

**Impact of the COVID-19 Pandemic on
Cardiology Services and Catheterization
Volumes in the Second Year:
*A Comparison of 2020 and 2021 at a Tertiary
Cardiac Centre in Bangladesh***

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Disclosure

- No potential conflicts of interest

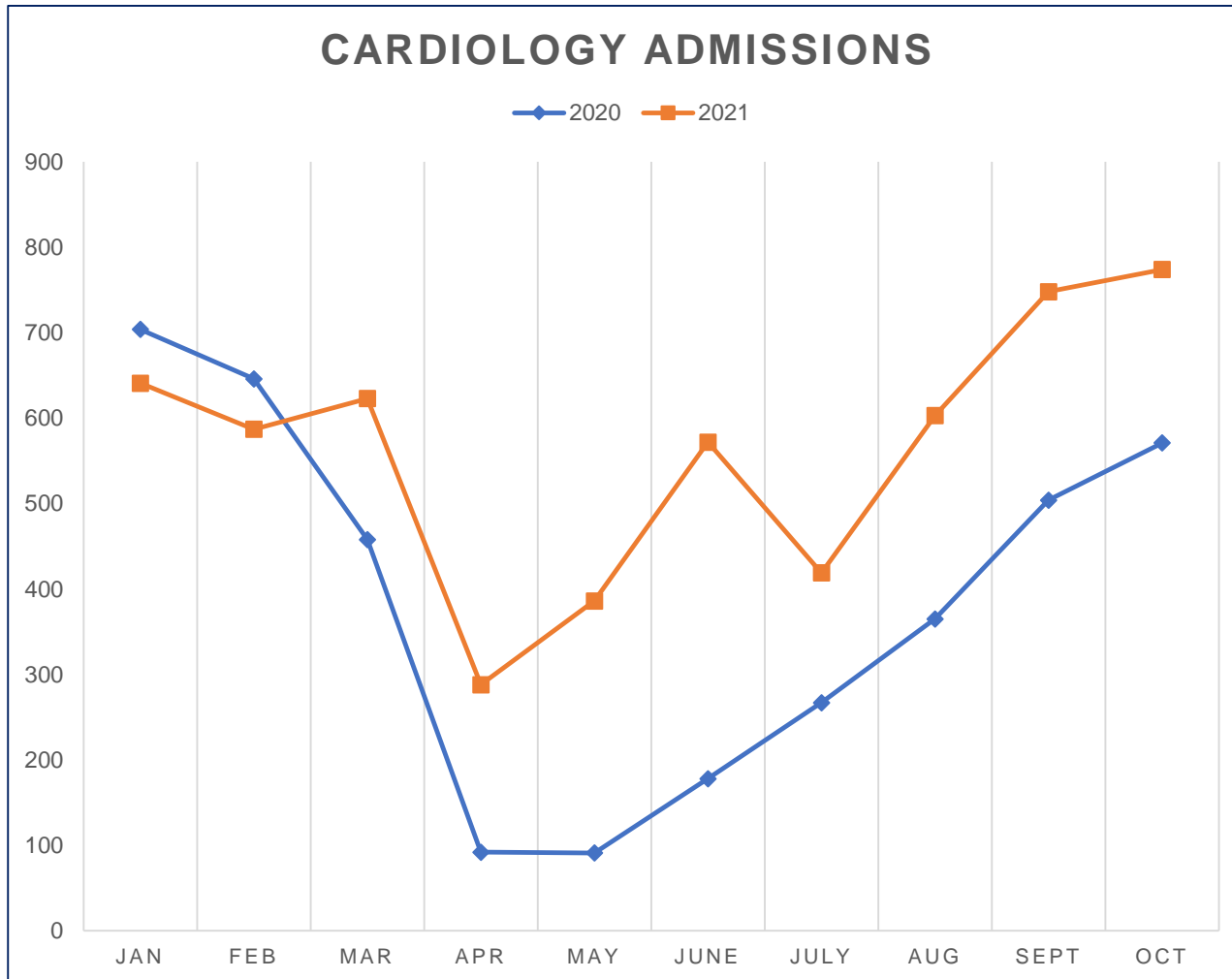
Background

- There is little data from South Asia on the impact of the COVID-19 pandemic on cardiology services and catheterization laboratory volumes during the second year of the pandemic, particularly considering the novel delta variant.
- The delta variant of SARS-Cov 2 had profound effects in the South Asian region during the second quarter (Q2) of 2021.
- We aimed to assess this impact at a tertiary cardiac centre in Bangladesh.

