

Abstract: Section C (Medical Sciences)

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**PRELIMINARY STUDY ON SERUM LIVER ENZYMES AND BILIRUBIN LEVELS
AMONG DRIVERS AT THE SRI LANKA TRANSPORT BOARD IN KONDAVIL
DEPOT**

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This research was designed to study on serum liver specific enzymes and bilirubin levels among drivers working at the Sri Lanka Transport Board (SLTB) in Kondavil depot. All drivers working at the SLTB in Kondavil depot were included in this study. Information about age, years of serving as driver, driving mileage per month and, alcohol & tobacco consumption were recorded using interviewer administered questionnaire. Five ml blood was withdrawn and the serum was separated from blood sample at 2500 rpm for 10 minute. ALanine Trasaminase (ALT) and Aspartate transaminase (AST) were measured by spectrophotometric method of Restman and Frankel. Levels of total and conjugated bilirubin were measured by method of Malloy and Evelyn. This is modified Van den Bergh method. All the data were analyzed in SPSS software version 16. Bivariate correlation and multinominal regression were used to analyse the data based on research problems. Total sample size was 50. Age range was 27- 58 years. Mean age was 42 years (± 9.64). Years of serving as a driver range were 2-35 years. Mean years of driving was 14.1 years (± 8.56). Twenty nine subjects were alcohol consumers. Sixteen subjects were smokers. Among the non alcohol consumers, age had significant correlation with conjugated bilirubin ($p=0.01$) which was fairly negatively correlated (Pearson correlation = - 0.503) and driving distance per month had statistically significant correlation with ALT ($p=0.01$) which was found as positively fair correlation (Pearson correlation=0.501). In the total sample, liver enzymes and bilirubin levels did not have statistically significant association with demographic, occupational and alcohol & tobacco consumption among drivers working at the SLTB in Kondavil depot ($p>0.05$). Liver specific enzymes (ALT and AST) and different types of bilirubin levels did not show significant association with occupational factors as well as age, and alcohol and tobacco consumption among drivers working at the SLTB in Kondavil depot.

Key words: Bilirubin, Alanine trasaminase, Aspartate transaminase, Pearson correlation