

FEATURE ARTICLE

2022 UPDATED PEDIATRIC INFECTIOUS DISEASE SOCIETY OF THE PHILIPPINES (PIDSP) RESEARCH AGENDA

*Robert Dennis J. Garcia, MD, MHSA, Ma. Cecilia G. Ama, MD, and Rosemarie Arciaga, MD, MSc
Pediatric Infectious Disease Society of the Philippines Research Committee*

The Pediatric Infectious Disease Society of the Philippines (PIDSP) has a mandate to promote and conduct relevant infectious disease-related research by its members, fellows in training institutions, and resident physicians in training hospitals. Part of such a mandate is the creation of a priority list of research topics, which directs the researcher to what information is deemed important by the PIDSP, if the research is to receive funding from the Society, should such be requested. This list was first created in 2016.

In April 2021, the PIDSP Research Committee met and agreed to update the list, by conducting a series of three internal surveys to determine if the items in the existing list were still relevant, and if new topics should be included. Twenty-three PIDSP members, which included board members, known researchers, and university faculty, were surveyed using an online Google form, over three surveys between May 31, 2021 and October 3, 2021. New items were elicited from the respondents, and the old and new items were asked to be prioritized into the headings: high, medium, low, and not a priority. Only the high and medium priority items were included in the final updated list.

Correspondence:

Dr. Robert Dennis J. Garcia

Email: rdgarcia59@yahoo.com

The authors declare that the data presented are original material and has not been previously published, accepted or considered for publication elsewhere; that the manuscript has been approved by all authors, and all authors have met the requirements for authorship.

RESULTS

1st survey (May 31, 2021):

- Priority levels (high, medium, low) were requested for the 116 hitherto research topics.
- The response rate was 19/23 (83%).
- There was a general agreement with the pre-listed priority level, except for eight topics.
- The 1st survey also elicited new proposed research topics. The result was a list of new topics.

2nd survey (August 17, 2021):

- Priority levels (high, medium, low, not a priority) were requested for the newly proposed research topics.
- The response rate was 12/23 (52%).
- There was a general agreement with a specific priority level, except for seven topics.

3rd survey (September 27, 2021):

- Priority levels were requested for topics with which there was disagreement in priority level (high vs. medium for old topics; medium vs. low for new topics).
- The response rate was 7/23 (30%).
- For the old topics, a majority preferred a change in priority from medium to high for five items; a change from high to medium for one item; while two items stayed in the same category.
- For the new topics, a majority favored five items in medium priority, while two were placed at low priority.

The above process resulted in an updated research priority list which contains:

- 116 old topics; two were changed from “high” to “medium priority”
- 30 new topics, of which 16 are of “high priority.”
- Three new sections:
 - COVID-19
 - Kawasaki disease
 - DOH research priorities

The following is the list of topic sections and items, with the corresponding priority level per item:

I. Leptospirosis

Topic	High	Medium
A. Risk factors for severe leptospirosis	X	
B. Predictors for mortality among children with severe leptospirosis	X	

II. Tuberculosis

Topic	High	Medium
A. Epidemiology of MDR-TB in children	X	
B. Treatment of MDR-TB in children	X	
C. Validity of TB diagnostic criteria in children	X	
D. Improving laboratory diagnosis of TB	X	
E. Strategies to improve treatment compliance ¹	X	
F. Research priorities included in the DOH/PHILCAT document	X	
G. Prevention of MDR-TB in children	X	
H. Strategies to improve TB case detection	X	
I. Treatment monitoring parameters for extra-pulmonary TB	X	
J. Surveillance of TB in the private sector ²	X	
K. Problems in the implementation of DOTS in children ²	X	
L. Adherence to the TB guidelines ²	X	
M. TB as a cause of childhood pneumonia ¹	X	
N. Strategies to improve private-public TB referral	X	
O. Strategies to decrease misconceptions regarding TB		X
P. Strategies in the dissemination of guidelines for TB management		X
Q. Education strategies targeting disease awareness/transmission		X
R. Determinants of TB disease in children		X
S. Strategies to increase isoniazid preventive therapy		X

¹ New topics

² Old topic, priority changed from medium to high

III. Influenza

Topic	High	Medium
A. Influenza surveillance among children	X	
B. Validation of rapid diagnostic tests for influenza in children	X	
C. Development of treatment guidelines for influenza	X	
D. Diagnostic criteria for influenza in children		X
E. Influenza vaccine studies		X

