

Introduction: Corona virus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has created a public health crisis. Extensive research has been conducted on COVID-19 infection in developed countries and in China. However, data are still scarce in South Asian and Sri Lankan setting. We aimed to identify common demographic, lifestyle and co-morbidity patterns of COVID-19 infection among adults.

Methodology: A cross sectional study was carried out in all patients (n=3861) admitted to the triage medical ward of National Hospital of Sri Lanka Colombo from December 1st, 2020, to January 31st, 2021. Data regarding age, sex, presence of diabetes mellitus (DM), hypertension, dyslipidaemia, chronic kidney disease (CKD), chronic obstructive pulmonary disease, smoking, alcohol consumption and SARS-COV2 rapid antigen test (RAT) results were collected. Associations with aforementioned parameters and COVID-19 status were assessed using Chi square test and odds ratios (OR).

Results: A total of 250 (6.5%) were positive for COVID-19 infection. Mean age of the population was 51.29 (SD=17.04) and 42.8% were males. Age groups (<30, 30-60, >60, $p=0.032$), diabetes mellitus ($p=0.027$), hypertension ($p=0.006$), CKD ($p<0.001$), smoking ($p=0.005$) and alcohol ($p=0.001$) were associated with being Covid-19 positive. A majority of 58.4% (146/250) of infected cases were in 31- 60 age group. Alcohol consumption (OR=2.004) and smoking (OR =1.877) were predictive of having COVID-19 infection. Higher percentage of Covid-19 negative patients had DM (29.8% & 20.5%, OR=0.718), hypertension (29.6% & 15.4%, OR=0.657), and CKD (15.4% & 0.6%, OR=0.206) than covid-19 positive patients.

Conclusion: The age group representing the workforce (30 – 60 years) was at an increased risk. Alcohol consumption and smoking increased the risk of acquiring the infection. Those with co-morbidities had a lower rate of COVID-19 infection. It can be suggested that their co-morbidities made them adhere to safety precautions.