw programmatic implications. The Institute may also continue its programme on dissemination/training workshops on Clinical Trials Registration Process in different parts of the country for clinical researchers and members of the Ethics Committee in partnerships with CDSCO so as to align with new rules.
- HPC agreed that proposed programmes on data capturing, collation and analysis on viral diagnostic labs (VDL's) on emerging and re-emerging viral infections and the national data of antimicrobial resistance compiled by National Anti Microbial Resistance Surveillance Network (AMRSN) established at different levels of Health Care established by ICMR are of great relevance. HPC recommends that mechanisms may be developed to create an inter-phase with MOH&FW to take policy decisions regarding implementation of various vaccine/health related programmes.

Microbial/Viral/bio banks

- HPC opined that various repositories of pathogens such as – Mycobacterial Repository at NJILOMD, Agra ; The National Gastro-intestinal tract Pathogens Repository at NICED; Malaria Parasite bank at ICMR's National Institute of Malaria Research ; HIV virus strains at NARI etc have played valuable role. HPC recommends their continuation and strengthening during XII Plan.