IV. Pneumonia

Topic	High	Medium
A. Risk factors for severe pneumonia	X	
B. Predictors of pneumonia-related mortality in children	X	
C. Clinical and laboratory parameters to differentiate viral vs. bacterial pneumonia	X	
D. Etiologic agents of pneumonia for age >5 years old	X	
E. Strategies to improve vaccine coverage for pneumonia	X	
F. Adherence to the PCAP case-management guidelines		X
G. Efficacy of existing PCV		X
H. Criteria for switching from IV to oral antibiotics in hospitalized PCAP		X
I. Validity of diagnostic parameters for pneumonia		X
J. Adjuncts in the management of severe pneumonia		X
K. Etiologies of PCAP in < 5 years of age ¹		X
L. Atypical pathogens as a cause of PCAP ¹		X
M. <i>Staphylococcus aureus</i> as a cause of PCAP ¹		X

¹ New topics

V. Dengue/DHF

Topic	High	Medium
A. Risk factors for poor outcome in dengue	X	
B. Effect of the Case Management Protocol in improving survival	X	
C. Baseline hematocrit among Filipino children	X	
D. Strategies to improve disease management	X	
E. Effective strategies for the dissemination of the new case classification & management protocols	X	
F. Dengue vaccine studies	X	
G. Validation of disease definition based on clinical & lab parameters ¹		X
H. Community approaches to decrease morbidity & mortality		X
I. Interventions for vector control		X
J. Mortality rate in patients with severe dengue		X

¹ Old topic, priority changed from high to medium

VI. Meningitis/encephalitis

Topic	High	Medium
A. Age-specific etiologic agents of meningitis in children	X	
B. Risk factors for poor disease outcome of viral, bacterial and TB meningitis in children	X	
C. Clinical presentation of viral, bacterial & TB meningitis in children	X	
D. Etiology of encephalitis in children	X	
E. Empiric therapy for bacterial meningitis in children	X	
F. Antimicrobial sensitivity pattern of bacterial causes of meningitis		X
G. Role of imaging in the diagnosis of meningitis		X
H. Adherence of pediatricians to the CPG on meningitis		X
I. Cost-effectiveness analysis of vaccination programs		X
J. Anti-NMDA, dengue and <i>Mycoplasma sp.</i> as causes of encephalitis ¹		X
K. Strategies to ensure polio eradication ¹		X

¹ New topics

VII. Sepsis

Topic	High	Medium
A. Clinical and laboratory predictors for sepsis	X	
B. Validation of diagnostic tools for sepsis	X	
C. Adjuncts in the management of sepsis	X	
D. Criteria for the diagnosis of sepsis in neonates	X	
E. Aids in the diagnosis of sepsis	X	
F. New management approaches for sepsis	X	
G. Etiology of sepsis	X	
H. Clinical profile & outcome of sepsis due to MDR organisms ¹	X	
I. Epidemiology of sepsis		X
J. Risk factors for sepsis in children		X
K. Appropriate treatment of early-onset and late-onset neonatal sepsis ¹		X
L. <i>Staphylococcus aureus</i> as a cause of community-acquired bacteremia ¹		X

¹ New topics

VIII. Diarrhea/rotavirus

Topic	High	Medium
A. Changing etiology and epidemiology of acute diarrhea in children	X	
B. Changing rotavirus serotypes with the introduction of rotavirus vaccine	X	
C. Impact of increasing rotavirus vaccine coverage among children < 2 years old	X	
D. Risk factors for diarrhea mortality	X	
E. Barriers to rotavirus vaccination	X	
F. Adjuncts in the management of diarrhea in children		X
G. Safety of rotavirus vaccines		X
H. Relationship between chronic diarrhea, IQ and growth		X
I. Adherence to the recommended diarrhea management		X
J. Herbal medicines for diarrhea in children		X

IX. Healthcare-associated infections

Topic	High	Medium
A. Site-specific surveillance for HC-associated infections	X	
B. Interventions to decrease HC-associated infections	X	
C. Risk factors for HC-associated infections in children	X	
D. Adherence to transmission-based infection control	X	
E. Multidrug-resistant HC-associated infections in children ¹	X	
F. Cost of HC-associated infections in private and public hospitals		X
G. Prevention of central catheter line infections		X

