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Editorial Note

Pakistani youth population is prone to SARS-CoV-2 (nCoVID-19) Infection

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To the Editor:

The novel coronavirus (nCOVID-19) with potential for human-to-human transmission at an exponential rate across the globe has been shown in numerous reports. According to WHO declaration COVID-19 is a global emergency with over 40 million infections that could cause 1-5 million deaths. Currently Pakistan is acutely facing this key challenge with lockdown and casualties. On February 25, 2020, the (COVID-19) first case was reported in Karachi (Sindh) from a pilgrim and rapidly spread throughout Pakistan. As of October 25, 2020, a total of 320,211 cases have been confirmed in the 4 Pakistani provinces, the capital Islamabad and the two autonomous. The predicted numbers of infections up to November 10 should be around 335,000-350,000 with 5000-10,000 severe and 1000-3000 critical cases [2-3].Though the available COVID-19 strain sequences from three autonomous regions Gilgit Baltistan (GB), Karachi (Sindh) and Khyber Pakhtunkhwa (KPK), Pakistan show 95-99% similarity with the Chinese original COVID-19 strains[4-5]. However, the current available Pakistani epidemiological data show substantially different patterns from the world COVID-19 trends(Fig.1A-C) by infecting 50-60 % of 18-49-year age individuals predominately with an alarming proportion of 35-45 % of younger people (18-39 years) with male dominancy (82-88 % male /12-18 % female),(Fig.1B-D). Similarly, different patterns of provinces epidemiological data, *i.e.,* KPK high mortality rate 40 ± 2 % with lowest 13 ± 2 % recovery vs other regions (Fig.1A) shows diverse COVID-19. On the other hand, the death rate 12 ± 2 % in (10-49-year youth) vs 84 ± 2 % (50-80+year old) (Fig.1E), suggesting youth as a COVID-19-gun showlder to hit old.

Beside nemours reasons, here we list some key factors affecting COVID-19 infections in Pakistan, *i.e.,*[1] Existence of different COVID-19 strains due to mutation or different Pakistanis returning from abroad (Fig.1A). [2] A massive 60% of young Pakistani getting infected (Fig.1B-C). [3] More exposure due to promiscuous activities (businesses, social gatherings, migrant workers, travelers, and transporters. [4] Social ignorance among the young of the world COVID-19 transmission trends. [5] Bad habits of sleep, fast-food, and smoking. Now we urgently need to consider these unusual aspects of COVID-19 in Pakistan and take all precautionary measures as early as possible.
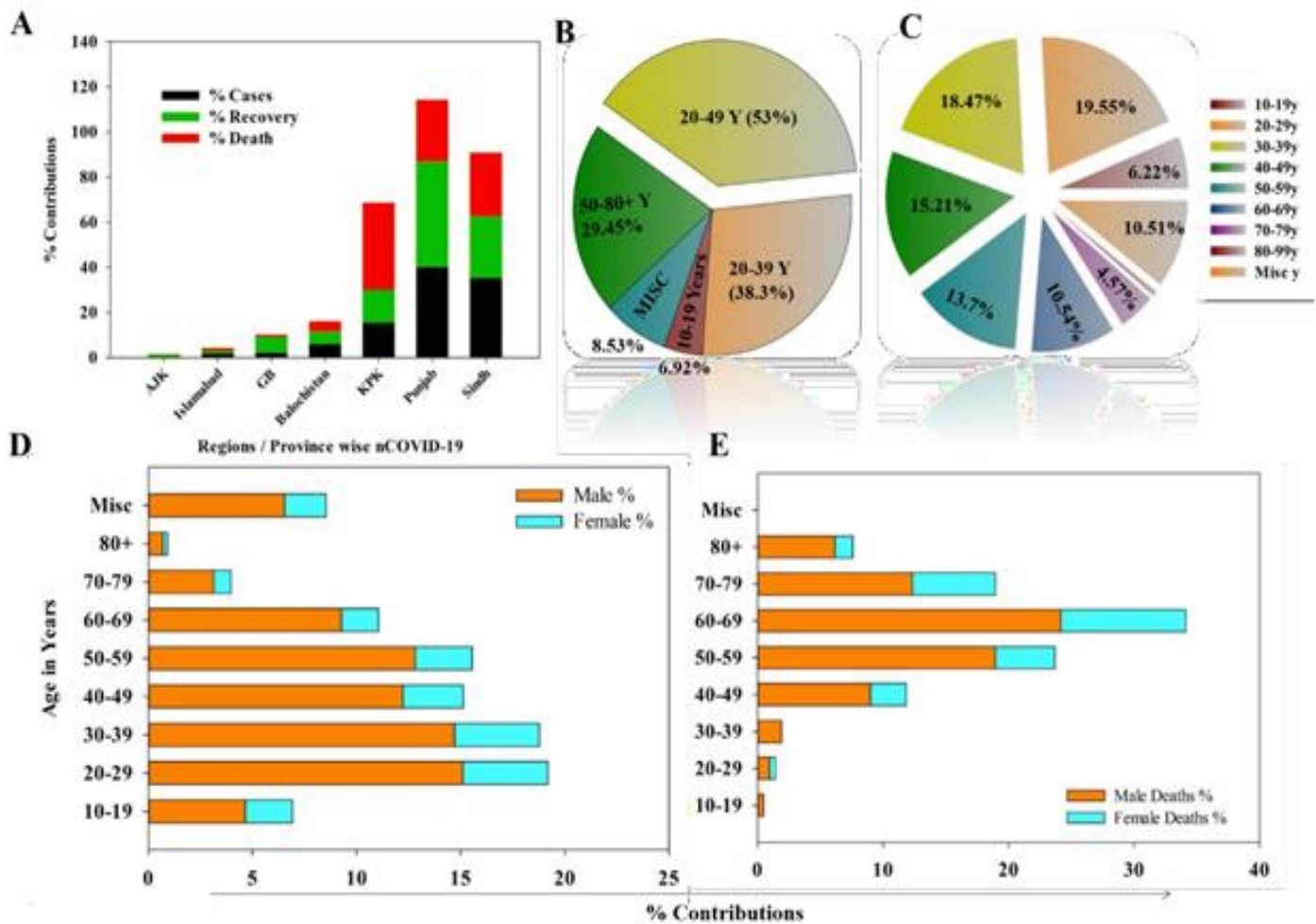
A) Bar graph shows region wise % nCOVID-19 status across Pakistan.

B-C) Pi chart representing age-wise nCOVID-19 infections;

B) Pre-dominant life age group infections.

C) Detail age wise overall status of % infection.

D-E) Bar graph highlighting age + gander wise demographic % of nCOVID-19 infection; D) shows age wise active cases demographic % infection.

E) Shows death rate demographic % of infection across Pakistan.

Figure 1: COVID-19 Epidemiology in Pakistani population:

Reference:

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