

“Characteristics of COVID-19 Positive Pregnant Patients and Their Maternal and Neonatal Outcomes”

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INTRODUCTION

The SARS-CoV-2 pandemic has had profound effects globally. Historical experience with previous Coronaviruses has shown increased maternal and perinatal morbidity and mortality, theoretically secondary to the physiologic changes of pregnancy. As of August 2021, the Philippines is the 23rd top country worldwide in terms of total cases, yet there remains to be a sparse pool of information both internationally and locally.

Objectives: This study aimed to present the prevalence, clinical characteristics, as well as the neonatal, obstetric, and maternal outcomes of all pregnant women admitted in the institution who had active or previous COVID-19 infection.

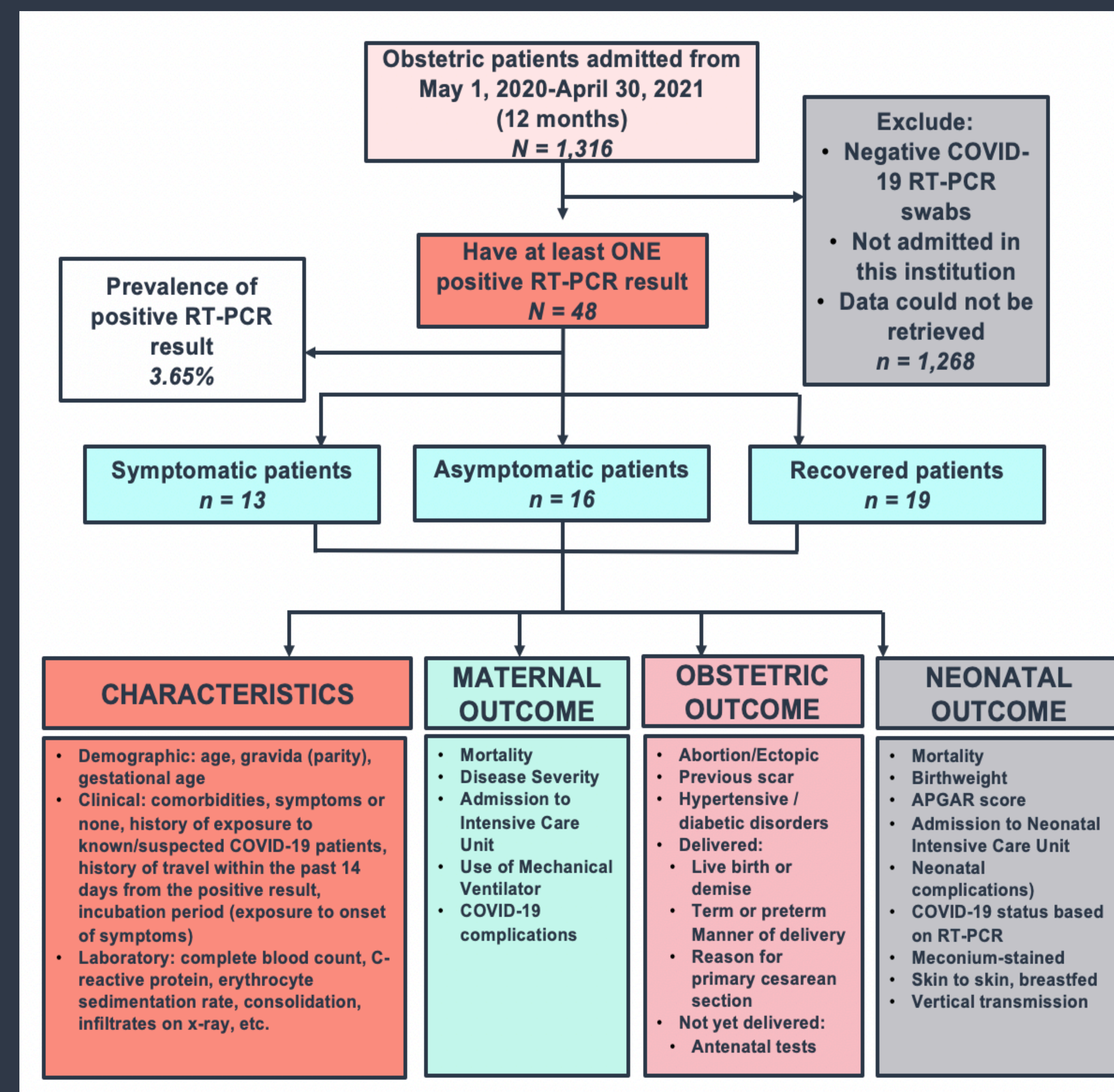


Figure 1. Process of Study

DESIGN & METHODOLOGY

Retrospective review of data using the hospital's health information system was utilized. Within the study period, all admitted obstetric patients who had at least one positive result in a RT-PCR naso-oropharyngeal swab for SARS-CoV-2 were included and categorized into: (1) **symptomatic**, (2) **recovered**, and (3) **asymptomatic**.

RESULTS

A total of 48 patients were included, where **prevalence** of COVID-19 in pregnancy was **3.65%**. Results showed that most patients were in the **third trimester** (mean age of gestation 35.26 ± 6.39), and contrary to the non-pregnant population, **majority** (60.41%) did **not have co-morbidities**. Most remained **asymptomatic** (33.33%) or had **mild symptoms** (18.75%), and underwent **abdominal delivery** (50%) for **obstetric indications**. There was **one mortality**, who had developed critical severity. COVID-19 status was not associated with adverse obstetric outcomes in this study population, but had significant association with **preterm birth** ($p=0.019$) and **neonatal intensive care unit (NICU) admission** ($p<0.001$).

CONCLUSION

Overall, most cases were **asymptomatic and had good prognosis** even with the adaptations a pregnant woman undergoes. In addition, **neonatal outcomes were generally good** regardless of the association with preterm birth and NICU admission. Lastly, there was **no appreciated evidence for vertical transmission**.

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Neonatal Outcomes		ASYMPTOMATIC		SYMPTOMATIC		RECOVERED		
	Category	Count	%	Count	%	Count	%	p-value
NICU Admission	No	1	6.7	0	0.0	18	100.0	< 0.001
	Yes	14	93.3	9	100.0	0	0.0	
Preterm on Maturity Testing	No	10	66.7	7	77.8	18	100.0	0.019
	Yes	5	33.3	2	22.2	0	0.0	
LGA	No	14	93.3	8	88.9	15	83.3	0.83
	Yes	1	6.7	1	11.1	3	16.7	
SGA	No	14	93.3	9	100.0	17	94.4	1.000
	Yes	1	6.7	0	0.0	1	5.6	
Meconium staining	No	11	73.3	9	100.0	17	94.4	0.133
	Yes	4	26.7	0	0.0	1	5.6	
APGAR 1 <8	No	12	80.0	8	88.9	17	94.4	0.503
	Yes	3	20.0	1	11.1	1	5.6	
APGAR 5 <8	No	14	93.3	8	88.9	18	100.0	0.321
	Yes	1	6.7	1	11.1	0	0.0	
Skin to skin	No	1	6.7	2	22.2	0	0.0	0.094
	Yes	14	93.3	7	77.8	18	100.0	
Vertical Transmission Of COVID	No	15	100.0	9	100.0	18	100.0	.
	Yes	0	0.0	0	0.0	0	0.0	
Breastfed	No	1	6.7	2	22.2	0	0.0	0.094
	Yes	14	93.3	7	77.8	18	100.0	

Table 1. Association between Neonatal Outcomes and COVID status using Chi-Square Tests