¹ New topics

X. Antimicrobial use

Topic	High	Medium
A. Effect of antibiotic stewardship on antibiotic use	X	
B. Antimicrobial resistance surveillance in children	X	
C. Appropriate antimicrobial use for common pediatric infections	X	
D. Antimicrobial prescription for common infectious diseases	X	
E. Optimal early switch to oral antibiotics in hospitalized children	X	

XI. Measles

Topic	High	Medium
A. Community programs to improve measles immunization rate	X	
B. Factors related to declining measles vaccination rate ²	X	
C. Risk factors for persistence or outbreaks of measles ²	X	
D. Risk factors for measles-associated complications and death		X
E. Adjuncts in the management of measles		X
F. Improving the accuracy of measles surveillance		X
G. <i>Staphylococcus aureus</i> as etiology of pneumonia in measles ¹		X

¹ New topics

² Old topic, priority changed from medium to high

XII. Pertussis

Topic	High	Medium
A. Age-specific incidence of pertussis in the community	X	
B. Clinical diagnostic criteria for pertussis in children	X	
C. Efficacy of chemoprophylaxis for prevention of disease transmission	X	
D. Predictors of mortality among infants	X	
E. Effectiveness of vaccination of pregnant women and/or adults to prevent disease transmission	X	
F. Cost-effectiveness analysis of rapid diagnostic tests for pertussis		X
G. Waning immunity following DPT vaccination		X
H. Risk factors for pertussis		X
I. Cost-effectiveness of drugs for prevention & treatment of pertussis		X

XIII. Rabies

Topic	High	Medium
A. Knowledge, attitudes and practices on rabies & its pre-exposure prophylaxis		X
B. Feasibility of pre-exposure prophylaxis		X
C. Cost-effectiveness of pre-exposure prophylaxis		X

XIV. HIV/STI

Topic	High	Medium
A. Epidemiology of HIV/AIDS among children & adolescents	X	
B. Risk assessment & intervention programs for adolescents & various groups at risk	X	
C. Clinical course of HIV/AIDS in children	X	
D. TB & HIV comorbidity	X	
E. Efficacy of various ARV combinations among children	X	
F. Interventions to improve disease recognition & management	X	
G. Opportunistic infections among children with HIV/AIDS	X	
H. HIV/AIDS-defining diseases among children	X	
I. Strategies to increase HIV testing among women	X	
J. Comorbid diseases with HIV, other than TB		X
K. Approaches to decrease stigma of the disease		X
L. Yield of prenatal HIV testing in pregnant women ¹		X
M. HIV manifestations in children & adolescents ¹		X

¹ New topics

XV. Malaria

Topic	High	Medium
A. Evaluation of the malaria control program in the community		X
B. Risk factors for complications & deaths in malaria		X
C. Malaria vaccine studies		X

XVI. Kawasaki disease¹

Topic	High	Medium
A. Clinical profile & outcome of children with complete vs. incomplete Kawasaki disease		X
B. Identifiable infectious & non-infectious etiologies in children with Kawasaki disease		X

¹ New topics

XVII. COVID-19¹

Topic	High	Medium
A. Epidemiology of COVID-19 in children	X	
B. Clinical presentation & outcomes of COVID-19 in children	X	
C. Effect of co-morbidities on disease severity and death in childhood COVID-19	X	
D. Morbidity and mortality in childhood COVID-19	X	
E. Short/long-term outcomes in childhood COVID-19	X	
F. COVID-19 vaccines	X	
G. Management of COVID-19 in children	X	
H. The effect of the COVID-19 pandemic on routine childhood vaccination compliance	X	
I. The rate of COVID-19 positivity among infants born to COVID-19-positive mothers	X	
J. Inflammatory markers in children with COVID-19 and association with morbidity & mortality	X	
K. Use of telemedicine in infectious disease patients during the pandemic		X

¹ New topics

XVIII. Surveillance

Topic	High	Medium
A. Infectious Disease Surveillance to include the private sector	X	
B. Survey of immunization coverage by private practitioners	X	
C. Water potability in Metro Manila tap water ¹	X	
D. Emerging and reemerging infectious diseases	X	

¹ New topics

XIX. DOH research priorities¹

Topic	High	Medium
A. Research priorities of infectious disease programs of the DOH		X

¹ New topics