

## **Determinants of household food security and dietary diversity during the COVID-19 pandemic in Bangladesh**

**Satyajit Kundu, Md. Hasan Al Banna**

Department School of Public Health, Southeast University, Nanjing, China

### **Abstract**

**Objectives:** The study aimed to determine the associated factors of household food security (HFS) and household dietary diversity (HDD) during the COVID-19 pandemic in Bangladesh.

**Design:** Both online survey and face-to-face interviews were employed in this cross-sectional study. The Household Food Security Scale and Household Dietary Diversity Score were used to assess HFS and HDD, respectively. The HDD scores were derived from a 24-h recall of food intake from 12 groups.

**Setting:** Bangladesh. **Participants:** A total sample of 1876 households were recruited.

**Results:** The overall mean scores of HFS and HDD were 31.86 (SD, 2.52) and 6.22 (SD, 5.49), respectively. Being a rural resident, having no formal education, occupation of household head other than government job and low monthly income were potential determinants of lower HFS and HDD. Approximately 45 % and 61 % of Bangladeshi households did not get the same quantity and same type of food, respectively, as they got before the pandemic. Over 10 % of respondents reported that they lost their job or had to close their businesses, and income reduction was reported by over 70 % of household income earners during the COVID-19 pandemic, which in turn was negatively associated with HFS and HDD.

**Conclusion:** Household socio-economic variables and COVID-19 effects on occupation and income are potential predictors of lower HFS and HDD scores. HFS and HDD deserve more attention during this pandemic particularly with reference to low-earning households and the households whose earning persons' occupation has been negatively impacted during the COVID-19 pandemic.

### **Biography:**

Mr. Satyajit Kundu studied Bachelor of Science in Nutrition and Food Science at Patuakhali Science and Technology University, Bangladesh, and also completed his MS in Biochemistry and Food Analysis in 2019 from the same university. He then joined the research group of Lina Wang at the School of Public Health, Southeast University, China. Currently, he is doing Master of Public Health (MPH) in China. He has published more than 10 research articles in SCI(E) journals and also several articles in SCOPUS indexed journals.