



**A COMMUNITY BASED REPRODUCTIVE HEALTH STUDY IN  
 JUMLA DISTRICT OF NEPAL: EMPHASIZING ON  
 CHILDBIRTH PRACTICE, OBSTETRIC COMPLICATION AND  
 CHILD SURVIVAL**

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### **ABSTRACT**

The objective of this study was to describe the reproductive health pattern among married women of reproductive age (MRWA) in Jumla district, a remote hilly area of Nepal, especially the childbirth practices, their determinants and their consequences for child survival.

Data collection was carried out in two stages, a household survey from September to October 1996 and qualitative study in July 1997. A total of 929 MRWA were interviewed from 20 randomly selected administrative wards in Jumla. Data were collected on socioeconomic background, reproductive history, childbirth

practices including management of obstetric complications, and child survival.

Descriptive analysis revealed that high-risk childbirth practices, such as giving birth in an animal shed (46.9%) and without an attendant (48.6%), were common. Other serious aspects of their reproductive health included high proportions of teenage marriage (90%) and teenage pregnancy (70%), low contraceptive practice (7%) and poor pregnancy outcome. Of the 929 MWRA analyzed, 828 had 3498 pregnancy outcomes, of which 3192 (91.2%) were live births, 103 (2.9%) stillbirths and 203 (5.8%) abortions.

To investigate child mortality and its trend across birth cohorts in Jumla, a consecutive sample of 2949 live-born children during the period 1971 to 1995 were analyzed. Mortality rates and trends for different age groups of children were calculated for each 5 year birth cohort. Although, child mortality in Jumla is higher than the national figures, there was a significant declined trend over the period of 1971 to 1995. However, neonatal death rates has not shown any significant changes, which may reflect the poor and non-improved midwifery care in this community.

To examine the association between birth practice and infant death, a total of 2999 singleton live-born infants from 772 mothers were selected. Analysis was restricted to the neonatal and postneonatal deaths. To account for multiple children from same mother the generalized estimating equations method was used for multivariate modeling. Children born in an animal shed were at



higher risk of death than were those born in the home. The association was stronger in the neonatal period (OR = 2.8, 95% CI 1.9-4.0) than in the postneonatal period (OR = 1.3, 95% CI 1.1-1.6). Non-attended delivery was also associated with elevated risk of neonatal death (OR = 4.3, 95% CI 2.9-6.5) but not significantly associated with post-neonatal death (OR = 1.2, CI 0.9-1.6).

Determinants of these high-risk childbirth practices were sought using the subset of 657 MWRA who had given birth to their last child during the previous 5 years. Qualitative information from TBAs, mothers-in-law, community leaders and currently pregnant women was incorporated with the quantitative data. Animal-shed delivery, delivery without an assistant, low ANC and unhygienic umbilical cord care were common. Moreover, the entire delivery procedure did not follow any cleaning procedure. Giving birth in animal shed was related to local custom, beliefs, ignorance and illiteracy. With regard to the immediate management of obstetric complications the only seriously dangerous practices were internal manipulation and pulling on the umbilical cord and inducing the vomit.

In conclusion, women and children in Jumla are at high risk of morbidity and mortality. In addition to socioeconomic and biological factors, the high-risk childbirth practices are contributing significantly to high infant mortality, especially during the neonatal period, in this community.