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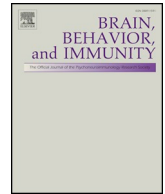
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## Mental health and emotional impact of COVID-19: Applying Health Belief Model for medical staff to general public of Pakistan

This commentary provides an overview of the mental health and Health Belief Model (perceived susceptibility, perceived severity, perceived threat, perceived barriers, perceived benefits, perceived self-efficacy) in terms of perceived stress, stress appraisal and coping strategies for general public and medical staff during COVID-19. Prevention remains the mainstay in the treatment, containment and controlling of the COVID-19 pandemic in Pakistan. Anyone suspected, or infected of COVID-19 either practice self-isolation and social-distancing at home, or admit to healthcare facility with infrastructure to handle COVID-19. Mental health problems can occur or aggravate or trigger psychological and emotional distress in self-isolated and quarantined individuals (Kelvin and Rubino, 2020). Besides, health care professionals continuously working in isolated units of hospitals could experience confinement phenomena causing collective hysteria (Montemurro, 2020; Kang et al., 2020). The victimization of vicarious traumatization could be significantly higher in general public and non-frontline medical workers (Li et al., 2020) because Pakistan's 24/7 active news channels are inducing the updates around the world regarding COVID-19 pandemic outbreak – as compared to frontline workers who are trained with the empirical immediate knowledge about the transmission and preventive control of COVID-19. Recent surge of unreported violent incidents in Lahore (near authors' hometown) among general public has increased exponentially because of high level of stress in this crisis. It is

possible that anxiety of falling sick or fear of death could amplify the sense of helplessness (nothing- can-be-done conviction and inability to mobilize effort), hopelessness (the feeling that any effort for constructive change is not worthwhile), exhaustion and burnout (continuous stressors' psychological strain hamper coping-mechanisms over long-term) and nervous anticipation (what may yet to come), negative emotions, work-life balance, and personal life stressors further compromise physical, mental and emotional wellbeing – which requires resilience (interactive and dynamic process of adjusting, dealing and adapting to adversity by cultivating a sense of empowerment and belongingness, and nurturing mindfulness) (see Fig. 1).

The ultimate impact of COVID-19 pandemic outbreak is unclear at the moment but more adherence to public health organizations' suggestions will keep healthcare systems from being overwhelmed. It is therefore imperative that community and medical staff be equipped with empirically precise knowledge and tools to effectively address and cope with the impact of COVID-19. Evidence-based model Health Belief Model (HBM) can explain and predict health-related behaviors with the regard of modification of patients' up-taking health services to mitigate threat to health (Champion and Skinner, 2008). This paper suggests the applying HBM to COVID-19 in mitigating behaviors which provokes anxiety and fear and converts individual beliefs informed by pre-conceived impressions of a perceived threat and direct cues of

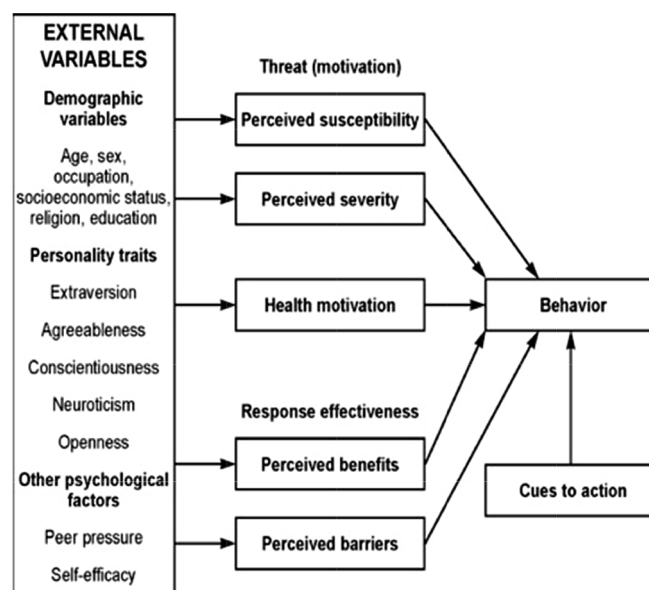


Fig. 1. The Health Belief Model.

<https://doi.org/10.1016/j.bbi.2020.04.012>

Received 3 April 2020; Received in revised form 6 April 2020; Accepted 6 April 2020

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perceived benefits from perceived barriers to action inform behaviors (through perceived self-efficacy).

Perceived susceptibility, perceived severity and perceived threat modify behaviors in a way that an individual is more likely to take healthy outcomes serious if the perceived threat is greater. As the perceived threat will be bigger if the perceived severity is bigger, as perceived threat is bigger if the perceived susceptibility is bigger –thus an individual experience adverse outcome. Perceived benefits regarding behaviors during the COVID-19 related to public perception of benefits such as healthy adherence with quarantine by spending time with family members, or quality time spend alone to cultivate desiring hobbies or habits. Exploring ways to mitigate or eliminate perceived barrier help individual, personal, cultural, financial and vocational barriers. Perceived self-efficacy is about preventive behaviors by reinforcing positive steps and the belief that one has ability to overcome a given situation. Effective mitigation of disease and COVID-19 mitigating behaviors require significant efforts to strengthen beliefs about disease which includes the severity and susceptibility of threat, eliminate barriers to act and reinforce self-efficacy beliefs. Empirical findings are salient features at this state of COVID-19 outbreak – addressing the general public regarding health risks and perceived threats; reiterating

mental health concerns predispose to fixation on the unempirical views; and encouraging lifestyle modification and motivate behavior change helps stress appraisal and coping strategies.

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