Factors Affecting Low Birth Weight in Pakistan

Sir,

LBW (low birth weight) is the indicator of infant's survival. Babies born with weight less than 2.5 kg are considered as of low birth weight. There are several socio economic and medical dynamics that ground LBW. Nature and magnitude of relationship vary among various communities. In this study, the effects of social, economic and biological factors on LBW were investigated for Pakistan.

Relevant data was extracted from the PDHS (2012-13). Study population was children born 5 years preceding the survey and respondents for current study were mothers' age 15 - 49. Sample size for analysis was 11,925. These women were asked about birth weight of their babies. Due to memory lapse, it was not possible to get exact weight from all respondents, as such subjective assessment was also used as proxy by asking mothers the size of child at birth (very small, smaller than average, average, larger than average, very large). Size of child at birth was recategorised by merging the categories, to make the analysis simple and easily interpretable as underweight/LBW (very small, smaller than average) and not underweight (average, larger than average, very large). According to Pakistan Demographic and Health Surveys (PDHSs), 2,834 (31.5%) and 2,312 (19.5%) births were found underweight (very small, smaller than average) in 2006-07 and 2012-13, respectively.

Percentage of babies whose birth weight was small or smaller than average was higher in Balochistan (n=141, 24.1%) and Gilgit Baltistan (n=22, 25.3%) as compared to other provinces, Punjab=1266 (18.5%), Sindh=530 (19.3%), KPK=344 (21%). Babies born to urban women had lower percentage of being LBW (n=501, 14.5%) as compared to rural women (n=1810, 21.4%). Percentage of LBW children, 1,504 (22.0%), 350 (17.2%), 324 (15.4%), 134 (13.9%) decreased if level of education of mothers increased (no education, primary, secondary and higher). Similar pattern was observed for father's education. Percentage of female children 1184 (20.3%) born underweight was slightly higher as compared to male children 1,127 (18.5%). Decreasing trend was observed between wealth index (poorest, poorer, middle, richer, and richest) and percentage of underweight babies, 704 (24.6%), 575 (22.8%), 421 (18.0%), 352 (15.1%), and 260 (13.9%). Percentage is higher for underweight babies born to working women 808 (23.6%); while non-working women had low percentage of underweight births, 1,503 (17.7%). Multiple births had prominently higher percentage of underweight children, 109 (45.4%). As birth order of children increases, minor increase in percentage of underweight babies is observed, birth order less than four, 1,364 (38.2%), birth order more than four, 947 (39.2%).

No substantial difference in percentage of underweight babies was observed for factors preceding birth interval (less than 24 months, 625 (18.6%), greater than 24 months, 1,149 (19.8%)). U-shaped pattern was observed for age of women at first birth and percentage of underweight babies (less than 19 years was 771 (23.7%), 19 - 30 years, 1,493 (17.7%), greater than 3,047 (20.1%)). Women who had not visited for prenatal care had higher percentage of underweight babies, 546 (22.3%) as compared to those who visited, 977 (19.7%).

Significance of social, economic and biological factors affecting birth weight of Pakistani children is investigated using Binary Logistic Regression Model. It is found that wealth index, work status of women, and multiple births are significantly associated with birth weight of child in Pakistan. Low economic status is significantly positively associated with low birth weight of child. Poor women cannot afford good nutrition intake during pregnancy. Working women had more chances of low birth weight as compared to non-working women. Multiple births are at higher risk of low birth weight. Twin births have increased risk of mortality.

REFERENCES


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