

# Impact of COVID-19 pandemic on cancer care delivery : A Real World Experience

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## Abstract

**Background:** There is lack of information on impact of Corona Virus Disease (COVID-19) pandemic on routine cancer care delivery.

**Aims and Objectives :** To evaluate the change in Day Care Chemotherapy (DCC) and Out Patient Department (OPD) patient numbers before and after COVID-19 national lockdown.

**Material and Methods:** Demographic data, diagnosis, type and frequency of chemotherapy delivered in Day Care between 1st February 2020 to 31st July 2020 were retrieved. Out Patient Department daily patient numbers were collected. Descriptive statistics, Odds ratio, Chi-square and Student T test were used to measure change in pattern of DCC and OPD patient numbers before and after 24th March 2020 (day of Lockdown). Pearson correlation coefficient was used to measure the strength of correlation between rise in COVID-19 cases and patient numbers.

**Results:** 3192 DCC and 8209 OPD visits were recorded in 126 working days. Median age was 47 years( SD + 19.06). Breast (17%) and Gall bladder( 15%) were the most common cancers receiving chemotherapy. There was a significant decrease in number of DCC delivered in post COVID lockdown [ mean 21.97 ( + 9.7)] compared to pre COVID lockdown [mean 33.30 (+11.4)],  $t=4.11$ ,  $p = 0.001$ . There was a significant decrease in number of OPD visits in post COVID lockdown [ mean 47.13 ( + 18.8)] compared to pre COVID lockdown [mean 89.91 (+30.0)],  $t=7.09$ ,  $p = 0.001$ . The odds of receiving weekly chemotherapy over non weekly regimes significantly decreased post COVID lockdown with Odds ratio of 0.52 (95% CI, 0.36-0.75) with Chi square of 12.57,  $p = 0.001$ . Daily COVID cases in State and OPD patient number were found to be moderately positively correlated on Pearson correlation coefficient,  $r = 0.35$ ,  $p = 0.001$ .

**Conclusion:** There was a significant fall in patient visit and chemotherapy cycles immediately after lockdown. The numbers increased later despite rise in COVID-19 cases.

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