



Expert meeting on dengue diagnosis and risk prediction, with a focus on improving clinical management and integration with IMCI/IMAI

Ho Chi Minh City

21st-23rd September 2015

**Oxford University Clinical Research Unit - Vietnam (OUCRU-VN)
Hospital for Tropical Diseases,
764 Vo Van Kiet, District 5
Ho Chi Minh City, Vietnam**

This meeting is being convened on behalf of WHO-TDR, the EC-FP7 funded IDAMS Dengue Consortium, the Oxford University Clinical Research Unit and the Hospital for Tropical Diseases of Ho Chi Minh City. The meeting will be held in the main OUCRU meeting room in the Research Building of the Hospital for Tropical Diseases.

The three main objectives of the meeting are a) to discuss the current progress and expected impact of the clinical observational IDAMS study on early dengue; b) to evaluate the potential need for adaptation of the IMCI algorithm for dengue, and c) to discuss efforts towards developing operational definitions for intermediate and severe dengue for use in therapeutic intervention trials & clinical research.

Background

Agenda

List of participants

Background

Improvements in clinical diagnosis and risk prediction for severe disease are urgently needed in order to improve management of dengue, especially in settings with a high case burden where appropriate allocation of limited resources is crucial to outcome.

In the ongoing clinical observational study currently being carried out by members of the IDAMS consortium (www.idams.eu), outpatients with undifferentiated fever and a history consistent with possible dengue are being recruited within 3 days of fever onset in 5 Asian countries (Bangladesh, Cambodia, Indonesia, Malaysia and Vietnam), and then followed daily until full recovery. The same study is also being carried out across a number of Latin American countries. The main aims of the study are 1) to identify clinical features and simple laboratory parameters that differentiate dengue from other febrile illness in the febrile phase, and 2) among study participants with confirmed dengue, to evaluate risk factors for progression to more severe disease. One of the main objectives of this meeting is to bring together senior clinicians and public health specialists from across the Southeast Asian region to discuss how the data being generated (>5000 participants to date across Asia) can best be utilized to improve dengue guidelines for disease classification and management. As well as contributing to the development of diagnostic and prognostic algorithms this very large clinical cohort has considerable potential towards standardization of procedures for dengue management and reporting.

Guidelines for the integrated management of childhood illness (IMCI) for use in children below 5 years of age, as well as for adolescent and adult illness (IMAI), are published by WHO and then adapted for local use in many resource limited countries, with a particular focus on management at the primary healthcare level. However, evaluations of the utility of IMCI guidelines have indicated that there are significant limitations with respect to the assessment of febrile illness in dengue endemic countries, and it has been suggested that in such countries the guidelines should be adapted to reduce the focus on dengue among children <5 years, while also including/developing a section directed towards identifying dengue among older children and adolescents presenting with febrile illness.

The third objective of the meeting relates to a new initiative aimed at developing a standardized system for classification of moderate and severe dengue specifically for use in research studies. As the burden of dengue increases globally, research to measure the impact of potential interventions (vaccines, therapeutic agents or vector control measures) is becoming ever more important, and it has become clear that consensus is lacking among the scientific community on how to define moderate and severe dengue for research purposes. At an initial meeting in Washington in April 2015, co-sponsored by NIAID/NIH, WHO and PDC, an initiative was launched aiming to develop criteria for moderate and severe dengue that are sufficiently detailed to allow comparability between different studies and across different research groups, but are also integrated with the classification systems used for clinical management and public health related surveillance.

Meeting Objectives

1. To discuss the progress of the clinical observational study in IDAMS and review the implications for diagnosis, classification and clinical management of dengue:
2. To discuss the need for adaptation of the IMCI algorithm for dengue
 - a. Extension of the age range for IMCI and/or integration with IMAI
 - b. Harmonization of guidelines
3. To discuss efforts towards developing operational definitions of moderate/severe dengue for therapeutic intervention trials & clinical research

AGENDA

Day 1 – September 21st (Participants arrive the day before)

