recorded either serum 25-hydroxyvitamin D (25-OHD) concentration (nmol/L) or estimated Vitamin D intake from interviews/food diaries.

Additionally, Vitamin D data was rarely collected in low-income countries such as Africa. Data mapping has outlined disease reporting standards in countries and has emphasised the systematic differences between healthcare systems.

**Conclusion** Vitamin D data can be combined with COVID-19 incidence and mortality data, to explore the relationship between Vitamin D and COVID-19. Further research can explore inter-individual differences in Vitamin D requirements, optimal therapeutic doses required and how individual requirements can be determined. Findings will improve disease pathway understanding, support the generation of aetiological hypotheses and contribute to COVID-19 prevention and treatment. Substandard diagnosis and reporting in low-middle income countries underestimates disease rates, compared to high income countries. Studies investigating countries across income levels may therefore be affected by case-ascertainment bias, however also highlight where future resources should be directed to improve overall health and reduce inequalities, as well as reducing the burden of COVID-19.

**Background** The world witnessed a dramatic disruption in our daily lives due to COVID-19 pandemic and Bangladesh is no exception. Such kind of public health crisis instigated by pandemics & its repercussion can elicit significant negative emotions, in line with stress, changed dietary patterns and weakened immune system. All these are inter-linked. As there were merely such studies in Bangladesh, this study aimed to find out association between dietary patterns and perceived stress level of urban adults during COVID-19 pandemic.

**Objectives** This study intended to find out the association between dietary patterns and perceived stress level among adults in Bangladesh as well as their dietary patterns and perceived stress level during COVID-19 pandemic.

**Methods** A Cross-sectional study was conducted among 300 adults (aged ≥18 years) of three urban communities in Dhaka city of Bangladesh from February 2021 to June 2021. A semi-structured questionnaire using purposive convenience sampling based on the Perceived Stress Scale (PSS) and minimum dietary diversity for individual adult, 24 hours recall by face to face interviews ensuring proper protective precautions. Measures included baseline and personal characteristics, perceived stress levels, dietary patterns. Data were analyzed by using latest SPSS software.

**Results** The results showed moderate level of perceived stress among majority of the population with approximate one-in ten (12.0%) and one-fourth (22.0%) of the respondents with a low and high level of stress, respectively. It also revealed the association of perceived stress level with several sociodemographic factors such as age group (p<0.026), employment status (p<0.001), monthly income (p<0.044) and sleep quality (p<0.001). Significant association between dietary patterns (egg consumption) and perceived stress level (p<0.036) was identified which is distinguishable to reliance on availability & affordability of the source. Those having poor sleep quality were more likely to get stress and changed dietary patterns (AOR=2.147; 95% CI: 1.153–3.997; p=0.00).

**Conclusions** As higher stress level is associated with less healthy eating behavior and dietary patterns leading to poor nutritional status, proper evidential reasoning can go a long way to emphasize the concern. It will be a prolific initiative if policymakers merge nutrition-related public health interventions along with stress management programs through multisectoral collaboration.