

## Posters

### Scientific Presentation - Other (Other Medical Condition)

#### 671 DEMOGRAPHIC VARIABILITY IN MORTALITY FROM COVID DURING THE TWO SURGES

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**Introduction:** COVID-19 resulted in significant mortality over the last several months. This survey aims to evaluate demographic differences between those hospitalised patients who died of COVID during the first surge [until 31/08/2020] and those who died during the second [01/09/2020–15/03/2021].

**Methods:** Data was obtained for all patients admitted with COVID during the two pandemic surges at two multi-ethnic, inner-city district general hospitals. Univariate and multivariable analyses [stepwise backward logistic regression] were conducted to evaluate

mortality as per patient demographics, length of stay, and whether patients had been managed in critical care.

**Results:** 1013 [21.5%] of 4,707 patients died during this period. Mortality was significantly lower during the second wave, compared to first i.e. 18.5% [632/2784] vs 29.5% [381/901]; 39% reduction [P < 0.001]. This reduction was observed across all ages, gender, ethnic subgroups, and both sites. Advancing age was associated with significant mortality at all times with no differences between the two waves. 77% of all deaths occurred in patient > 70. There were fewer deaths among those < 50 during the second wave compared to first [7 vs 12]. Reduction in mortality during second wave was noted across all ethnic sub-groups. However, significantly greater reduction was observed in Black African [54.6%], South-Asian [47.3%], Black Caribbean [44.4%], and East-Asian [44.2%] groups, compared to white subgroup [34.2%]. Majority of patients who died were managed on general medical wards during both waves [n = 824, 81.3%]. For patients who spent time in critical care, there were no significant differences in mortality [30.6 vs 33.7%, p = ns]. There were no differences in terms of length of hospital stay between the two waves. Multivariable analyses showed that Black African [OR 0.47, 95% CI 0.27–0.82] was independently associated with lesser mortality during second wave.

**Discussion:** This large survey has described demographic differences in mortality between the two surges. Lower mortality rates during second wave may be due to better treatment modalities, greater awareness of infection prevention and control, and possibly vaccination. This survey indicates greater psychological support may be required for healthcare workers on general medical wards who looked after greater proportion of COVID deaths.