EClinicalMedicine 24 (2020) 100462

Contents lists available at ScienceDirect

EClinicalMedicine

journal homepage: https://www.journals.elsevier.com/eclinicalmedicine

Commentary

COVID-19 experience in Kuwait: A high prevalence of asymptomatic cases and increased mortality in smokers

Awadhesh Kumar Singh

Department of Diabetes & Endocrinology, G.D Hospital & Diabetes Institute, Kolkata, India

ARTICLE INFO

Article History:
Received 29 June 2020
Accepted 1 July 2020
Available online xxx

Emerging information adds to our knowledge that may help in dealing with the current pandemic of coronavirus disease 2019 (COVID-19), caused by Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-2). In EClinicalMedicine, Almazeedi and Colleagues [1] have reported a retrospective analysis with regards to the patient's characteristics of more than thousand confirmed COVID-19 from a single large hospital of Kuwait, studied over a period of about 2 months. Authors have found that nearly half of patients were of Indian origin working as manual laborer in Kuwait, and one-fourth of them had a history of recent travel from the place where COVID-19 was highly prevalent at that point of time. This study also found nearly half of them were asymptomatic at the time of admission, majority had no signs of any infection on clinical examination, and all were diagnosed during the routine mass screening on behalf of Kuwaiti government. Most of COVID-19 patients were young (mean age 41 year) male, of which 22% were obese and only 30% had comorbidities, of which, hypertension and or diabetes contributed nearly one-third. At admission, 90% had normal white blood cell count including absolute lymphocyte count and two-third had a normal chest X-ray. Multivariable analysis found the risk factors that were significantly associated with an increased risk of severity requiring ICU admission were elevated procalcitonin, C-reactive protein, smoking and older age (>50 years). The risk factors that were significantly associated with an increased risk of death include smoking, elevated procalcitonin and asthma.

Authors must be applauded for reporting the clinical characteristics of COVID-19 patients of a whole country of Kuwait in Middle-East, since all patients were admitted in this only single large COVID-19 hospital, as per governmental law. In addition, this study carries a special importance since one homogeneous protocol was applied for every patient with regards to diagnosis, treatment, prognosis and discharge.

The key finding from this study is disproportionately higher number of COVID-19 patients who were asymptomatic (46%), when compared to the other currently available studies. For example - one longitudinal study from Taiwan [2] and other from USA [3] found approximately 18% of asymptomatic cases, while a Korean study [4] reported only 2% of asymptomatic cases of COVID-19. Although this discordant finding could partly be attributed to the mass screening carried out in the present study, it is also likely that some of asymptomatic cases were detected early in pre-symptomatic stage. Nevertheless, this finding does carry an immense importance to public health, considering that these asymptomatic patients could have silently spread the infection, had they not been diagnosed with COVID-19 and quarantined. Therefore, it is imperative for all the stake holders that testing programs should be made affordable to the public at large to trace, test, identify and quarantine these asymptomatic cases, in order to flatten the pandemic curve. In addition, this also emphasizes the importance of social distancing and mandatory use of mask during the unlock down period, as most of countries have already started.

Another finding of importance includes affliction of migrant people of South-Asian origin in majority. While this has been accounted by the authors to the residential proximity to the two epicenters of Kuwait where majority of these people live in highest concentration and linked to the poor socioeconomic status, this may not necessarily be the exact reason. A higher involvement of migrant South-Asians irrespective of their socioeconomic status and behavioral factors have been recently documented in a study from UK [5]. The reason for ethnic predilection to COVID-19 is not known but surely needs further evaluation [6]. Nonetheless, all efforts should be tried in order to minimize the risk in any such susceptible ethnic groups.

Finally, two important risk factors that have emerged from this study need special attention. Both smokers and patients having high procalcitonin were not only associated with a significant increase in severity but also had significant increase in mortality. This finding is similar in line with recent metanalysis that found smokers are having *a* >2-fold increase in severe COVID-19 [7]. Interestingly, initial debate that started with the association of smoking with less chance of contracting SARS-CoV-2 and subsequent proposal of nicotine use, no longer remain tenable [8,9]. Notwithstanding, World Health Organization recommends tobacco users to stop smoking [10]. Since high procalcitonin denotes a concomitant bacterial infection and increase in procalcitonin was associated with a poor prognosis, it is desirable to use broad-spectrum antibiotics judiciously, whenever necessary.

DOI of original article: http://dx.doi.org/10.1016/j.eclinm.2020.100448.
E-mail address: draksingh_2001@yahoo.com

https://doi.org/10.1016/j.eclinm.2020.100462

Declaration of Competing Interest

Nothing to declare

References

[1] Almazeedi S, Al-Youha S, Jamal MH, et al. Characteristics, risk factors and outcomes among the first consecutive 1,096 patients diagnosed with COVID-19 In Kuwait. Lancet EClin Med 2020. doi: 10.1016/j.eclinm.2020.100448.

[2] Cheng HY, Jian SW, Liu DP, et al. Contact Tracing Assessment of COVID-19 transmission dynamics in Taiwan and risk at different exposure periods before and after symptom onset. JAMA Intern Med 2020. doi: 10.1001/jamainternmed.2020.2020.

[3] Payne DC, Smith-Jeffcoat SE, Nowak G, et al. SARS-CoV-2 infections and serologic responses from a sample of U.S. Navy service members - USS Theodore Roosevelt, April 2020. MMWR Morb Mortal Wkly Rep 2020. doi: 10.15585/mmwr.mm6923e4.

[4] Park SY, Kim YM, Yi S, et al. Coronavirus disease outbreak in call center, South Korea. Emerg Infect Dis. 2020;26(8). doi: 10.3201/eid2608.201274.

[5] Niedzweidz CL, O'Donnell CA, Jani BD, et al. Ethnic and socioeconomic differences in SARS-CoV-2 infection: prospective cohort study using UK Biobank. BMC Med 2020;18:160. doi: 10.1186/s12916-020-01640-8.

[6] Khunti K, Singh AK, Pareek M, Hanif W. Is ethnicity linked to incidence or outcomes of covid-19? BMJ 2020;369:m1548.

[7] Guo FR. Active smoking is associated with severity of coronavirus disease 2019 (COVID-19): an update of a metaanalysis. Tob Induc Dis 2020;18:37.

[8] Farsalinos K, Barbouni A, Niaura R. Systematic review of the prevalence of current smoking among hospitalized COVID-19 patients in China: could nicotine be a therapeutic option? Intern Emerg Med 2020. doi: 10.1007/s11739-020-02355-.

[9] Rossato M, Russo L, Mazzocut S, Di Vincenzo A, Fioretto P, Vettor R. Current smoking is not associated with COVID-19. Eur Respir J 2020. doi: 10.1183/13993003.01290-2020.

[10] WHO statement on smoking and COVID-19: scientific briefing May 26, 2020. https://apps.who.int/iris/bitstream/handle/10665/332182/WHO-2019-nCoV-Sci_Brief-Smoking-2020.1-eng.pdf.