

Clinical , antropometric and biochemical component of the Annual health survey

Background information

Realising the need for generating comprehensive district-level data on the health and nutrition status of all members of the family, fertility and mortality parameters, and maternal and child health, the National Commission on Population recommended “there should be an Annual Health Survey (AHS) of all districts, which could be published/monitored and compared against bench marks”. In response to this recommendation, the Registrar General of India is carrying out the Annual Health Survey, which is being funded by the Ministry of Health and Family Welfare. The field work has been outsourced to experienced survey agencies, and the supervision is being done by the Office of the Registrar General of India (ORGI). The objective of the AHS is to provide the core vital health and nutrition indicators at the district level. Currently, the survey is being carried out in 284 districts in 9 States (Assam, Bihar, Chhattisgarh, Jharkhand, MP, Orissa, Rajasthan, UP, and Uttarakhand). For effective management of field work, these states have been divided into 18 zones with more or less equal work loads. The survey is being carried out in 20,252 statistically selected sample units (census enumeration blocks in urban areas and villages in rural areas) covering 3.6 million households, comprising a total population of 18.2 millions. In each district, 71 sample units with a population of about 64,000 are covered. The sample size has been calculated to provide reliable estimates of Infant Mortality Rate at district level (with average IMR of 60 and birth rate of 25) with a 10% permissible relative standard error. In order to provide district-level IMR estimates for the said 9 States, AHS covers a sample which is ~2.7 times larger than the all-India sample of SRS (which provides state-level estimates of IMR). The first round of the AHS has recently been completed, and the district-specific fact sheet providing district level data on:

- fertility and mortality
- prevalence of disabilities, injuries, acute and chronic illnesses and access to health care for these morbidities and
- access to maternal, child health and family planning services

have been released and uploaded on the website of the RGI. .

Clinical, anthropometric and biochemical (CAB) component of the annual health survey

In India, undernutrition and anaemia have been major public health problems in all segments of the population. DLHS 2 provided district-wise information on the prevalence of undernutrition in preschool children, and the prevalence of anaemia in preschool children, adolescent girls and pregnant women. However, data on the prevalence of anaemia and undernutrition in other age groups and physiological groups are not available. Available data indicate that infant and young child feeding and caring practices, and morbidity due to infections, are critical determinants of the nutritional status of preschool children. DLHS 2 has shown that there are substantial inter-State and inter-district variations in these, but no updated information is available. Even though the use of non-iodised salt is banned in the country, NFHS-3 showed that the proportion of households consuming non-iodised salt/salt

with inadequate iodine content remains high. Updated information is needed to assess the impact of the ongoing efforts to improve access to iodised salt.

India is currently undergoing a nutrition and health transition. Over-nutrition, hypertension and diabetes are emerging as public health problems in both urban and rural areas. There has not been any nation-wide survey to provide district-level data on the prevalence of over-nutrition, diabetes and hypertension. It is essential to obtain district-specific data on all these, so that appropriate district-specific interventions can be planned, implemented, and their impact monitored.

The clinical, anthropometric and biochemical (CAB) component of the AHS is an effort to obtain, in the sub-sample of the AHS, district level data on the prevalence of under- and over-nutrition, anaemia and hypertension, abnormalities in fasting glucose levels, and household availability of iodised salt. This will enable the formulation of decentralised district-specific plans for interventions and also provide the baseline data against which the impact of interventions (process and impact parameters) during the Twelfth Plan can be assessed. The CAB survey will be carried out in a sub-sample of the AHS survey population - 1350 households per district spread across 12 villages /urban enumeration blocks. The sample size has been computed based on the assumption that the prevalence of abnormal fasting glucose level is likely to be seen in 4 % of the population. In respect of all children below the age of 3 years, information on infant and young child feeding and caring practices will be collected. For all children below the age of 5 years, data on acute illnesses in the fortnight preceding the survey will be collected. The following measurements will be taken in members of the selected households:

- heights and weights of all members of the household, including children aged 1 month and above,
- Hb estimation in all members including children aged 6 months and above,
- blood pressure in all members of the household aged 18 years and above, and
- fasting blood sugar levels in all members of the household aged 18 yrs and above.

In addition, household salt will be tested for iodine content to assess access to iodised salt.

The field survey will be taken up by the experienced survey agencies selected through an open bidding process. The training of the personnel carrying out the survey, and the Hb estimation from the samples taken from the surveyed population will be carried out by seven partner institutions: Nutrition Foundation of India, New Delhi, National Institute of Health and Family Welfare, New Delhi, Regional Medical Research Institute, Bhubaneswar, Regional Medical Research Centre, Dibrugarh, National Institute of Nutrition, Hyderabad, Tribal Medical Research Centre, Jabalpur, and Desert Medical Research Centre, Jodhpur. The survey will provide district level estimates on:

- prevalence of under-nutrition and anaemia in children, men and women,
- hypertension and diabetes in adults, and
- household access to iodised salt.

It is expected that the AHS and its CAB component will provide data for decentralised district-level planning and monitoring of the impact of health, family welfare and nutrition interventions in all districts for the nine States.

NFI has been chosen as

- one of the two institutions undertaking the training of master trainers from partner institutions,
- the institution for selection of anthropometric equipment for the survey,
- one of the six institutions for training of the survey personnel,
- one of the seven institutions for Hb estimation from samples collected from about 60 districts,
- one of the institutions participating in finalization of the tabulation plan, interpretation of findings, and writing of the report.