Time	Topic	Presenter
08.00 – 08.30	Transport from hotels to OUCRU / HTD site	
08.30 – 08.45	Welcome and introduction of participants	Bridget Wills
08.45 – 09.00	Opening Address by Professor Tran Dac Phu - Director of the Centre for Preventive Medicine, Hanoi, Vietnam	
09.15 – 09.45	Scientific key note: “Adult Dengue in Southeast Asia”	Prof Yee-Sin Leo, Singapore
09.45 – 10.00	Overview of dengue epidemiology in China	Dr Yu Li, China CDC
10.00 – 10.15	Overview of dengue epidemiology in Taiwan	Prof CC King, Taiwan
10.15 – 10.45	Coffee break	
UPDATE ON THE IDAMS STUDY		
10.45 – 11.15	Update on the current state of the IDAMS study (recruitment, monitoring, data management, timelines)	Thomas Jaenisch
11.15 – 13.00	Update on the current state IDAMS study (perspectives from the various recruiting sites) - Bangladesh - Cambodia - Indonesia - Malaysia - Vietnam	Malabika Sarkar Chuop Bhopal Ida Safitri Lucy Lum Dong Thi Hoai Tam
13.00 – 14.00	Lunch break	
14.00 – 15.30	Group work (4 groups) - Dengue versus other febrile illness in the early febrile phase - Role of current warning signs for decision to hospitalize - Hospitalization and IV fluids as a proxy of disease severity - Adult dengue – how different from paediatric?	
15.30 – 16.00	Coffee break	
16.00 – 18.00	Presentation of group work, discussion (plenary)	
19.30	Group Dinner (Hoa Tuc Restaurant)	

Day 2 – September 22nd

Time	Topic	Presenter
ADAPTATION OF IMCI GUIDELINES		
08.30 – 09.00	Dengue Guidelines in the Context of IMCI	Martin Weber
09.00 – 09.30	Development and Validation of IMCI Guidelines for Dengue	Jackie Deen
09.30 – 10.00	Current state – different IMCI and clinical guidelines in Asia	Thomas Jaenisch / Nay Wyine
10.00 – 10.30	Coffee break	
10.30 – 12.00	Perspectives on IMCI / IMAI from leading clinicians, local MOH / WHO representatives in Asia	Pheaktra Ngoun, Cambodia Doan Thi Ngoc Diep, Vietnam - NN 3
12.00 – 13.30	Lunch break	
DEVELOPMENT OF MODERATE / SEVERE DENGUE DEFINITIONS		
13.30 – 13.45	Efforts towards developing operational definitions of moderate/severe dengue for dengue intervention trials & clinical research	General Introduction Kay Tomashek
13.45 – 14.30	Proposed definitions for moderate/severe plasma leakage	Bridget Wills (20 mins) Group Discussion (25 mins)
14.30 – 15.15	Proposed definitions for moderate/severe bleeding	Lucy Lum (20 mins) Group Discussion (25 mins)
15.15 – 15.45	Coffee break	
15.45 – 16.15	Proposed definitions for moderate/severe CNS and liver involvement	Kay Tomashek (20 mins) Group Discussion (25 mins)
16.15 – 16.45	Plans for validating moderate/severe disease definitions for dengue intervention trials	Thomas Jaenisch (20 mins) Group Discussion (25 mins)
16.45 – 17.30	Plenary discussion: intermediate/severe disease definitions....	
19.30	Group Dinner (Cuc Gach Quan)	

Day 3 – September 23rd

Time	Topic	Rapporteur
08.30 – 09.45	Wrap up and closing discussion – IMCI	Jacqueline Deen
09.45 – 11.00	Wrap up and closing discussion – intermediate/severe disease definitions	Sophie Yacoub
11.00 – 11.30	Coffee break	
11.30 – 12.30	Future opportunities for regional collaboration?	Bridget Wills
12.30 – 13.00	Closure of the meeting	
13.00 – 14.00	Lunch	
14.00	Return to hotels and departure of participants	

List of participants
Expert meeting on dengue clinical management and IMCI

A) Countries in Asia (Clinicians, researchers, MOH representatives)

Bangladesh

1. Dr Firoz Ahmed

Associate Scientist & Head
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Clinical Laboratory Services, icddr,b
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2. Prof Malabika Sarker

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3. Imran Ahmed

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4. MD. Mahmubul Alam

Senior Research Officer
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Clinical Laboratory Services, icddr,b
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5. Prof. Ridwanur Rahman

Professor at Shaheed Suhrawardy Medical College and Hospital
Sher-E-Bangla Nagar, Dhaka – 1207, Bangladesh