Methods

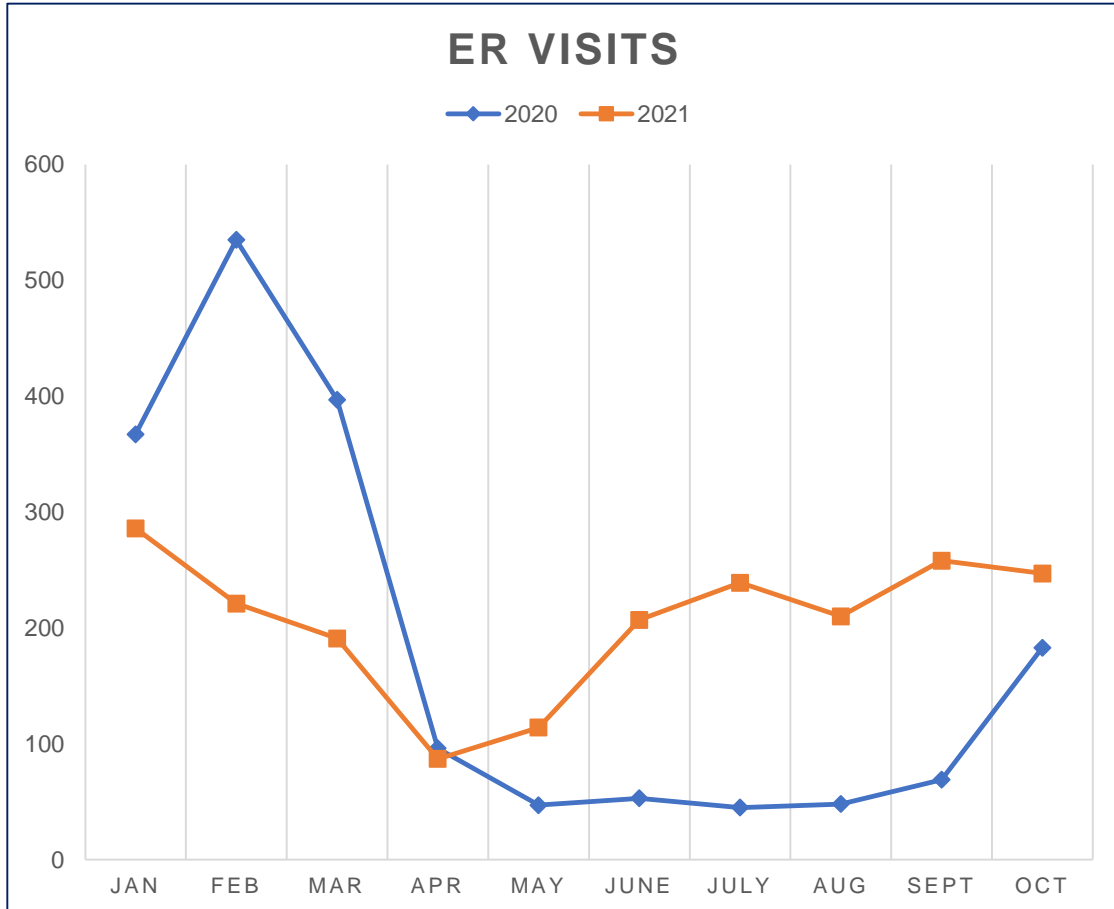
- Data on patient visits, admissions, procedures and catheterization volumes were collected for January to October 2020 and 2021 via hospital electronic records.
- Comparisons for each corresponding month were made between 2021 and 2020.
- The difference was expressed as a percentage (% Δ).
- Data for each quarter (Q1 to Q3) were compared using paired t-test.
- $P < 0.05$ was considered significant.

