SEA TIDAL OCCURRENCE AS BASIS FOR ESTIMATING THE TIME OF CHILD DELIVERIES

by

JOSE HERNANY L. ABELLO, JR.

An Undergraduate Thesis
Presented to
The Division of Biological Sciences
College of Arts and Sciences
University of the Philippines in the Visayas

In Partial Fulfillment
of the Requirements of Bio 200
(Undergraduate Thesis)

March 1992

ABSTRACT

The study was made to investigate the reliability of using the predicted time of occurrence of high tide or low tide as a basis of estimating the time of delivery of a child. This was conceived because of the belief and practice of "hilots" which has never been proven scientifically. The data on deliveries were obtained from the Angel Salazar Memorial General Hospital (San Jose, Antique) and the Western Visayas Medical Center (Mandurriao, Iloilo City). Random sampling was used with ten deliveries chosen for each month in the respective hospitals from the total number of spontaneous deliveries for the year 1990. The time of delivery was paired with the nearest occurrence of high or low tide based on the Predicted Tide and Current Tables for 1990 published by the National Mapping and Resource Information Authority, Coast and Geodetic Surveys Department. The raw data were subjected to regression analysis using Microstat software. The linear correlation coefficients (r) obtained were 0.960 (ASMGH) and 0.949 (WVMC) while the coefficients of determination (r^2) were 0.921 (ASMGH) and 0.901 (WVMC). A strong positive correlation between the two variables was seen in both hospitals studied. The time durations before or after the occurrence of high or low tide within which a child could be expected to be delivered on the average were 1.68 hours

(ASMGH) and 1.85 hours (WVMC). The study has demonstrated that the estimated time of occurrence of high or low tide could be considered as basis for estimating the time of delivery of a baby.