

The differences between two groups are non-significant with respect to both education ($\chi^2 = 0.982$, $df = 1$, $p > 0.05$) and economy ($\chi^2 = 0.403$, $df = 2$, $p > 0.05$). They are again identical with regards to family size ($\chi^2 = 1.803$, $df = 5$, $p > 0.05$). But the mean AGM of affected group was found to be later (14.04 ± 1.05) than the other group (13.28 ± 0.97), which is statistically significant ($t = 7.32$, $df = 383$, $p < 0.001$). AGM of the former group also deviates from several earlier studies(4) on Bengali Hindu Women.

It is well established that though menarche is a normal physiological process, it is influenced by geographical, physical, pathological, psychological and sociological factors including education, occupation, nutrition and hygienic living condition(4,5). In the present study affected group attained menarche significantly later than the other, though both are enjoying all similar environmental conditions (like economy, education, family size, food habits, geography *etc.*) except the consumption of arsenic for long time, for which the females from affected area are suffering from several chronic diseases (as diagnosed by the doctors).

Thus though our data can not directly prove the influence of arsenic on AGM, it does not also reject the hypothesis of the association. As it is the first study of

documenting this association, detailed evaluation with much more data over a wide area is, therefore, needed to accept or reject the hypothesis with certainty.

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Evaluation of IPPI Coverage Survey in Two Districts of Bihar

Pulse Polio immunization with OPV is being conducted two times each year in all 550 districts in the country since 1995. The

Government has launched comprehensive Pulse Polio Program all over India on October 14, 2001 to give polio drop to all children up to five years of age. In Bihar, this program was conducted during October 14-18, 2001. UNICEF requested Institute for Research in Medical Statistics (IRMS), Delhi to evaluate the reach at this program so

that the recommendations could be utilized in the second round of Pulse Polio scheduled on December 2, 2001. Accordingly, a quick evaluation has been undertaken in the districts of Champaran (E) and Bhagalpur of Bihar.

A quick evaluation were undertaken with the objectives to assess the coverage of IPPI during October 14-18, 2001, to identify the proportion of zero dose children, to assess the reach and effect of communication efforts of IPPI and to assess the reasons for non-compliance. A forty cluster sampling technique has been used. The allocation was 15 clusters from urban and 25 from rural areas in each district.

All the villages were divided into four sub-groups according to the population of the village as <500, 500-999, 1000-1999 and more than 1999. Numbers of clusters selected from each sub-group are in proportion to the number of villages in that group. Probability Proportion to Size (PPS) technique has been used to select desired number of villages in each sub-group. Primary caretaker of all the children born between Oct. 1996 to Oct. 2001 in each selected cluster has been interviewed using structured questionnaire. In the sub-groups with population <500 and 500-999, all eligible children were covered. But in bigger villages, an effort was made to cover all children belonging to Muslims, Schedule Casts/Schedule Tribes while it was every fifth household in case of other caste.

PPS technique was used to select specified number of Wards from the list of wards using census-91 as frame. All the Mohallas/colonies of the selected ward were listed with the help of ward members and community members. These mohallas/colonies were divided into three sub-groups of upper/

Middle Socio Economic Category (SEC), Low SEC and slum. One mohalla/colony from the first group, two (one Muslim and one Hindu) from the second and two from third (one SC/ST and one other) sub-group were selected randomly. Thus, a total of five mohallas /colonies were selected from each urban cluster. So, 100 children (under five of age) from each urban cluster were assessed.

About two third of the households belong to Hindu and remaining were mainly Muslims. About 35% of the households belong to Schedule caste and schedule Tribes were very few. About two third of mothers were illiterate, it being 82% in rural area and 60% in urban area. Only few (2%) were graduates, it being about 5 percent in urban 0.3% in rural areas. Only one percent of the children did not receive Pulse Polio drops, it being 2% in urban area and 1% in rural area. About 91% of the children received the Pulse Polio drop by house-to-house approach followed in the campaign.

It was observed that immunization of children did not depend upon the literacy of mother / Religion / Caste. The main reason for not receiving pulse polio drop have been observed as no body came to the house (42%), not present during home visit (32%), no need of OPV every time (16%) and remaining were others. Muslims in Urban areas and Scheduled Caste in rural areas had lower coverage. By whose decision the pulse polio drop was not given, were mainly Mother (37%) and other family members (60%). Playing of tapes as well as announcements by Mike (30%) and Health worker (27%) were the main sources of information for the Pulse Polio Program. Only date for the Program and to immunize your each of the child were the main

messages through Inter-personal Communication (IPC) and Mass media. Most of the people prefer house-to-house approach because of saving of time.

Clustering of un-reached though the un-reached children are spread all over, yet concentrated in clusters, which are at the border with Nepal or in areas with higher concentration of scheduled castes in rural, and Muslims in urban areas.

Timely funding, the banner and poster should be available at least 10 days earlier the actual date of PPI, by increasing the teams, by increasing the frequency of mike and taking cooperation of Mullah for separate announcement from Masjid were suggestions made for improvement of coverage.

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Phenobarbital Toxic Levels in a Nursing Neonate

Antiepilepsy drugs have revolutionised the management of epilepsy however their use in pregnant and nursing mothers needs careful monitoring(1). Drugs like phenobarbitone, primidone and ethosuximide accumulate in nursing neonates to levels approaching or even exceeding those of their mothers(2).The use of phenobarbital while breastfeed is controversial due to its slow elimination by the nursing infant (3).We report a case of phenobarbital toxicity in a newborn.

A 26-year-old mother with epilepsy (secondary to tuberculous meningitis) who was moderately controlled on 90 mg of

phenobarbitone delivered a male baby at term weighing 2.75 kg .On day one of life baby had an absent suck and became progressively lethargic by the third day. Initially the infant was on when intravenous fluids and later as sensorium improved, baby was breastfed. The anticonvulsant concentrations measured in mother's plasma, breast milk and baby's blood on day 6 showed an increased levels of phenobarbital in the baby's plasma which reached toxic levels by day19 (*Table I*). To avoid cumulative dose effect of phenobarbitone (PB), breastmilk was gradually withdrawn and the baby monitored for withdrawal reactions. A decision was made to reinstitute human milk, once maternal PB was replaced by another antiepileptic drug.

Little data till date is available on transplacental transfer of anticonvulsants.