

A Search for Operation of Natural Selection in ABO Blood Groups: Evidences from Four Ethnic Groups of Orissa

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ABSTRACT The paper discusses effects of natural selection on four population groups of Orissa in the form of differential fertility and mortality as a consequence of ABO incompatibility. The negative effect of ABO incompatibility is not fully manifested in terms of significant decrease in the viability of foetus and children. However, incidences of abortion, stillbirth and post-natal mortality are marginally higher among incompatible couples than compatible couples with out revealing significant statistical difference except in Mohato. The prezygotic selection due to antigen-antibody interaction differs between A antigen and B antigen. The hypotheses so far developed by earlier scholars with respect to effect of ABO incompatibility on viability of foetus, children and maintenance of polymorphism have been tested, and the authors have expressed their views logically either in accepting and or rejecting hypotheses.