



PROF. KARUTHAN CHINNA
WORKSHOP SPEAKER

Professor Karuthan Chinna is a highly experienced biostatistician, researcher, educator and statistical consultant with around four decades of experience in teaching statistics, research methodology and data analysis. He has served in academic institutions including the University of Malaya, Taylor's University and UCSI University, and is currently with IMU University, Kuala Lumpur.

He has authored and co-authored numerous national and international peer-reviewed publications, presented extensively at national and international conferences, published books on Biostatistics and SPSS, and provided statistical consultation for research projects involving the Ministry of Health Malaysia and other institutions.

His areas of expertise include, but are not limited to, questionnaire development and validation, psychometrics, biostatistics, research methodology, multivariate data analysis, structural equation modelling, factor analysis, meta-analysis, statistical modelling, questionnaire translation, reliability and validity assessment, data interpretation, SPSS-based statistical analysis, and quality control.

His publication record includes work on questionnaire translation, psychometric assessment and validation, making his experience especially relevant to this workshop.

RESEARCH QUESTIONNAIRE DEVELOPMENT AND VALIDATION WORKSHOP

29-30 OCTOBER 2026

(Thursday - Friday)

8 a m - 5 p m

**Bilik Latihan Komputer,
Cawangan Teknologi Maklumat,
Level 6, Hospital Tunku Azizah**



**LIMITED SLOT AVAILABLE,
FIRST COME FIRST SERVED**



Organized by :



**CLINICAL RESEARCH
CENTRE (CRC)
HOSPITAL TUNKU AZIZAH
KUALA LUMPUR**

In Collaboration with :



**MALAYSIAN
THORACIC
SOCIETY**

TENTATIVE PROGRAM

Day 1 : 29 October 2026

0800-0900	Registration and breakfast, Pre-workshop Assessment
0900-1030	Questionnaire design: Concepts, Conceptualization, Operationalization
1030-1045	Morning break
1045-1200	Types of validity
1200-1300	Validaiton guidelines
1300-1400	Lunch
1400-1500	Content and Face Validity
1500-1545	Pilot study and Internal consistency
1545-1600	Evening break
1600-1700	Test-retest reliability analysis

Day 2 : 30 October 2026

0800-0900	Registration and breakfast
0900-0930	Exploratory Factor Analysis (EFA): Purpose and applications, Assessing data suitability, Extraction methods
0930-1100	Exploratory Factor Analysis (2): Latent factors, Factor Loadings and cross-loadings, Construct Validity and Reliability
1100-1115	Morning break
1115-1215	Confirmatory Factor Analysis (CFA): Purpose and applications, CFA versus EFA, Introduction to AMOS software
1215-1300	Confirmatory Factor Analysis (3): Measurement model, Estimation methods, Evaluating model fit
1300-1400	Lunch
1400-1500	Confirmatory Factor Analysis (3): Assessing reliability and validity, Composite reliability (CR), Convergent validity, Discriminant validity
1500-1600	Testing measurement invariance: Configural, metric, and scalar invariance, Comparing groups or time points, Partial invariance when appropriate
1600-1615	Evening break
1615-1700	Reporting CFA results

REGISTRATION FORM

RESEARCH QUESTIONNAIRE DEVELOPMENT AND VALIDATION WORKSHOP

Registration	Fee	8% SST	Total Fee	/
MTS Member or MOH staff	RM 200.00	RM 16.00	RM 216.00	
Others	RM 250.00	RM 20.00	RM 270.00	

On-site registration WILL NOT be accepted. Places are limited. Registration will close once all places are taken.

All payments by cheques should be issued in favour of "**Malaysian Thoracic Society**"
Payments can be made via telegraphic transfer to the following account:

Account Name : Malaysian Thoracic Society
Account Number : 873-1-0420229-5
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(Please return the remittance advice note along with this form either by fax or email. Document image by email is also acceptable)

Each registration per participants

All Information is required

Name :	_____	Dr / Ms / Mr
Phone Number :	_____	Personal Email : _____
IC No. :	_____	Designation: _____
Department/Klinik Kesihatan :	_____	
Hospital/Pusat Kesihatan Daerah :	_____	
MTS Member ? :	Yes / No	Dietary Preference : Non-Vegetarian / Vegetarian
Payment Amount :	_____	Date of Payment : _____
Payment Reference Number :	_____	
Please include attachments as below :		
1. Proof of Payment		

Any enquiries please contact :

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Hospital Tunku Azizah
Email : researchwchkl@moh.gov.my
Tel : 03-2600-3000 (ext 2120)