Cambodia

6. Dr. Pheaktra Ngoun

Medical Executive Director Angkor Hospital for Children
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Kingdom of Cambodia

7. Dr Chuop Bophal

Research Clinician
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China

8. Dr Yu Li

Research Assistant, Division for Infectious Diseases
Chinese Center for Disease Control and Prevention (China CDC)

Indonesia

9. Dr. Ida Safitri Laksono

Tropical and Infectious Disease Sub Division
Paediatric Department
Dr. Sardjito Hospital/Faculty of Medicine,
Gadjah Mada University
Yogyakarta 55281, Indonesia

10. Dr. Yodi Mahendradhata

GMU Centre for Tropical Medicine
Gedung PAU-UGM
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Yogyakarta 55281, Indonesia

Japan

11. Dr Norio Ohmagari,

Director, Disease Control and Prevention Centre
National Centre for Global Health and Medicine
Tokyo, Japan

Laos

12. Professor Douangdao SOUK ALOUN, MD, PhD.

Deputy Director of Mahosot Hospital
Acting President of Council of Medical Sciences
P.O. Box: 1720, Vientiane Capital, Lao PDR

13. Dr Bandith Soumphonphakdy

Paediatric Intensive care Unit, Mahosot Hospital,
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Malaysia

14. Professor Lucy Lum

Department of Paediatrics, Faculty of Medicine
University of Malaya
Kuala Lumpur, Malaysia

15. Dr Suresh Kumar Chidambaram

Infectious Disease Consultant
HOSPITAL SUNGAI BULOH, MoH Malaysia
Kuala Lumpur, Malaysia

Myanmar

16. Dr. Nay Yee Wyine

Project Coordinator, Myanmar Neglected Tropical Diseases Research Collaboration
University of Public Health
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The Philippines

17. Dr Nimfa M. Putong

Department Head, Public Health Office
237 Rizal Avenue St. Bo. Balite, Montalban, Rizal.

Singapore

18. Professor Yee Sin Leo

Head of the Institute of Infectious Diseases and Epidemiology
Tan Tock Seng Hospital
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Singapore 308433

19. Prof. Annelies Wilder-Smith

Professor of Infectious Diseases
Director, Global Health and Vaccinology Programme
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Sri Lanka

20. Dr Hasitha Tisera

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Sri Lanka

Taiwan

21. Prof. King, Chwan-Chuen

Institute of Epidemiology & Preventive Med
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Thailand

22. Dr. Piyarat Suntarattiwong

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23. Ms. Rasana Waleerattanapa

Chief Nurse, Dengue Unit, WHO Collaborating Centre for
Case Management of Dengue/DHF/DSS, Queen Sirikit
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Vietnam

24. Assoc. Prof. Dr. Tran Dac Phu □

Director General, Department of Preventive Medicine
Ministry of Health, Vietnam
135 Nui Truc, Giang Vo, Ba Dinh, Ha Noi, Viet Nam □

25. Dr Ha Manh Tuan,

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26. Dr Nguyen Thanh Hung

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27. Prof. Dr Phan Trong Lan

Director, Pasteur Institute/Ho Chi Minh City Ministry Of Health
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Ho Chi Minh City, Viet Nam

B) WHO representatives

28. Dr. Martin Weber

Programme Manager, Child and Adolescent Health
WHO Regional Office for Europe
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C) Representatives from countries in Europe

Germany

29. Dr. Thomas Jäenisch

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31. Marius Wirths MA

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- 32. Dr. Silvia Runge-Ranzinger**
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D) External

- 33. Dr. Jacqueline Deen**
Independent Consultant
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Thailand

- 34. Dr. Kay Tomashek**
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E) Local Organizers / Representatives

- 35. Prof. Bridget Wills**
36. Prof. Cameron Simmons
37. Prof. Dong Thi Hoai Tam
38. Dr Nguyen Tran Nam
39. Dr Doan Thi Ngoc Diep
40. Dr Marcel Wolbers
41. Dr Phung Khanh Lam
42. Dr Nguyen Minh Tuan
43. Dr Hoang Quoc Cuong
44. Dr Sophie Yacoub
45. Dr Dinh The Trung
46. Ms Nguyen Tan Thanh Kieu
47. Dr. Nguyen Thanh Ha Quyen
48. Dr. Elisabeth Giger
49. Ms Trang Vo Hong Yeng