## **Immunization Status of Infants in Kargil**

Despite the international thrust, universal immunization remains a dream in developing countries(1). In India, too, situation is no different and regional imbalances are particularly sharp(2). Jammu & Kashmir State is considered a poor performer. Since no authentic data was available, we conducted an appraisal study in Kargil to determine the current status of infantile immunization.

Kargil, located 203 km north of Srinagar and situated at an altitude of 7000 m above the sea-level, is very sparsely populated. The land is hilly, terrain very difficult, climate chilly, and weather inclement, and the only road linking it to rest of the world remains closed for more than 8 months a year. The adverse geoclimatic features, along with rampant illiteracy, conservatism, and frequent crossborder shelling, make the district a highly vulnerable area amenable to disruption of health services. In the current survey, which covered the 3 most populated blocks (Kargil, Sankoo & Drass), a total of 538 children between the ages of 12 and 23 months were evaluated for their immunization status.

Results showed that only 65% of infants received full primary immunization, with rural areas fairing worse (62%) than the urban areas (72%). Coverage rates were similar in boys and girls. Antigen-wise, the highest coverage (92.5%) was seen for BCG, and the poorest (65%) for measles vaccine. The attrition from the first to third dose of DPT and OPV (from 89% to 83%) was remarkable; drop-out rates from the 3rd priming dose (83%) to booster (31%) at 16-24 months were far more steep. Some 7.5% of the infants remained completely un-immunized, while 28.5% were only partially primed (*Table*).

In 1998-99, the 2nd National Family Health Survey (NFHS-II)(3) was undertaken by the International Institute for Population Sciences, Mumbai, to provide information on the immunization status of infants. However, Kargil was left out of that survey. Our study showed a higher coverage in Kargil than the State-average found in the NFHS-II and other surveys including the Rapid Household Survey (MOH, GOI)(3,4,5). Curiously, performance in Kargil - the most backward district of the State - was higher than the districts with a better geo-demographic and socio-economic background.

The fact that immunization coverage among infants from socio-economically better families and of highly educated mothers was lower than in their less privileged counterparts suggests negative attitude of educated mothers towards immunization of their infants.

Despite a higher comparative performance revealed in our study, the pattern of the steadily decreasing proportion of infants from the 1st priming to 3rd dose, and a further remarkable attrition for booster dose at 16-24 months was similar to that found elsewhere in the State.

Comparative analysis of the evaluated figures reveals that the actual coverage for all antigens was lower than that conveyed officially. The NFHS-II also found a consistent overestimation in the official statistics of the J & K State(6). Gross exaggeration of immunization coverage in official data is found even at the national level as has been pointed out by the WHO-Unicef evaluation studies. This suggests that policy-makers and planners should not rely heavily on the officially-quoted figures, and that well-designed evaluation studies by independent agencies may be required annually to assess the actual coverage.

**TABLE I**–Proportion Of 12-23 Month-old-children Found to be Actually Covered\* in Various Evaluation Studies.

Name of the Survey	Total sample	Rural %	Urban %	Male %	Female %
Current Study (Kargil)	65.1	62.1	72.2	66.3	63.0
MICS¤ (J&K)	54.9	50.7	72.9	58.4	50.3
NFHS-II• (J&K)	56.7	53.4	73.1	61.4	50.0
RHS¥ (J&K)	41.8	_	_	65.7	60.8

- \* Children who had received BCG, 3 doses of DPT & OPV each, & measles vaccine were considered to be fully immunized..
- MICS: Multiple Indicator Cluster Survey, 2000. Department of Women & Child Development, Government of India & Unicef.
- NFHS-II: National Family Health Survey, 1998-99. International Institute for Population Sciences, Mumbai & ORC USA.
- ¥ RHS: Rapid Household Survey, Phase II, 1999. Ministry of Health & Family Welfare, Government of India.

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