



Pediatric Nephrology Society of the Philippines (PNSP) Guidelines on COVID 19-vaccination of Pediatric Kidney Patients

October 14, 2021

Situational Background:

Coronavirus Disease (COVID)

As of October 14, 2021, from World meter, there are 240,021,214 Coronavirus cases reported with 4,891,285 or 2% deaths worldwide. In the Philippines, there now 2,698,232 documented cases with 40,221 deaths or 1.5%.

COVID in Children

UNICEF data showed that children and adolescents under 20 years of age accounts for 14% of reported COVID cases with around 0.4% deaths. In the local setting, from the start of the pandemic until August 2021, DOH recorded 183,747 pediatric COVID cases, 0-19 years of age. This is around 10% of the total COVID cases with 520 confirmed deaths.

Pediatric COVID cases with kidney disease:

On behalf of the COVID-19 Task Force of the Italian Society of Pediatric Nephrology, Mastrangelo et al in August 2021 did a study on the incidence of COVID-19 infection among pediatric kidney patients. Of the 1572 participants, with a median age of 11.1 years, there were only 3 or 0.19% with confirmed COVID 19 infection.

From the National Kidney and Transplant Institute, the study of Ancheta et al, reported that out of 517 pediatric CKD patients admitted last year, 2% or 15 cases had COVID positive infections. On follow up, from the start of the pandemic up to June 2021, of the 686 admissions there now 5% or 33 reported COVID cases.

PNSP Response

With the ongoing threat of COVID 19 infection, PNSP reviewed the international and local data on the efficacy and safety of COVID 19 vaccination on pediatric patients with kidney disease and formulated its recommendations. Last October 12, PNSP conducted an interactive session with its members together with experts from pediatric Allergology-Immunology, Infectious Disease and Cardiology specialties.

October 15, 2021, is the start of COVID 19 vaccination among children ages 12-17 years and the Pediatric Nephrology Society of the Philippines would like to share the **PNSP Guidelines on COVID 19-vaccination of pediatric kidney patients 12 to 18 years old.**

(Disclaimer: The following guidelines are based on the limited available data. These guidelines need to be revisited regularly and updated as necessary.)

1. Is COVID-19 vaccination recommended for pediatric patients with kidney disease?

Yes. COVID-19 vaccination is NOT CONTRAINDICATED among pediatric kidney patients ages 12-18 years old who are: on immunosuppressants, diagnosed with CKD; on dialysis; post kidney transplants and who had COVID-19 infection.

2. What COVID-19 vaccines are recommended for pediatric patients with kidney disease?

Consider any one of the following vaccines:

- Pfizer-BioNTech (BNT162b2)
- Moderna (mRNA-1273)
- AstraZeneca/COVISHIELD (ChAdOx1-S)*
- Johnson & Johnson vaccine*

* No recommendation yet from DOH, Philippines

3. How many doses of COVID-19 vaccine do pediatric patients with kidney disease need?

May give 2 doses for most patients, with a minimum interval of 28 days between the 1st and 2nd dose. However some patients may need a 3rd dose. *

Recent studies demonstrate that some people who are immunocompromised develop an improved antibody response after a third dose of vaccine. Moderna COVID-19 vaccine is preferred for the third dose. However, if Moderna is unavailable (or if the individual prefers), the Pfizer-BioNTech COVID-19 vaccine may be provided.

* No recommendation yet from DOH, Philippines as to the 3rd dose

4. Are there specific contraindications for COVID-19 vaccination on pediatric patients with kidney disease?

The risk of allergic reaction is the same with the general population. For those with history of anaphylaxis of unknown cause or those with suspected allergy to COVID-19 vaccine components, there is a need for allergology clearance prior to immunization

5. For pediatric patients on immunosuppressants, do they need to withhold these medications prior to COVID -19 immunization?

Recommendations for patients on immunosuppressants are based on extrapolated data from other viral infections, immunology of immunizations and from expert opinion.

Patients who need to receive immunosuppressive therapy like Rituximab, Prednisone 20 mg/day or greater, Cyclophosphamide or Plasma Exchange, should complete the course of treatment first before receiving the vaccine.

For life-threatening conditions, treatment should not be delayed in order to be immunized.

For patients on Rituximab therapy:

To optimize vaccine response, COVID 19 immunization should ideally be given 4 to 5 months after their last infusion and 2 to 4 weeks prior to next infusion if possible.

For patients on prednisone: 20mg/day or higher (or equivalents):

Consider waiting until prednisone dose is tapered to below 20mg/day to receive both vaccine doses.

6. Is it safe to give COVID-19 vaccine together with other vaccines?

COVID-19 vaccines can be given concomitantly with, or any time before or after any other indicated vaccine.

It has been demonstrated that immunogenicity and adverse event profiles are generally similar when vaccines are administered simultaneously as when they are administered alone.

7. What to do on pediatric patients diagnosed with kidney disease associated with hypertension?

Vaccine recipients with blood pressure (BP) not meeting definitions of hypertensive emergency and without symptoms like chest pain, headaches or pain on the nape may be given immunization.

Those with hypertension should take their medication before getting vaccinated. If BP remains too high, a doctor should be consulted first.

8. What are the reported vaccine side effects among pediatric patients with kidney disease?

Side effects are the same with the general population such as pain and swelling from the vaccination site; fever, chills, feeling of tiredness or headache.

9. Is COVID 19 immunization safe and effective in pediatric kidney patients with co-existing cardiomyopathy?

Consider vaccine if:

-Functional Class 1 Asymptomatic

-2D echo shows good LVEF at least 50% despite LV hypertrophy; mild pericardial effusion no IVC or Stage C with moderate to severe LVED >5.5 but asymptomatic

Otherwise, may need cardiology clearance

References:

http://www.bccdc.ca/Health-Info-Site/Documents/COVID-19_vaccine/Kidney_disease_Clinical_Guidance.pdf

<https://www.kidneyfund.org/covid-19/vaccine-faqs/>

https://www.gla.ac.uk/news/headline_808086_en.html

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8245347/>

<https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci.html>

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/immuno.html>

https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fvaccines%2Fcovid-19%2Finfo-by-product%2Fclinical-considerations.html#Coadministration

<https://doh.gov.ph/press-release/DOH-ISSUES-ADDITIONAL-VACCINATION-GUIDELINES>

<https://www.kidney.org/coronavirus/vaccines-kidney-disease#side-effects>

Philippine Society of Hypertension and Philippine Heart Association Guidelines



Pediatric Nephrology Society of the Philippines

Board of Trustees

President: Agnes A. Alarilla-Alba MD
Vice President: Violeta M. Valderrama MD
Secretary: Bettina C. Cercenia MD
Treasurer: Marvin C. Callanta, MD

Board Members

Ma Angeles G. Marbella MD
Ma Lorna Lourdes L. Simangan, MD
Paul Joseph T. Galutira, MD

Regional Representative
Lynette Fillone Alcala MD

Immediate Past President
Maria Rosario F. Cabansag, MD

Committee on CPGs & Committee on Policy Statements

Chair: Ma Lorna Lourdes L Simangan, MD

Members

Eric Emmanuel T. Aragon, MD
Nathan C. Bumanglag, MD
Coe P. dela Sena, MD
Catherine B. Dizon, MD
Ana Rose Dy-Vicente, MD
Dennis S. Flores, MD
Maria Theresa Garcia- Banez, MD
Maria Margarita M. Romano, MD
Lourdes Paula R. Resontoc, MD

Adviser: Agnes Alarilla-Alba, MD