

Supplement material S1

Participant Questionnaire: Survey on the Management of Pediatric Sepsis and Septic Shock among Thai Physicians

Part 1: General Information

- Gender: ☐ Male ☐ Female ☐ Prefer not to disclose ☐ Other: _____

- Years of Experience as a Physician

- ☐ 0-1 years ☐ 1-2 years ☐ 2-3 years
☐ 3-5 years ☐ 5-10 years ☐ More than 10 years
☐ Prefer not to disclose

- Medical specialist

- ☐ General Practice ☐ Pediatrics
☐ Prefer not to disclose ☐ Other: _____

- Current Professional Role

- ☐ Intern or General Practitioner (GP) ☐ Resident or clinical fellow
☐ Pediatric Specialty Physician or Faculty Staff
☐ Prefer not to disclose ☐ Other: _____

- Hospital Type Where You Work

- ☐ Primary care center (≤ 30 beds)
☐ Secondary care center (> 30 beds)
☐ Tertiary care center
☐ Super tertiary care center
☐ Private Hospital
☐ Other: _____

- Geographical Region of Your Hospital

- ☐ Bangkok ☐ Central Region ☐ Northern Region
☐ Southern Region ☐ Eastern Region ☐ Northeastern Region
☐ Western Region

- Have you participated in any training or studied about the management of sepsis/septic shock in children?

- ☐ Yes ☐ No

Part 2: Survey on Practices for Treating Pediatric Sepsis and Septic Shock

Please answer the survey truthfully.

1. When was the last time you treated a child with sepsis or septic shock?

- ☐ Within the past week ☐ Within the past month
☐ Within the past 3 months ☐ Within the past 6 months
☐ Within the past year ☐ More than a year ago
☐ Never treated a child with sepsis or septic shock

2. On average, how many patients did you diagnose with sepsis or septic shock per month in the past year?

- ☐ 1-2 patients per month ☐ 2-5 patients per month
☐ 5-10 patients per month ☐ 10-15 patients per month
☐ More than 15 patients per month

3. For a 6-year-old boy weighing 20 kg with no prior illnesses who was injured playing with friends in the park two days ago and now has a pus-filled wound on his leg,

how long did it take to screen this patient until the doctor examined him at your hospital?

- ☐ 5 minutes ☐ 15 minutes ☐ 30 minutes
☐ 1 hour ☐ 2 hours ☐ Other: _____

4. Upon examining the patient described in question 3, a boy shows good consciousness, clear lungs, a wound with pus on the left leg, warm extremities, flash capillary refill, and bounding pulses, what do you consider the most important in the initial resuscitation of this patient?

- ☐ Broad-spectrum antibiotic ☐ Appropriate fluid bolus
☐ Wound dressing and sending ☐ pus for culture
☐ Dopamine infusion ☐ Epinephrine infusion

5. How soon after admission does a patient like the one in question 3 receive a broad-spectrum empirical antibiotic in your hospital?

- ☐ 15 minutes ☐ 30 minutes ☐ 1 hour
☐ 2 hours ☐ More than 2 hours ☐ Other: _____

6. For the patient in question 3, which fluid for resuscitation would you choose first?

- ☐ 5% Dextrose in saline ☐ Normal saline ☐ Ringer's lactate solution
☐ 5% human Albumin ☐ Blood component ☐ Other: _____

7. What volume of fluid would you use for loading fluid resuscitation for the patient in question 3?

- ☐ 200 ml (10 ml/kg) ☐ 300 ml (15 ml/kg) ☐ 400 ml (20 ml/kg)
☐ 500 ml (25 ml/kg) ☐ 600 ml (30 ml/kg) ☐ Other: _____

8. How would you administer the fluid in question 7 to the patient?

- ☐ IV bolus ☐ IV in 5 min ☐ IV in 10 min

- ☐ IV in 15 min ☐ IV in 30 min ☐ IV in 1 hr
☐ IV in 2 hr ☐ IV in 8 hr ☐ IV in 24 hr
☐ Per oral ☐ Intraosseous
☐ Fluid not required for this patient

9. After the first fluid administration for the patient in question 3, if the BP is measured again at 75/40 mmHg and HR at 156 bpm with no signs of fluid overload, what is the maximum initial fluid resuscitation volume you would use before deciding to administer inotropic/vasoactive agents?

