# Research studies areas to be taken-up under Grant-in-aid scheme of DHR

### 1. Research Studies in areas relevant to Public Health.

S.NO.	Priority Area of	Topic of the study	
	Research		
	Non-Communicable Diseases		
1.	Cancer	Estimation of State/region wise disease burden	
		Profiles of cancers	
		Risk factors identification	
		<ul> <li>Development and evaluation of algorithms for diagnosis and Management</li> </ul>	
		Other areas relevant to the programme.	
2.	Mental Health	<ul> <li>Epidemiological studies for assessing for disease burden and determinants etc.</li> </ul>	
		Development of skills for end of life care	
		Model projects under Brain Grid with NKN	
		Development and evaluation of algorithms for diagnosis and	
		management	
		Other areas relevant to programmes.	
3.	Cardiovascular Diseases	Epidemiological studies for Burden estimation (regional/states)	
		Socio-behavioral, lifestyle and other risk factors	
		Profile of CVS diseases	
		Development and evaluation of algorithms for diagnosis and	
		management	
		Other areas relevant to programmes.	
4.	Environmental Health/	Burden estimation	
	occupational health	Impact of legislation	
		Air and water pollution	
		Health problems related to pesticides etc	
		Profile of occupational health problems of national importance	
		Other areas relevant to programmes.	
5.	Stroke and neurological	State and regional data	
	disorders	Type of strokes	
		Risk factors estimations	
		Development and evaluation of algorithms for diagnosis and	
		management	
		Other areas relevant to programmes.	
6.	Diabetes	State and regional data	
		Risk factors estimations	
		Strategies for management at various levels	
		Other areas relevant to programmes.	
7.	Metabolic disorders	State and regional data along with risk factors	

		Development and evaluation of algorithms for diagnosis and	
		management	
		Other areas relevant to programmes.	
8.	Congenital	State and regional data including classification	
	Malformations and	Risk factors estimations	
	Genetics	Development and evaluation of algorithms for diagnosis and	
		management	
		Other areas relevant to programmes	
9.	Kidney and liver	State and regional data and types	
	disorders	Risk factors estimations	
		Development and evaluation of algorithms for diagnosis and	
		management	
		•	
		Other areas relevant to programmes.	
Studies	1. Physical Health	Studies on various aspects such as:	
on	problems	Vulnerability to diseases.	
Gender	specifically related	Socio-cultural factors	
and	to women	Education and access to information	
Health	regarding top 5	Gender specific public health interventions	
	problems:		
	<ul><li>Heart diseases,</li></ul>		
	■ Breast		
	cancer/cervix		
	<ul><li>Osteoporosis</li></ul>		
	<ul><li>Depression</li></ul>		
	<ul><li>Autoimmune</li></ul>		
	diseases		
1.	Maternal health	Estimating morbidity and mortality patterns	
		Nutritional disorders	
		Tools for reducing MMR	
		Reproductive health	
		Health care seeking behavior	
		Other areas relevant to programmes.	
2.	Child health	Estimating morbidity and mortality patterns	
		Nutritional disorders (malnutrition and obesity)	
		Diarrhoeal and respiratory disorders	
		Factors affecting pre-term, LBW	
		Immunization	
		Other areas relevant to programmes.	
3.	Low child sex ratio and	Factors influencing female feticide	
	other Gender and Health	Social beliefs	
		Qualitative research studies	
		Domestic violence	
		Other areas relevant to programmes.	

# 2. Programme for Translational Research

Item	Topic of the Study		
Leads identified by ICMR	The technologies targeted for 2013-14 include :		
Institutes and partly developed	(i) diagnostic assays/ reagents/ devices for diabetes mellitus; cervical cancer; thallesemia ; infectious diseases such as tuberculosis, leptospirosis, hepatitis E, rotavirus diarrhoea, food borne pathogens, Chlamydia infections, kala- azar, malaria, filarial and lung fluke;		
	(ii) vaccines for Japanese encephalitis, hepatitis E, ;		
	(iii) nutrition: assays for bioavailability of iron , vitamin A estimation;		
	(iv) Others: cooling garment to prevent and manage heat effects; ergonomically designed rickshaw; test for determination of viability of sperms; molecules, metabolites / organisms for biological control of mosquitoes.		
	31-75: Leads identified as second priority likely to take 3-4 years to develop prototype/ technologies		
1.Leads identified from extramural projects 2.Leads identified by other agencies/ requiring inter- departmental collaboration with like DST, DBT, DSIR, DRDO etc.			

