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ORIGINAL ARTICLE

STATUS OF MATERNAL AND CHILD HEALTH AND SERVICES UTILIZATION PATTERNS IN THE URBAN SLUMS OF BHOPAL, INDIA

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ABSTRACT

Introduction: Women in Asia face constraint in obtaining health services but also in expressing reproductive health needs.
Methodology: It was a community based cross sectional study.
Observation: According to antenatal care Government hospital was an important source of antenatal services in both areas. Most of ANC (90%) services utilized by mothers through government hospital and 6% through private hospital. In both areas 86.49% deliveries were conducted at home. Deliveries conducted at govt. hospitals were higher 10% than private hospitals 3.60%. Majority of deliveries were conducted by untrained Dai (63.33%) at home in both the areas. Services received by them during Post natal period at home, majority by health worker 35(46.05%) followed by government hospitals 28(36.84%) and private hospital 13(17.10%). Out of total 790 under five children 278(35.2%) were fully immunized, 381(48.2%) partially and 131(16.4%) had unknown status. Nutritional deficiency Anaemia was more common between 0-1 years of age was (29.9%) followed by vitamin B deficiency (2.1%). 1-5 years of age Vitamin B deficiency was (4.9%), vitamin A (4.6%), vitamin D(1.9%) and vitamin C (0.99%) found in both areas. Malnutrition according to Gomez classification (23.6%) of male children were road to health, (31%) had grade I, (22.1%) grade II, and (23.4%) grade III malnutrition and female children (24.9%) was grade I, (23.2%) grade II, and (22.7%) grade III. Overall prevalence of grade III malnutrition was (22.5%), no significant difference (standard error of proportion=SEP=6.33, P>0.05) was found in both gender.
Conclusion: During pregnancy maximum antenatal mothers utilized antenatal care services through govt. Hospitals; postnatal care was poor in both areas of Bhopal urban slum. Nutritional anaemia was common problem (35.44%) in both areas among under five children.

Key words: Urban slums, Maternal and child health.

INTRODUCTION

Women in Asia face constraint in obtaining health services but also in expressing reproductive health needs. In India around two third populations come under this group. The utilization of maternal and child health services is poor in all areas that are also shown by our national statistics. Present coverage of full antenatal checkups is 43.8%, institutional deliveries is 34% , deliveries by trained personnel is only 45% and fully immunization coverage 56%, that's lead to high morbidity and mortality among the women and children. The current study was conducted with an objective to study the status and utilization pattern of Maternal and Child health in slums areas of Bhopal.

MATERIALS AND METHODS

A cross sectional community based study was conducted in an urban slums of Bhopal city from January 2003 to April 2003, namely Banganga and Bagh Afhrat Afza . We were selected 509 families comprises of 518 mothers and 790 under five children. Equal proportions of families were interviewed with the help of predesigned and pretested proformas after

obtaining informed consent from the respondents in all four quadrants of slum was selected. We were studied families as a sample those having at least one under five live child. The height and weight of children were recorded as per standard procedure and categorization for malnutrition was done according to Gomez's classification (2). Detailed clinical examination was done to find out various nutritional deficiency and other disorders. Anaemia was diagnosed based on clinical examination. The results of the study were compiled and analysed by using suitable software.

OBSERVATION

Total 518 mothers were interviewed, among them 331(63.8%) were received ANC Checkups, 452(87.2%) received TT Immunization and 318(61.3%) taken iron folic acid tablets tablets. According to source of antenatal care Government hospital was an important source of antenatal services in both areas. 90% of ANC services utilized by mothers through government hospital and 6% through private hospital.

Table 1: Source of Antenatal care in both areas

Source	T.T. Dose (%)	Health Checkups (%)	I.F.A. tablets (%)
Govt. Hospital	425 (94.0)	314 (94.9)	302 (94.9)
Private Hospital	027 (6.0)	175.1 (16)	5.1 (5.1)
Total	**452 (100)**	**331 (100)**	**318 (100)**

Table 2: Distribution of mothers according to place and conduction of delivery

Category	Mothers (%)
Place of delivery	
Home	429 (86.49)
Govt. Hospital	049 (9.87)
Private Hospital	018 (3.62)
Delivery conducted by	
Doctor	71 (14.30)
Dai	314 (63.33)
Relative	101 (20.36)
Health Worker	10 (2.01)

86.49% deliveries were conducted at home. Majority of deliveries were conducted by untrained Dai (63.33%) at home in both the areas. Utilization of post natal care services received by them during Post natal period at home by health worker 35(46.05%) , government hospital 28(36.84%) and private hospital 13(17.10%), over all utilization of post natal services were poor in both areas.

