

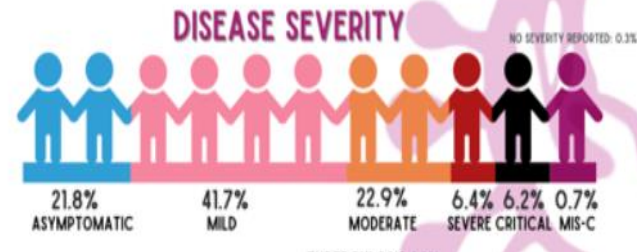
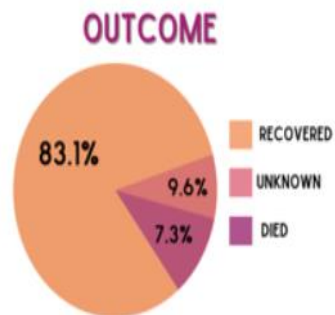
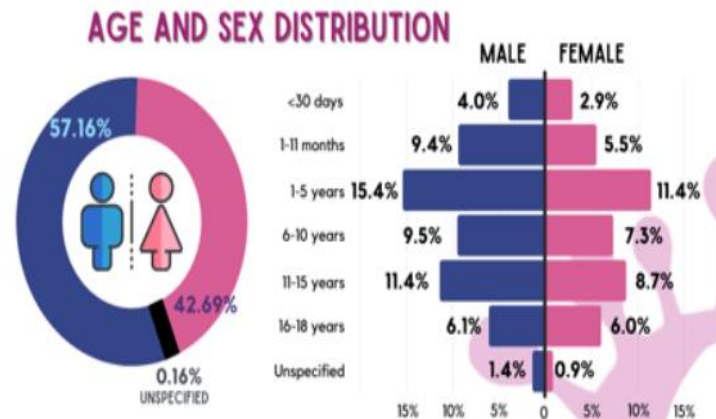
**A Cross-sectional Study
on the Clinical Phenotypes and Predictors of
Post COVID-19 Condition
among Children of Cagayan de Oro City**

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As of April 2023, the World Health Organization has reported a total of 764,474,387 COVID-19 cases globally.

Locally, as of March 2022, the SALVACION Registry recorded **3,221 COVID-19 cases in children.**



Objectives

- Prevalence of post COVID-19 among children of Cagayan de Oro City and their baseline characteristics
- Common Manifestations
- Clinical Predictors

Methodology

- Cross-sectional Analytical Study
- Adapting ISARIC Global COVID 19 – pediatric survey questionnaire answered by a telephone interview
- Study Population:
 - 186 children aged 0- 18 years in Cagayan de Oro City with confirmed SARS-CoV-2 infection (April 2022- April 2023)
 - Control in 1:1 ratio
- Statistical Analyses: Univariate analysis and multi-variate logistic regression

Results

Table 1: Sociodemographic data and health characteristics of the participants

Variables	Case (n=186)		Control (n=250)		p-value
	N	%	N	%	
Age, mean	5.9		6.3		0.41
Male	96	51.6	131	52	0.806
Poor-income class	73	39	131	52	<0.001
Clustering of symptoms in the household	108	58	22	8	<0.001
Complete household vaccination Status	182	98	237	94.8	0.483
Patient Vaccination Status					
Unvaccinated	141	75	183	73.2	0.104
1 dose	3	1.6	3	1.2	
2 doses	42	22.5	66	26	
Nutritional Status					
Overweight/Obese	5	2.6	3	1.2	0.088
No Comorbidities	148	79.6	205	82	0.002

Results

Table 2: Acute Symptoms

Variables	Case (n=186)		Control (n=250)		p-value
	N	%	N	%	
Acute Symptoms					
Asymptomatic	16	8	52	20	0.001
Diarrhea	10	5	29	11	0.001
Decreased appetite	4	2	9	3	0.001
Vomiting	21	11	36	14	0.001
Cough	92	49	103	41	0.001
Coryza	68	36	63	25	0.001
Fever	126	67	112	44	0.001
Seizure	5	2	6	2	0.001
Shortness of breath	21	11	31	12.4	0.001
Sore throat	6	3	2	0.8	0.001

Results

Table 3. Prevalence of Persistent Symptoms

Variables	Case (n=186)		Control (n=250)		p-value
	N	%	N	%	
Persistent Symptoms	29	15	4	1.6	<0.001*
Cough	19	10	2	0.8	
Rhinorrhea	16	8.6	2	0.8	
Loss of Taste	0.5	1	0	0	

