

# TRENDS IN TUBERCULOSIS DIRECTLY OBSERVED TREATMENT SHORT-COURSE (DOTS) AVAILMENT DURING THE COVID-19 PANDEMIC IN METRO MANILA, PHILIPPINES



SCAN ME

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## BACKGROUND INFORMATION

- Amid the COVID-19 pandemic, tuberculosis (TB) is still one of the world's deadliest infectious diseases. It's difficult to diagnose and tough to treat. When patients are unable to complete their treatment regimens, they risk developing drug-resistant tuberculosis (DR-TB), which makes the condition more difficult to treat.
- The Philippines has the 4th highest TB burden (Global TB Report 2020)
- Metro Manila is the Philippines' capital region and 100% urban.
- The consequences of COVID-19 lockdowns have likely prevented TB patients from accessing prompt TB diagnosis & treatment.
- In Metro Manila, the imposition of enhanced community quarantine restrictions, including stay-at-home orders and ban on public transportation may have likely hindered many TB patients from obtaining their ration of medicines from government-subsidized Directly Observed Treatment, Short-Course (DOTS).

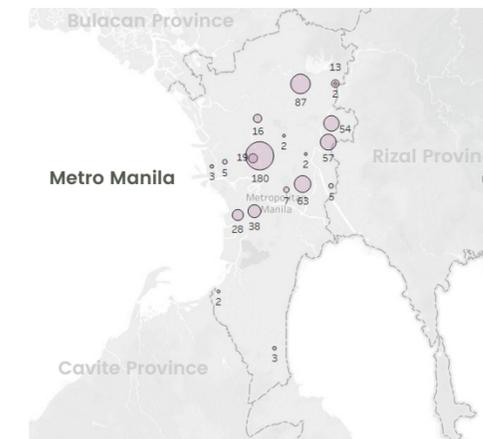
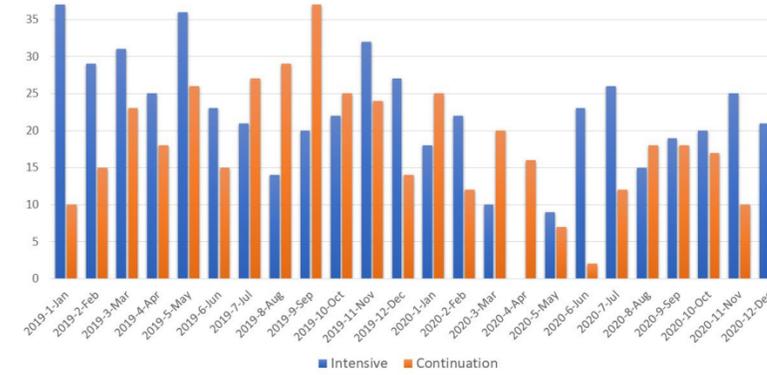
## PROJECT OBJECTIVE

This study aims to examine the trends in tuberculosis treatment during challenging conditions, particularly the COVID-19 pandemic.

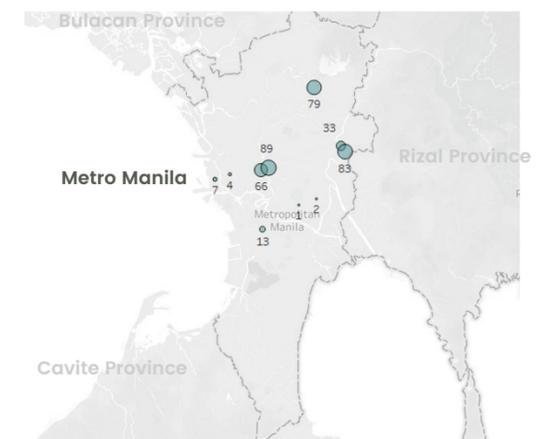
## RESULTS & DISCUSSION

These maps show the location of participating health facilities in Metro Manila that have distributed the DOTS – intensive phase and continuation phase regimens to patients for the periods Jan – Dec 2019 (leftmost map) and Jan – Dec 2020 (rightmost map).

There was a noticeable decrease from 2019 to 2020 in both the number of health facilities (# of individual circles) and the total availed treatment (label and circle size).

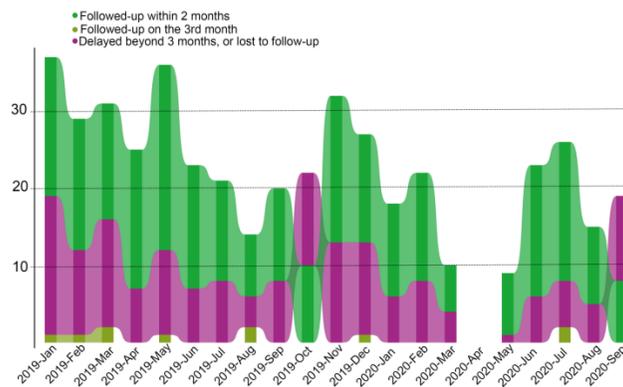


Jan 2019– Dec 2019



Jan 2020 – Dec 2020

Total claims from Jan 2019 to Dec 2020 for DOTS – intensive & continuation phases



Followup status of those who started DOTS – intensive from Jan 2019 to Sep 2020

- lesser monthly DOTS availments in 2020 than in 2019 (ANOVA  $p < 0.001$ )
- zero availment for DOTS – intensive in April 2020, coinciding with strictest lockdown in Metro Manila (enhanced community quarantine)
- lowest number of DOTS availments in April 2020 and May 2020 during strictest lockdown status in the nation's capital
- delayed or lost to follow-up (purple stacks on the left) comprised a significant portion of patients, placing them at risk for developing DR-TB
- delayed/lost to follow-up substantial even pre-pandemic ( $\chi^2 p = 0.2$ )

## MATERIALS AND METHODS

- This is an observational, retrospective, multicenter cohort study to determine the impact of the COVID-19 pandemic on the trend in TB treatment availment.
- We have examined DOTS claims data from the government's national health insurance agency, Philippine Health Insurance Corporation (PhilHealth)
- Secondary, public, and anonymous data were obtained from claim forms of member-patients availing the PhilHealth outpatient packages for DOTS Intensive Phase (RVS 89221) and DOTS Continuation Phase (RVS 89222).
- We examined 2019 to 2020 data for comparison.



## ANALYSIS, CONCLUSIONS, & RECOMMENDATIONS

- Failure to follow-up & reduced DOTS availment may be due to limited accessibility.
- Patients may be health facility-averse due to stigma with COVID-19-like symptoms.
- TB control programs are under stress due to diversion of resources & priorities (COVID-19).
- The pandemic may have accelerated the use of innovative tools, e.g., telemonitoring.
- These info will be useful to reshape TB control strategies during the pandemic.

