MEDWIN PUBLISHERS
Committed to Create Value for Researchers

Virology & Immunology Journal
ISSN: 2577-4379

Undetermined Implications of Islamic Veil Practicing for COVID-19 Diagnosis and Treatment

Rastmanesh R*
Independent Researcher, Physicians Building, Sarshar, Tajrish, Tehran, Iran

***Corresponding author:** Reza Rastmanesh, Independent Researcher, Iran, Email: r.rastmanesh@gmail.com

Commentary
Volume 7 Issue 2
Received Date: June 13, 2023
Published Date: June 26, 2023
DOI: 10.23880/vij-16000314

Abstract

A recent systematic review demonstrated that among different religions, the association between COVID-19 risks and religious practice was different in terms of transmission, mitigation and adaptation to COVID-19. We argue that this difference might be partially correlated with strict full face and level of Islamic veiling practice. Strict full face veil techniques intuitively and practically mimic wearing facemasks, thus providing a protective role against COVID-19 viral exposure. It however prevents sufficient sunlight exposure needed to synthesis enough vitamin D in the skin, which is as an important factor in COVID-19 prevention and treatment. This letter specifically and intentionally focused on Islamic countries; however, its implications cover similar religious practices and settings. Based on preliminary observations from Iran and Arab countries, we will show that despite similar lower vitamin D status, veiling practice and full-face-veil-wearing probably put a protective –meanwhile differential- effect against COVID-19 cases and deaths.

Keywords: COVID-19; Veil practicing; Vitamin D; Depression; Diagnosis; Treatment

Commentary

This letter, between serious and facetious, addresses a neglected implication of the planetary tragedy produced by COVID-19. We address the Islamic veil practicing which is a symbolic marker of compliance with social and religious norms.

Results obtained from rapid systematic review including two studies (cross-sectional and cohort) examining case incidence of COVID-19 among women who often wore face veils while on Hajj pilgrimage, demonstrated a protective relationship-albeit it is not statistically significant. [1]. We have pointed out elsewhere that women who practiced more strict Islamic veiling -including the full face veil- techniques, had significantly better body satisfaction, higher self-esteem, and decreased depression scores, but meanwhile had significantly higher body mass index (BMI) compared to those who did not observe these social and religious norms in an Iranian context [2]. This may suggest that lower depression among such women, may offer another protective role against COVID-19, because during this pandemic, depression negatively impacted immune system and social coping mechanisms, according to reports from Iran and Saudi Arabia [3,4]. On the other hand, three independent systematic review and meta-analysis recently showed that higher body mass index is an important risk factor for severity of COVID-19 patients [5-7]. On the other hand, we have reports conducted in eastern provinces of Saudi Arabia before the COVID-19 pandemic, where veil-wearing is practiced in 58% of the eastern provinces; reportedly respiratory infections and asthma were significantly more common in veils users

($p < 0.00001$ and $p < 0.0003$, respectively) [8]. However, current reviews indicates that asthma per se does not seem to be an independent risk factor for COVID-19 overall [9,10]. Clearly it can be seen that there is an intricate relationship between Islamic veiling and COVID-19 diagnosis, treatment and its mortality/morbidity.

Vitamin D is among the three top-scoring molecules demonstrating potential infection mitigation patterns against the COVID-19 pandemic through their interaction with gene expression [11]. Thus, veiling practices may impact vitamin D status negatively. There are many reports including one from Turkey-another mostly Muslim country- showing that mean 25-OHD concentration in veiled women is significantly lower than that of unveiled women (33.1 +/- 16 ng/ml) compared to (53.9 +/- 27.3 ng/ml) ($p < or = 0.001$) [12].

It is still controversial what level of serum 25-hydroxyvitamin D is optimal, however it is recommended to increase vitamin D intake and have reasonable sunlight exposure to maintain serum 25-hydroxyvitamin D at least 30 ng/mL (75 nmol/L), and preferably at 40-60 ng/mL (100-150 nmol/L) to protect against COVID-19 [13]. Furthermore, it is recommended that people who are already at higher risk of vitamin D deficiency should consider taking vitamin D preparations to maintain the circulating 25(OH)D in the optimal levels (75-125nmol/L) [14]. This suggests that future recommendations for optimal vitamin D intake should consider social and religious settings to compensate COVID-19-related burden on physiologic and immunologic demand.