Results

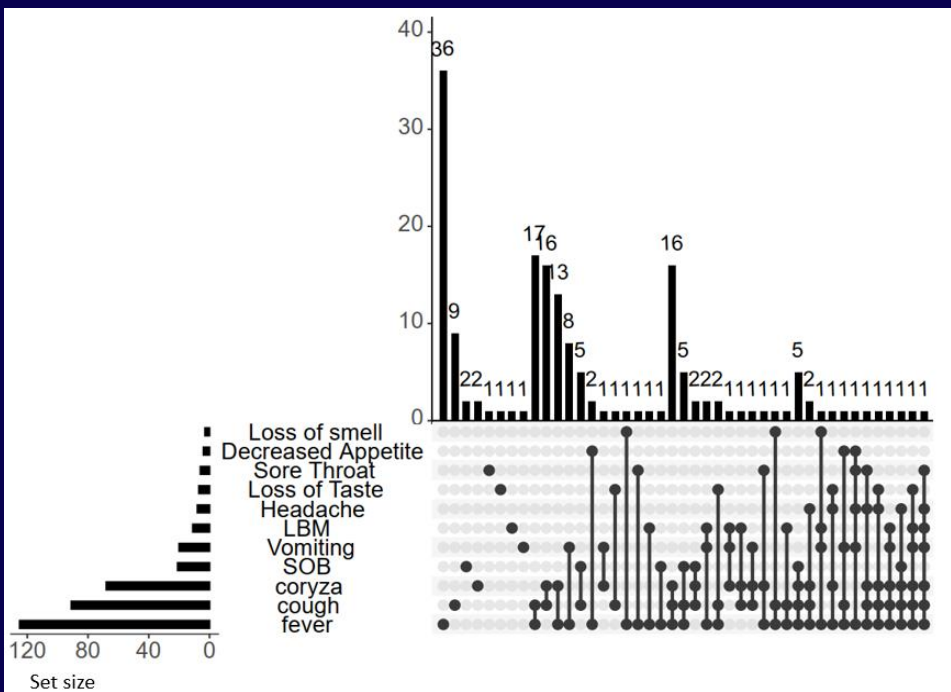


Figure 2a. UpSet plot representing the individual and co-existent acute COVID-19 symptoms

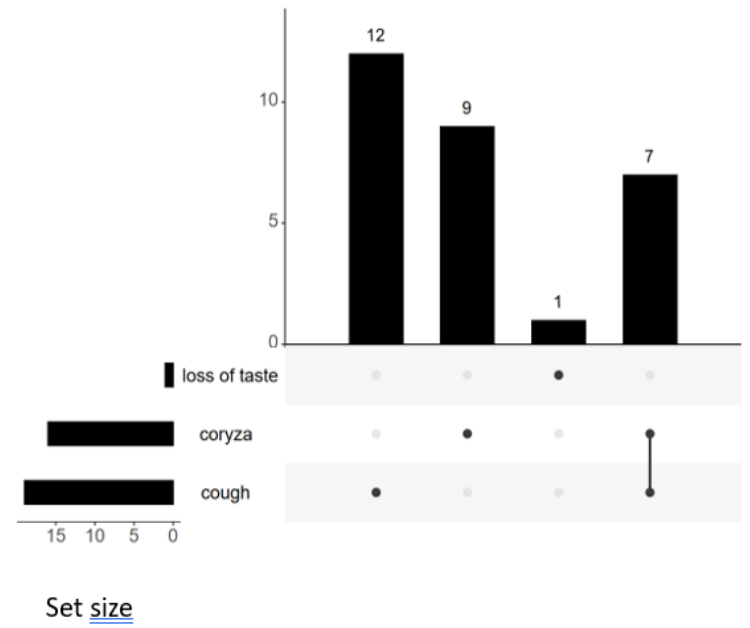


Figure 2b. UpSet plot representing the individual and co-existent persistent symptoms.

Results

Table 4: Clinical predictors of post COVID-19 condition

Predictors	With Persistent Symptoms		cOR	Univariate Analysis p-value	aOR	Multivariate Analysis p-value
	N	%				
Age						
0 - 23 months	4	13.8	Reference			
2- 4 years old	13	44.8	7.00	0.071		.824
5-11 years old	10	34.4	13.83	0.013	11.9	.053
12-18 years old	2	6.8	2.06	0.62		.145
Vaccination status						
Unvaccinated	25	86.2	Reference			
1 dose	1	3.4	2.7	0.260	1.7	.494
2 doses	3	10.3	4.22	0.116	5.9	.309
Care Received						
Outpatient	14	48.3	Reference			
Hospitalization	15	51.7	2.37	0.037	4.104	.010*

Conclusions and Recommendation

- Children less than 11 years old, male sex and unvaccinated group have a higher prevalence of persistent symptoms.
- Persistent cough, rhinorrhea and loss of taste were the common manifestations.
- The age group 5-11 years old was identified as a clinical predictor of post COVID-19 condition along with those who were hospitalized.
- We recommend a longitudinal matched cohort design done on a larger population.