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ABSTRACT

This study examines differentials in infant and child mortality by socio-economic and demographic characteristics in Nepal. The study is mainly based on data from the Nepal Fertility Survey carried out by the Nepal Family Planning and Maternal child Health Project in 1976 in collaboration with the World Fertility Survey. This was the first major national representative demographic survey carried out in Nepal.

This study examined the infant and child mortality differentials in rural areas of Nepal by regions, by socio-economic characteristics of the family and by demographic characteristics of the mothers. Taking into consideration variations by socio-economic and demographic factors, regional differentials in mortality are found to be important. The risk of infant and child death has been shown to be higher in the mountains compared to the Terai and hills. Education of the mother is found to be important in determining child mortality.

With regard to demographic factors, it has been shown that the high risk of infant and child death to first order births is due to the fact that these births occur predominantly to younger women. The importance of the combined effect of maternal age and parity is also demonstrated in this study. Higher order births to younger women have an excessive risk of infant and child death. This synergistic effect of higher order births and young maternal age on infant and child mortality is obviously linked with short birth intervals.
The length of preceding birth interval and the survival of previous birth are important predictors of infant and child mortality among subsequent births. This study revealed that even at the shortest preceding birth interval (<18 months) the probability of the later child of the interval dying during infancy is considerably higher among the children of mothers whose first child of the interval has died than if the first child of the interval is alive. This indicates that in addition to and, perhaps, more than the competition for maternal attention and household resources between the two closely spaced living siblings, the fact that the older sibling had died introduces additional risks during infancy to the recently born child ('family environment effect').

Conversely, the 'competing child effect' seems to operate particularly on the risk of child death. It is shown that among children born in an interval of less than 18 months, the risk of child death is lower in the case where the first sibling of the interval has died compared to those where it survived. This may be due to the fact that where the preceding sibling died there is no competition, and the short birth interval does not represent additional risk, presumably by removing the 'competing child effect'. However, at 'favourable to survival intervals' (18-35 months and three years or more) the death of the older sibling increases the risk of death for the reference child ('family environment effect'). Loss of an earlier child may suggest inadequate living conditions or care or both that are unfavourable enough to supersede or overpower the otherwise favourable effect of the longer birth interval.
To sum up, younger women with high parity, women who have had a history of prior child loss, and childbearing with short spacing have been identified, in this study, as the factors making live births vulnerable to excessive risk of infant and child death. This finding may be helpful for future planning and policy decisions aimed at reducing infant and child mortality.

As the sample selected in the Nepal Fertility Survey 1976 was based on the probability proportional to size of the population of different regions, the sample representing the urban population of Nepal is not adequate to make a separate in-depth investigation of the socio-economic factors affecting infant and child mortality in urban areas; however, the study has revealed lower infant and child mortality in urban than in rural areas of Nepal. This suggests that further research using a large urban sample would make possible the in-depth analysis of the determinants of infant and child mortality in urban areas which would be of great interest to policy makers.
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