Lower vitamin D status in veiled women, can negatively impact the immune system and thus enhance the affinity of angiotensin converting enzyme 2 (ACE2) against the SARS-Cov-2 spike receptor binding domain [3,14,15]. All of these variables are implicated in COVID-19 cases and deaths, which may have associations with religious practices as we briefly discussed.

Interestingly, different Muslim countries have experienced quite very different numbers of excess deaths [16]. Overall, fifty Muslim-majority countries have fewer COVID-19 cases and deaths than the 50 richest non-Muslim countries, except for some countries like Iran which has recorded significantly higher levels of excess mortality [17,18]. Differential legal, health and political response to COVID-19 have been implicated to explain dramatic differences in excess mortality and wide diversity in the COVID-19 response across Muslim majority countries, including Iran and other Arabic countries, however less attention has been paid to the potential influence of direct social and religious practices, including level of Islamic veiling practice and full-face-veil-wearing which are two social practices that are fulfilled in different ways in Iran and Turkey compared to Arab countries [16-20].

Evidently, these observations are relevant and important since they suggest that the associations between religious practices and COVID-19 incidence/prevalence/case fatality/population mortality rates are intricate. This evidence also suggests that in order to come to a better understanding of how other religious practices (eg. religious gatherings, pilgrimage, etc.) might affect this terrible pandemic, the possible interaction or modification effect of multiple confounding variables should be statistically considered in design and analysis of future studies. This might also facilitate the introduction of better personal and social measures for the management of COVID-19.

The literature on the relationship between religious practice and COVID-19 risks is indeed scarce. A systematic review during the early stage of COVID-19 pandemic demonstrated diverse effects of religious practice as a double-edged sword in the context of COVID-19 pandemic. The findings of this systematic review revealed that among different religions (namely Islam, Christianity, Judaism, Catholicism and Shincheonji Church of Jesus), the association between Covid-19 risks and religious practice was different in terms of transmission, mitigation and adaptation to COVID-19 and subsequent lockdowns and restrictions, suggesting the point that the statistical interaction between religious practice and COVID-19 transmission, mitigation and adaptation in individuals from different religious affiliations would be most likely different. This highlights the importance of adopting suitable statistical methods when examining individual responses to COVID-19 risks in terms of religion, religious practice and most importantly level of veiling practice and help to interpret the results better. This is also important for international comparative studies. Furthermore, authors in future might choose to re-analyze available data, particularly if they could adjust for confounding factors such as data on level of veiling practice, full-face-veil-wearing, as well as other confounders such as serum vitamin D and depression, in case data were available. A mediation analysis (using above mentioned variables) performed to support the conclusion would also be desired.

Results of aforementioned studies can be criticized; these studies are usually cross-sectional and short-term and do not account for indirect mediational influences of Islamic veiling in viral load exposure, modulation of immunity and synthesis of vitamin D and alteration of depression neither the direct mimicry effect of full-face-veil-wearing in preventing/aggregating respiratory infections.

In sum, though it has been suggested that despite similar lower vitamin D status, veiling practice and full-face-veil-wearing probably put a protective –meanwhile differential-

effect against COVID-19 cases and deaths, the story is not that straightforward and one needs to calculate the bottom line to determine whether or not some specific religious practices offer a better protection against COVID-19 pandemic This observation may trigger further investigations. This question is open for future comparative international studies.

References

1. Brainard J, Jones N, Lake I, Hooper L, Hunter PR (2020) Facemasks and similar barriers to prevent respiratory illness such as COVID-19: A rapid systematic review. MedRxiv pp: 1-22.

2. Rastmanesh R, Gluck ME, Shadman Z (2009) Comparison of body dissatisfaction and cosmetic rhinoplasty with levels of veil practicing in Islamic women. Int J Eat Disord 42(4): 339-345.

