

Webinar Series on Dengue Prevention & Control in South-East Asia Region

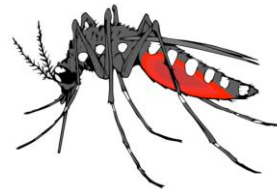
Session 3: Homecare of Dengue Patients

Key messages to the patient and caregivers in home care

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Key messages to the patient and caregivers in home care

- Useful information of dengue for patients
- Management of mild illness at home
- Warning signs after fever has gone away (or came down) require urgent medical attention
- Prevent dengue transmission in community





Useful Information of Dengue for Patients

- Dengue (break-bone fever) is a viral infection caused by dengue virus, transmitted to humans through the bite of infected mosquitoes.
- Most people who get dengue are asymptomatic or have mild illness.
- Most cases are able to take care of themselves at home and the patients will get better in 1–2 weeks.
- Outpatient follow up visits to a clinic/hospital according to doctors' appointment is important.
- Symptoms of dengue: high fever, headache, retro-orbital pain, red face, myalgia, arthralgia, nausea, vomiting, rash, petechiae, gum bleeding, nose bleeding, or bleeding from other sites



Management of Mild Illness at Home

- **Rest** as much as possible in a comfortable room with good ventilation

- **Diet and fluids:**
 - ✓ Advice to give soft, balanced and nutritious diet such as ice cream, milk or fruit juice
 - ✓ Avoid eating black or red-color foods/drinks as these may interfere with the interpretation of vomiting blood
 - ✓ Avoid drinking plain water which may cause electrolyte imbalance particularly low serum sodium level
 - ✓ Oral electrolyte solution (ORS) is recommended if the patient refuses to take oral food.



Management of Mild Illness at Home

■ Control fever:

- ✓ Place tepid sponging at least 15 minutes for reducing fever
 - Cold water immersion : heat convection $0.1^{\circ}\text{C}/\text{min}$
 - Place tepid sponging 15 min : reduce body temp 1.5°C
- ✓ If the patient is shivering, stop tepid sponging and using a light sheet to cover body rather than a heavy blanket.
 - Shivering is a regulatory mechanism to increase heat in body.
 - Cover body with a light sheet would help heat evaporation better than using a heavy blanket.



Management of Mild Illness at Home

■ **Control fever:**

- ✓ Take acetaminophen only if fever is over 38.5°C
- ✓ The recommended doses of acetaminophen should be given at least 4 hours apart, when taken as an overdose can cause hepatitis.
- ✓ Avoid taking aspirin, NSAIDs and steroid due to increase the risk of severe bleeding, acute hepatitis and acute kidney injury



Useful Information of Dengue for Patients

- Rarely, dengue can become severe resulting in death between day 3 to 7 since fever onset or when fever is going away.
 - Warning signs generally begin in the 24-48 hours after the fever has gone away.
 - Severe dengue has a 3-phase clinical course: febrile, critical, and recovery.
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- Not all dengue patients need to be admitted into a hospital during febrile phase.
 - Outpatient follow up visits to a clinic/hospital according to doctors' appointment is needed start on day 3 since fever onset till fever subside for 24 hours.



Warning signs after fever has gone away require urgent medical attention and hospitalization

If a patient has one or more of the following signs/symptoms, the patient should be brought to a hospital as soon as possible.

- Clinical deterioration when fever subside (or lower peak of fever)
- Drowsy, lethargy, refuse to eat and drink
- Severe vomiting
- Severe abdominal pain
- Bleeding
- Behavioral change
- Restless, irritable
- Thirsty
- Cold, clammy, mottling skin
- No urine for 4-6 hours





Symptoms and signs of recovery after fever has gone away

- **A**–Appetite
- **B**–Bradycardia
- **C**–Convalescence rash or itching
- **D**–Diuresis





Home Care after Discharge from the Hospital

- Dengue patients can be discharged from hospital when they get better, can eat or drink, no fever for at least 24 hours, and have PLT count $>50,000/\text{mm}^3$.
- PLT count usually return to normal level around 1 week after discharge.
- After discharge within 1-2 weeks, the patients should avoid heavy/invasive activities that are risks for bleeding :
 - Extreme sports injury
 - Pull a tooth
 - Injections (IV, IM)



Prevent Dengue Transmission in Community

- The effective way to prevent dengue transmission in community is to prevent mosquito bites and control mosquito populations.
- Be careful of patients who have a fever not to be bitten by mosquito in order to keep their family members from getting dengue.
 - Viremia occur during febrile phase.

<https://wwwnc.cdc.gov/travel/yellowbook/2024/infections-diseases/dengue>

<https://www.cdc.gov/dengue/symptoms/family.html>

<https://www.who.int/news-room/questions-and-answers/item/dengue-and-severe-dengue>



Prevent Dengue Transmission in Community

Avoid mosquito bites indoors:

- Sleep under mosquito nets
- Use mosquitoes screens on windows and doors
- Wear long-sleeved shirts and long pants
- Stay in an open air
- Use mosquito repellents



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Prevent Dengue Transmission in Community

Control mosquito populations:

- Drain and dump standing water found in containers inside and around the house: pet dishes, flower pots, vases, buckets, tires, cans.
- If containers cannot be drained or dumped out, cover them so that mosquitoes cannot get inside to lay eggs.





Prevent Dengue Transmission in Community

Control mosquito populations:

- Weekly, wash out containers with a brush or sponge to remove mosquito eggs.
- Get rid unwanted containers around the houses
- Household insecticide aerosols or other insecticide vaporizers may be also reduce biting activity.





Thank you for your attention