- ☐ 400 ml (20 mL/kg) ☐ 500 ml (25 mL/kg) ☐ 600 ml (30 mL/kg)
☐ 800 ml (40 mL/kg) ☐ 1000 ml (50 mL/kg) ☐ 1200 ml (60 mL/kg)
☐ 1400 ml (70 mL/kg) ☐ 1600 ml (80 mL/kg) ☐ 1800 ml (90 mL/kg)
☐ 2000 ml (100 mL/kg) ☐ Other: ____

10. Which inotropic/vasoactive agents are available for use in your hospital? (Multiple answers possible)

- ☐ Dopamine ☐ Dobutamine ☐ Epinephrine
☐ Norepinephrine ☐ Milrinone ☐ Levosimendan
☐ Vasopressin ☐ Terlipressin ☐ Angiotensin
☐ Enoximone ☐ Other: ____

11. After administering the full volume of fluid in question 9, how soon after you order treatment does the patient typically receive inotropic/vasoactive agents in your hospital?

- ☐ 5 minutes ☐ 15 minutes ☐ 30 minutes
☐ 1 hour ☐ 2 hours ☐ Other: ____

12. If a child patient has a BP of 70/30 mmHg and a HR of 160 bpm with warm extremities after initial fluid administration, which inotropic/vasoactive agent would you choose first?

- | | | |
|---|-------------------------------------|--------------------------------------|
| <input type="checkbox"/> Dopamine | <input type="checkbox"/> Dobutamine | <input type="checkbox"/> Epinephrine |
| <input type="checkbox"/> Norepinephrine | <input type="checkbox"/> Milrinone | <input type="checkbox"/> Other: ____ |

13. If a child patient has a BP of 60/40 mmHg and a HR of 160 bpm with cold extremities after initial fluid administration, which inotropic/vasoactive agent would you choose first?

- | | | |
|---|-------------------------------------|--------------------------------------|
| <input type="checkbox"/> Dopamine | <input type="checkbox"/> Dobutamine | <input type="checkbox"/> Epinephrine |
| <input type="checkbox"/> Norepinephrine | <input type="checkbox"/> Milrinone | <input type="checkbox"/> Other: ____ |

14. If a child patient has been stabilized initially with fluids and epinephrine at 0.3 mcg/kg/min and is now in the ICU with BP 112/65 mmHg, HR 130 bpm, cold extremities, and ScvO₂ < 70%, which inotropic/vasoactive agent would be most appropriate in this situation?

- | | | |
|---|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> Dopamine | <input type="checkbox"/> Dobutamine | <input type="checkbox"/> Epinephrine |
| <input type="checkbox"/> Norepinephrine | <input type="checkbox"/> Milrinone | <input type="checkbox"/> Levosimendan |
| <input type="checkbox"/> Vasopressin | <input type="checkbox"/> Terlipressin | <input type="checkbox"/> Angiotensin |
| <input type="checkbox"/> Enoximone | <input type="checkbox"/> Other: ____ | |

15. During the treatment of a patient with sepsis/septic shock who has a urinary catheter placed, if the patient is not urinating, how long will you wait before considering referral to a pediatric nephrologist or deciding on further action?

- | | | |
|----------------------------------|----------------------------------|--------------------------------------|
| <input type="checkbox"/> 1 hour | <input type="checkbox"/> 2 hours | <input type="checkbox"/> 3 hours |
| <input type="checkbox"/> 4 hours | <input type="checkbox"/> 5 hours | <input type="checkbox"/> 6 hours |
| <input type="checkbox"/> 7 hours | <input type="checkbox"/> 8 hours | <input type="checkbox"/> Other: ____ |

16. What is the mortality rate for pediatric patients with sepsis/septic shock in your hospital?

☐ Less than 10%

☐ 10-20%

☐ 20-40%

☐ 40-60%

☐ 60-80%

☐ More than 80%

☐ Other: _____

17. Have you received training on pediatric sepsis/septic shock management during your training?

☐ Yes

☐ No

☐ Other: _____

18. Do you think there should be annual training on pediatric sepsis/septic shock management?

☐ Yes, it should be organized

☐ No, it should not be organized

☐ Other: _____

19. Are you able to access a central line in children (excluding umbilical vein catheters in newborns)?

☐ Yes

☐ No

☐ Other: _____

20. Who do you think should be able to access a central line in children? (Multiple answers possible)

☐ General Practitioners

☐ Family Medicine Physicians

☐ Emergency Medicine Physicians

☐ General Pediatricians

☐ Pediatric Specialists

☐ General Surgeons

☐ Pediatric Surgeons

☐ Anesthesiologists

☐ Other: _____

21. Comments or suggestions on managing pediatric sepsis/septic shock in your hospital

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22. Other comments or suggestions:

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