Results



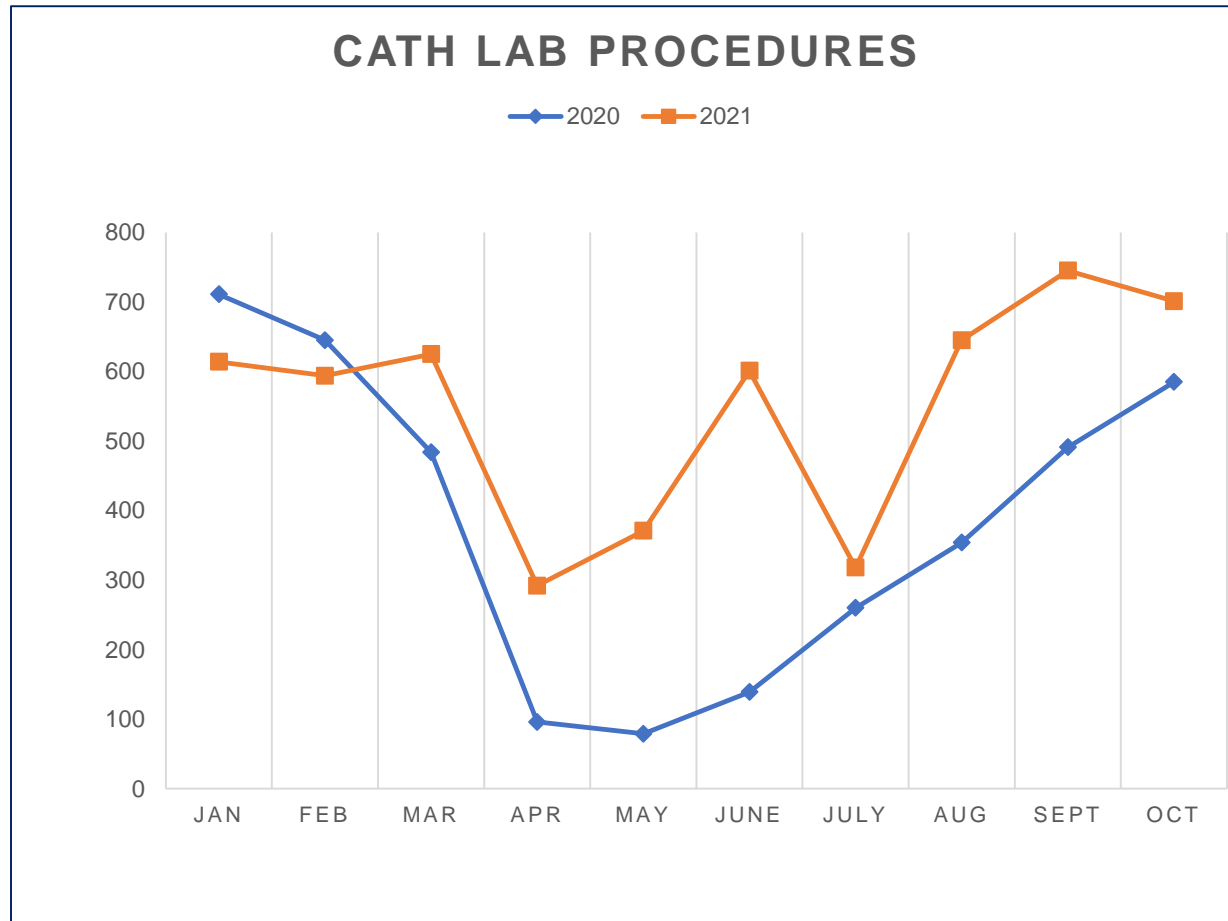
- Significant increase in cardiology inpatient admissions ($\% \Delta 45.54\%$; $p=0.04$) in 2021 as compared with 2020.
- Significant increase in outpatient procedures ($\% \Delta 47.39\%$; $p=0.002$)
- Decline in Q2 coinciding with delta surge
- Despite this Q2 decline in 2021, total admissions ($p=0.036$), outpatient visits ($p=0.024$) and outpatient procedures ($p=0.046$) were significantly elevated in comparison to Q2 in 2020

Results



- ER visits increased by 11.96% overall in 2021, but was not significantly different ($p=0.7$).

