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**ABSTRACTS: VOLUME 3, SPECIAL ISSUE**

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**ABSTRACT**

**Influence of COVID-19 on lifestyle behaviors in the Middle East and North Africa Region: a survey of 5896 individuals Open Access Journal of Translational Medicine**

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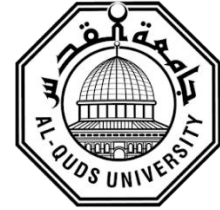
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**Published in May 2022**

**Background:** Coronavirus disease (COVID-19) pandemic has affected health and lifestyle behaviors of people globally. This project aims to identify the impact of COVID-19 on lifestyle behavior of individuals in the Middle East and North Africa (MENA) region during confinement.

**Objectives:** To identify COVID-19 impacts on the physical activity levels and eating habits among individuals residing in the MENA countries.

**Methods:** We conducted an online survey in 17 countries (Egypt, Jordan, United Arab Emirates, Kuwait, Bahrain, Saudi Arabia, Oman, Qatar, Yemen, Syria, Palestine, Algeria, Morocco, Libya, Tunisia, Iraq, and Sudan) from the MENA region on August and September 2020. The questionnaire included self-reported information on lifestyle behaviors, including physical activity, eating habits, smoking, watching television, social media use and sleep before and during



the pandemic. Logistic regression was performed to analyze the impact of COVID-19 on lifestyle behaviors.

**Results:** A total of 5896 participants were included in the final analysis and 62.8% were females. The BMI of the participants was  $25.4 \pm 5.8$  kg/m<sup>2</sup>. Around 38.4% of the participants stopped practicing any physical activities during the confinement ( $P < 0.001$ ), and 57.1% reported spending more than 2 h on social media ( $P < 0.001$ ). There were no significant changes in smoking habits. Also, 30.9% reported an improvement in their eating habits compared with 24.8% reported worsening of their eating habits. Fast-food consumption decreased significantly in 48.8% of the study population. This direct/indirect exposure to COVID-19 was associated with an increased consumption of carbohydrates (OR = 1.09; 95% CI = 1.02–1.17;  $P = 0.01$ ), egg (OR = 1.08; 95% CI = 1.02–1.16;  $P = 0.01$ ), sugar (OR = 1.09; 95% CI = 1.02–1.16;  $P = 0.02$ ), meat, and poultry (OR = 1.13; 95% CI = 1.06–1.20;  $P < 0.01$ ). There was also an associated increase in hours spent on watching television (OR = 1.07; 95% CI = 1.02–1.12;  $P < 0.01$ ) and social media (OR = 1.09; 95% CI = 1.01–1.18;  $P = 0.03$ ). However, our results showed a reduction in sleeping hours among those exposed to COVID-19 infection (OR = 0.85; 95% CI = 0.77–0.94;  $P < 0.01$ ).

**Conclusions:** The COVID-19 pandemic was associated with an increase in food consumption and sedentary life. Being exposed to COVID-19 by direct infection or through an infected household is a significant predictor of amplifying these changes. Public health interventions are needed to address healthy lifestyle behaviors during and after the COVID-19 pandemic.

**Research Keywords:** COVID-19, coronavirus, lifestyle, MEN