# 3. Programme for Inter-sectoral Co-ordination including funding of joint projects

S.NO.	Purpose of study		
Joint pro	ojects with DBT /DST/DRDO on diagnostics & vaccine		
1.	Diagnostics in area of Cancer, Stroke, Diabetes, Vector borne diseases, Tuberculosis,		
	Leishmaniasis etc.		
	Vaccines for Vector borne diseases, Leishmaniasis etc.		
	Basic biology, polymers, devices, bio-instrumentation and other life science related areas		
	like nanotechnology etc.		
Joint pro	pjects with DBT /DST/CSIR/ on New drug discovery		
2.	Drug discovery in the areas of Cancer, Stroke, Diabetes, Vector borne diseases,		
	Tuberculosis, Leishmaniasis etc.		
	Diagnostics, devices and therapeutics with DST, DBT, CSIR, DRDO, Information		
	Technology		
Joint pro	pjects with AYUSH New drug discovery / Treatment		
3.	• Drug discovery / new treatment in the areas of Cancer, Stroke, Diabetes, Vector borne diseases, Tuberculosis, Leishmaniasis, cardiovascular diseases, Mental disorders, arthritis, skin disorders etc.		
	<ul> <li>Role of Yoga in cardio-vascular diseases, diabetes, stroke and neurological disorders etc.</li> </ul>		
	Other alternate therapies		
	• Other alternate therapies		
Joint pro	jects with Department of Environment		
4.	Effect of climate change on vector borne diseases, and other communicable diseases and		
	impact of transgenic/ recombinant technology on health		
	Indoor and outdoor air pollution		
	Noise heat, radiation pollution etc		
	Pollution due to chemicals, pesticides, other toxic waste etc.		
	Development of disaster management tools		
Joint pro	ojects with DARE/ ICAR		
5.	Diagnostics, treatment and control of diseases on Zoonosis		
	Improvement of nutritional status		
	Nutritional safety –use of pesticides; other toxic contaminants etc		
	Traditional surface of positional solution control con		
Joint pro	ojects with Department of Space		
6.	GIS mapping of Vector borne diseases with geo-climatic factors		
O.	GIS mapping of cardio-vascular, cancer, diabetes diseases with population density,		
	industry, agricultural produce etc.		
	, , , , , , , , , , , , , , , , , , ,		
Joint pro	ojects with M/o of Women & Child Development, Department of Health & FW and ICSSR/		
-	nent of information technology/ labour etc.		

Nutritional patterns and developing interventions with WCD, Nutritional institutes
 Socio-behavioural factors related with maternal health with ICSSR
 Health education with WCD
 Public health interventions with Department of Health and women and child development, social justice
 Under-five morbidity pattern with ICDS
 Nutritional interventions with schools, WCD
 Studies with ICSSR on Low Child sex ratio, female feticide, domestic violence and sexual violence at work place
 Model projects on implementation of Knowledge management policy;
 other model projects related to national programmes including health systems research and socio-behavioural interventions

### 4. Programme for Comparative /cost effectiveness analysis for public health choice.

S.NO.	Area of Research	Sub-areas	Topics of the study
Α.	Non-communic	able diseases	
1	Cancer		<ul> <li>Methods for effective and early diagnosis</li> <li>Impact of health services for cancer management</li> <li>Efficacy of different regimens</li> <li>Development of guidelines for diagnosis and management</li> </ul>
2	Mental Health		<ul> <li>Scales and tools for assessment of Mental Health</li> <li>Evaluation of newer modalities of treatment like ECT etc</li> <li>Development of guidelines for diagnosis and management</li> </ul>
3	Cardiovascular Diseases		<ul> <li>Assessment of promotive models for prevention of risk factors</li> <li>Efficacy of newer diagnostic tests</li> <li>Models of early treatment to reduce mortalities</li> <li>Health informatics and health technology assessments</li> <li>Development of guidelines for diagnosis and management</li> </ul>
4	Stroke and neur	ological disorders	<ul> <li>Newer diagnostics</li> <li>Newer treatment modalities</li> <li>Preventive models</li> <li>Development of guidelines for diagnosis and management</li> </ul>
5	Diabetes		Newer diagnostics

6	Malaria Dengue Chikungunya Japanese Encephalitis (Vector Borne Diseases)	<ul> <li>Newer management strategies</li> <li>Health promotive and preventive models</li> <li>Development of guidelines for diagnosis and management</li> <li>Efficacy of alternate drugs</li> <li>Newer vaccines</li> <li>Newer drugs including larvicidals</li> <li>Preventive technologies</li> <li>Use of technologies for prevention and cure</li> </ul>
		Development of guidelines for diagnosis and management
7	Tuberculosis / Leprosy Other Mycobacterial diseases	<ul> <li>Multidrug resistance</li> <li>Newer diagnostics</li> <li>Newer drugs and combinations</li> <li>Development of guidelines for diagnosis and management</li> </ul>
8	Leishmaniasis / Kalazar	<ul><li>Newer diagnostics</li><li>Newer drugs</li></ul>
9	Zoonoses	<ul><li>Newer diagnostics</li><li>Newer drugs</li></ul>
10	Guidelines for management of important maternal and child health problems; region specific guidelines for nutrition; enteric infections, acute fevers; PUO; genetic disorders, blood disorders etc;	