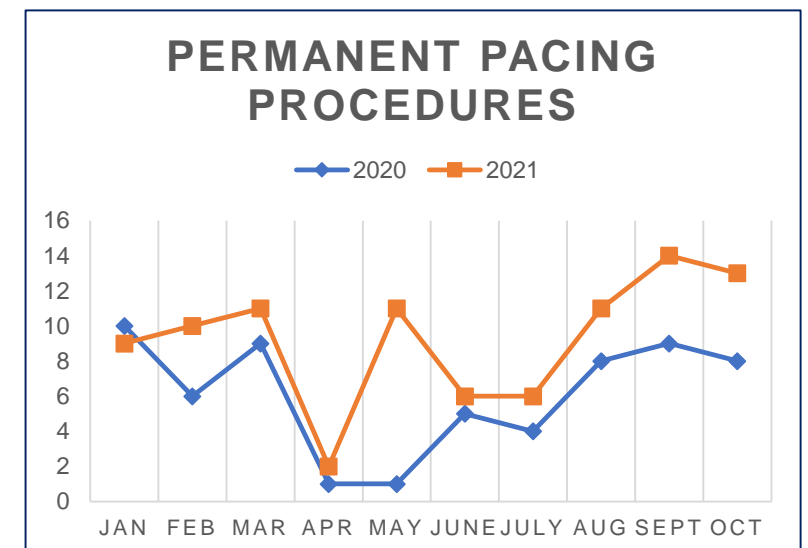
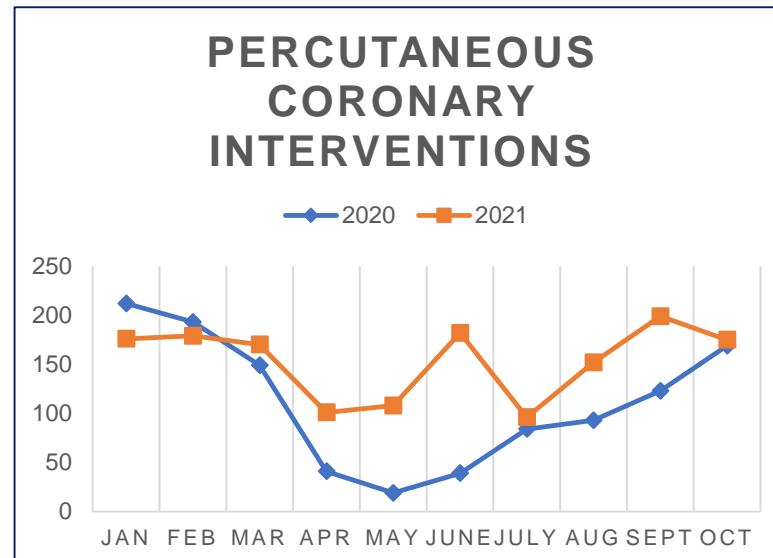
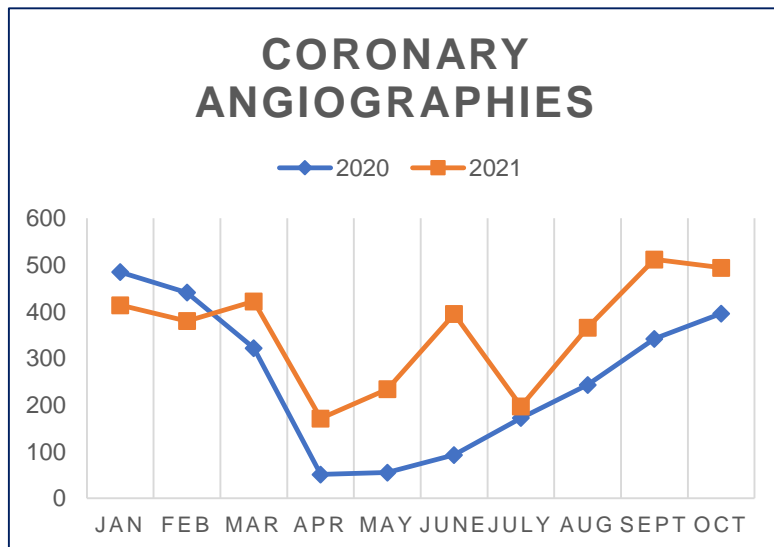
Results



- A significant increase in total cath lab procedures ($\% \Delta 43.24$; $p = 0.013$) was seen in 2021.
- As compared with Q1 of 2021, admissions and cath lab volumes declined in Q2 (coinciding with the delta variant wave), but have picked up in Q3, and continue to increase.

Results

- Coronary angiographies, PCI and PPM procedures declined in Q2 of 2021
- Compared to Q2 of 2020, cath lab volumes were elevated numerically ($p=0.055$) in 2021, with graphical trends showing increased volumes in Q3.
- Overall, there was a significant increase in permanent pacing ($\% \Delta 52.46\%$; $p=0.009$) in 2021 as compared with 2020.



Conclusion

- Cardiology services and cath lab volumes had reached almost pre-pandemic levels in January and February 2021.
- Although admissions and catherization laboratory volumes declined during Q2, coinciding with the COVID-19 surge due to delta variant, they were still higher than corresponding months in the preceding year.
- This indicates an encouraging adaptation of the healthcare systems to care delivery during the prevailing pandemic.