

Opportunity for Natural Selection: The Vaiphei of Manipur, India

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ABSTRACT An attempt has been made to deal with the opportunity for natural selection among the Vaiphei of Churachandpur, Manipur based on the differential fertility and mortality from 38 ever pregnant women aged of 45 + years. Observed that, the I value is 0.344 and low contribution of mortality component in the population.

INTRODUCTION

Indices of natural selection reported from the North East India are very few, though it is very important not only to understanding the population variations in the operation of natural selection through differential fertility and mortality but also for assessing the socio-economic status of such population (Reddy and Chopra, 1990). With this end in view, study on selection intensity among the Vaiphei of Churachandpur District of Manipur is undertaken this time for a brief communication.

MATERIALS AND METHODS

Demographic data from 100 Vaiphei households of Vaiphei veng in the Churachandpur District, Manipur were collected during January – February 1998. Also information on age, sex and marital status of each offspring, reproductive wastages collected through in-depth interview with the head of the family using household census scheduled. The index for opportunity of selection (I) and its mortality and fertility component (I_m , I_f) were computed following the original formula of Crow (1958) and modified version suggested by Johnston and Kensinger (1971).

RESULT AND DISCUSSION

The reproductive performances of Vaiphei mother are shown in Table 1. The mean number of live-births per mother of aged 45 years and above is 4.32 with a variance (V_f) of 4.66 which is comparatively lower than these of other Indian populations particularly from reported population groups of North East India. Whereas the proportion of offspring mortality (pre-mature

death) before 15 years of age is 0.1111 or 11.11%. The indices of selection due to mortality (I_m), fertility (I_f) and both mortality and fertility are 0.052, 0.249 and 0.315 respectively. I is operating very low intensity in the present population and greater contribution of fertility components than the mortality components. It is, of course, comparable with those of reported like the Khampti (Sarkar et al., 1994), the Kaibarta (Sengupta and Gogi, 1995), Sonowal Kachari (Deka, 1980), Christian war Khasi (Khongsdier, 1994), Hmar (Varte, 1998) and so on.

Table 1: Data used in calculating the Index of total selection intensity

Total number of mother aged of 45 years and above	=	38
Total number of reported mother Pregnancies/conception.	=	182
Total number of Live-births	=	186
Proportion of survivors to birth (P_b)	=	0.8889
Proportion of child death (P_d)	=	0.1111
Proportion of embryonic death (P_{ed})	=	0.0185
Mean number of live birth per mother of aged 45 years and above ('X').	=	4.3200
Variance of fertility (V_f).	=	4.6656

Operating low intensity and low contribution of mortality component may presumpt that this population were exposed to and benefited by the urban facilities and other socio-economic conditions.

Table 2: Indices of selection intensity among the Vaiphei of Manipur

According to Crow (1958)			According to Johnston and Kensinger (1971)			
I_m	I_f	I	I_{me}	I_{mc}	I_f	I
0.052	0.249	0.315	0.022	0.052	0.249	0.344

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