Table 3: Source of service utilization by mothers during postnatal period

	Mothers (%)
Home	35 (46.05)
Govt. Hospital	28 (36.84)
Private Hospital	13 (17.1)
Total	**76 (100)**

Of total 790 under five children 278(35.2%) were fully immunized, 381(48.2%) partially and 131(16.4%) unknown status in the studied areas.

Table 4: Distribution of children according to Immunization status

Immunization Status	Children (%)
Complete	278 (35.18)
Partial	381 (48.32)
Unknown status	131 (16.50)
Total	**790 (100)**

Table 5: Nutritional Deficiency Age wise in Both Area

Type of Vitamin deficiency	Age in Years (%)		
	0-1 (n= 187)	1-5 (n=603)	Total (n= 790)
Vit A	00 (00)	28 (4.6)	28 (3.54)
Vit B	04 (2.1)	30 (4.9)	34 (4.3)
Vit C	0 (0.1)	6 (0.99)	6 (0.75)
Vit D	1 (0.5)	12 (1.9)	13 (1.64)
IDD	00 (00)	0 (0)	0 (0)
Anemia	56 (29.9)	224 (37.1)	280 (35.44)

Nutritional deficiency Anaemia in both areas between 0-5 years of age was more common (37.1%) than 0-1 year (29.9%) followed by vitamin B deficiency (2.1%). 1-5 years of age Vitamin B deficiency(4.9%), vitamin A(4.6%), vitamin D(1.9%) and vitamin C(0.99%) found in both areas.

Nutritional classification according to Gomez classification (23.6%) of male children were normal, (31%) had grade I, (22.1%) grade II, and (23.4%) grade III, in female children (24.9%) was grade I, (23.2%) grade II, (22.7%) grade III.

Overall prevalence of grade III malnutrition was 22.9% and no significant difference were found by gender (P>0.05).

Table 6: Nutritional Status in Under Five Children According to Sex

Nutritional Status	Male (%)	Female (%)	Total (%)
Normal	107 (23.6)	100 (29.2)	207 (26.0)
Grade – I	141 (31.0)	85 (24.9)	226 (28.3)
Grade – II	100 (22.1)	79 (23.2)	179 (22.5)
Grade – III	102 (22.4)	76 (22.7)	178 (22.9)
Total	450 (100)	340 (100)	790 (100)

DISCUSSION

Total 518 mothers 331(63.8%) received antenatal care services. Similar observation was found in national family health survey (60%)[3]. Coverage of TT Immunization in studied areas was 87.2%, similar type findings also reported in NFHS-2. In present study institutional deliveries was significantly lower 13.46% and deliveries by trained person were 74.7%. According to national statistics institutional deliveries is 34% and deliveries by trained persons is 45%[3]. 278(35.18%) of children were fully immunized, 381(48.2%) partially immunized and 131(16.4%) have unknown status, in the present study immunization coverage was significantly lower (P<0.001) than national average, Observation have been reported by NFHS-2 was 56% children fully immunized, 8.6% unknown status and 35.4 partially immunized[3,4].

182(23.3%) of children had malnutrition grade III, according to Gopalan C and Kamala Jaya Rao in prevention in childhood health problem in adult life, F. Falkner was found malnutrition grade IV 1-2% in preschool children[10]. Malnutrition (Protein energy malnutrition) percentage significantly higher (SEP = standard error of proportion =1.03, P<0.001) in study area. 579 (74%) of children under the age of five years were underweight for their age in study area, according to Royston E , we were found 31% of developing countries under five children were underweight for their age, significantly higher in study area (P<0.001) [11]. Vitamin A deficiency in study area was 3.54%, similar type of finding also found in government of India, national child survival and safe motherhood programme[15]. Nutritional deficiency anaemia in study area was 35.44% and in Narsinga Rao, B.S., Proceed. Nut. Society of India 50%- 60% was reported[13].

CONCLUSION

Maximum antenatal mothers utilized antenatal care services through govt. hospitals. In the surveyed area maximum numbers of deliveries were conducted at home and Dais was conducted of maximum number of deliveries in both areas. Postnatal care was poor in both areas of Bhopal urban slum. Common source of Post Natal Care was in Ban Ganga and Bagh Fhrat Afza is home visit by health worker. Nutritional anemia was common problem (35.44%) in both areas among under five children. First grade malnutrition was more common in male children (31%) than female children (24.9%), no gender differences were observed in grade- II and grade – III malnutrition.

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