

Interrelationships Between Blood Glucose and Blood Pressure *vis-à-vis* Factors, Such as Age and Sampling Time in Urban Population of Raipur, Madhya Pradesh

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KEYWORDS Blood Glucose. Systolic BP. Diastolic BP. Human Population. Age Effect. Sampling Time Effect

ABSTRACT Postprandial blood glucose (BG) and blood pressure, both systolic (BPS) and diastolic (BPD), were monitored in 159 human subjects. The data were obtained over two consecutive days between 09:30 and 15:30. Thereafter, subjects were grouped on the basis of age, sampling time, level of blood glucose and blood pressure. Of the total subjects, 21 were diabetic (13.2%), 13 hypertensive (8.18%) and 23 mild hypertensive (14.46%). Statistically significant age and sampling time effects were established on blood glucose. Diabetic, hypertensive and mild hypertensive subjects had statistically significantly higher BG, BPS and BPD values as compared with the respective variables in healthy human subjects. However, BG in hypertensive group was not statistically significant when compared with normal subjects. BPS and BPD were found to be positively correlated with each other in all the groups except mild hypertensive subjects. In normal subjects alone blood glucose was found to be age-dependent. It was observed that in mild hypertensive subjects, BPD increased with the age and in the same subjects BG and BPS were positively correlated with each other. The results of the present study appear to have clinical significance.