3. Ramezani M, Simani L, Karimialavijeh E, Rezaei O, Hajiesmaeili M, et al. (2020) The Role of Anxiety and Cortisol in Outcomes of Patients With Covid-19. Basic Clin Neurosci 11(2): 179-184.

4. Alfawaz HA, Wani K, Aljumah AA, Aldisi D, Ansari MGA, et al. (2021) Psychological well-being during COVID-19 lockdown: Insights from a Saudi State University's Academic Community. J King Saud Univ Sci 33(1): 101262.

5. Chowdhury AI, Alam MR, Rabbi MF, Rahman T, Reza S (2021) Does higher body mass index increase COVID-19 severity? A systematic review and meta-analysis. Obes Med 23: 100340.

6. Malik VS, Ravindra K, Attri SV, Bhadada SK, Singh M (2020) Higher body mass index is an important risk factor in COVID-19 patients: a systematic review and meta-analysis, Environ Sci Pollut Res Int 27(33): 42115-42123.

7. Ong SWX, Young BE, Leo YS, Lye DC (2020) Association of Higher Body Mass Index With Severe Coronavirus Disease 2019 (COVID-19) in Younger Patients. Clin Infect Dis 71(16): 2300-2302.

8. Ahmad EFE, Mohammed M, Al Rayes AA, Al Qahtani A, Elzubier AG, et al. (2001) The effect of wearing the veil by Saudi ladies on the occurrence of respiratory diseases. Journal of Asthma 38(5): 423-426.

9. Bloom CI (2023) Covid-19 pandemic and asthma: What did we learn?, Respirology 28(7): 603-614.

10. Lombardi C, Gani F, Berti A, Comberiati P, Peroni D, et al. (2021) Asthma and COVID-19: a dangerous liaison?. Asthma research and practice 7(1): 9.

11. Glinsky GV (2020) Tripartite Combination of Candidate Pandemic Mitigation Agents: Vitamin D, Quercetin, and Estradiol Manifest Properties of Medicinal Agents for Targeted Mitigation of the COVID-19 Pandemic Defined by Genomics-Guided Tracing of SARS-CoV-2 Targets in Human Cells. Biomedicines 8(5): 129.

12. Guzel R, Kozanoglu E, Guler-Uysal F, Soyupak S, Sarpel T (2001) Vitamin D status and bone mineral density of veiled and unveiled Turkish women. J Womens Health Gend Based Med 10(8): 765-770.

13. Charoenngam N, Holick MF (2020) Immunologic Effects of Vitamin D on Human Health and Disease. Nutrients 12(7): 2097.

14. Ali N (2020) Role of vitamin D in preventing of COVID-19 infection, progression and severity. J Infect Public Health 13(10): 1373-1380.

15. Lan J, Ge J, Yu J, Shan S, Zhou H, et al. (2020) Structure of the SARS-CoV-2 spike receptor-binding domain bound to the ACE2 receptor. Nature 581: 215-220.

16. Islam N, Shkolnikov VM, Acosta RJ, Klimkin I, Kawachi I, et al. (2021) Excess deaths associated with covid-19 pandemic in 2020: age and sex disaggregated time series analysis in 29 high income countries. bmj 373: n1137.

17. Mahayosnand PP, Gheno G, Sabra ZM, Sabra DM (2021) Fifty Muslim-majority countries have fewer COVID-19 cases and deaths than the 50 richest non-Muslim countries. Anonymous.

18. Ghafari M, Kadivar A, Katzourakis A (2021) Excess deaths associated with the Iranian COVID-19 epidemic: A province-level analysis. International Journal of Infectious Diseases 107: 101-115.

19. Hasan HF (2021) Legal and Health Response to COVID-19 in the Arab Countries. Risk Management and Healthcare Policy 14: 1141-1154.

20. Jardine R, Wright J, Samad Z, Bhutta ZA (2020) Analysis of covid-19 burden, epidemiology and mitigation strategies in muslim majority countries. Eastern Mediterranean Health Journal 26(10): 1173-1183.