

NANTANA THONGRA-AR, Pol.Lt.: STUDY ON BLOOD ALCOHOL CONCENTRATION OF THE DRIVERS AND PASSENGERS INVOLVED IN THE FATAL ROAD TRAFFIC ACCIDENTS IN BANGKOK AND THE NEAR-BY PROVINCES. THESIS ADVISOR : ASSO. PROF.VILAILAG IM-UDOM, Dr.en Pharm., Dr.PRAWIT SOONTHORNSIMA, M.D., M.P.H., Scert. of Community Development (Berkeley, U. of California). 310 PP. ISBN 974-578-896-1.

A cross-sectional study has been done on 405 autopsy cases of both drivers and/or passengers died in traffic accidents in Bangkok and the near-by provinces which were sent by the police officers to the Institute of Forensic Medicine, Surgeon-General Office, the Royal Thai Police Department from June 1st to December 31st, 1990. The objective of this study is to determine the mean blood alcohol concentration, factors associated with blood alcohol concentration and the relationship between injury patterns and the blood alcohol concentration. The study is divided into 3 parts. Part 1 : collect the personal, drinking and driving history interviewed from the victim's relatives accidental patterns and autopsy report. Part 2 : determine the blood alcohol concentration by head-space gas chromatography. Part 3 : compare the accidental events in the positive and negative blood alcohol group and the association of these factors to blood alcohol.

Result : the cases were separated into two groups by the presence of blood alcohol. Group 1 were 246 cases (60.7%) of positive blood alcohol and group 2 were 159 cases (39.3%) of negative blood alcohol. The concentration of the alcohol in the blood of group 1 were between 114.6-132.2 milligram percent with 95% confidence. The significant differences of the positive and negative blood alcohol groups were age incidence, pattern and frequency of drinking and the activities of victims before the accident. The environmental differences ie. month or season of the accidental occurrences, and the injury patterns were found to have no relationship with blood alcohol concentration. The autopsies showed injuries occurred at head, thorax and abdomen to be 82.7%, 25.7% and 10.7% respectively.