Clinical Research Workshop Series:
Certificate-I in Clinical Research
Activity Number: AGI-03-P178

Every Wednesday beginning 4th September to 27th November 2024,
15:30 - 19:00
Venue: College of Medicine Building H12, Room 126, Qatar University

Target Audience: Health Researchers and Resident Doctors

Overall aim:

Undertaking this clinical research workshop series will provide in-depth understanding of several key areas in clinical research. These areas include statistical inference, multivariable modeling, clinical trials and economic evaluation. This CPD series aims to develop competencies of clinical researchers looking to expand their research expertise.

Overall learning objective(s):

By the end of the CPD workshop series, participants will be able to apply the knowledge and skills they have attained to conduct high-quality clinical research and use findings from the literature to inform evidence-based clinical decisions.

Certification:

Participants attending each workshop will be eligible to receive up to THREE Category 1 CPD points. Participants who complete 10 out of 12 CPD workshop series will be eligible to receive a **Certificate-I in Clinical Research** from the College of Medicine, Qatar University. To be eligible for the **Certificate-I in Clinical Research,** participants will also be required to successfully complete an online assessment after each CPD workshop. These assessments will remain open until the completion of the series and can be taken multiple times if needed.

Course Fees:

Registration for each CPD workshop incurs a fee of QAR 100, payable on the QU Health CPD Website. Participants opting to register for the Certificate-I in Clinical Research will incur a single fee of QAR 1000, payable before the date of the first workshop.

Certificate-I in Clinical Research participants will be provided with access to Blackboard where all the course materials and resources will be hosted, and will be updated through the duration of the workshop series.

<u>Speakers:</u>

This workshop is hosted by the Department of Population Medicine at the College of Medicine, QU Health, Qatar University by clinicians and clinical researchers who are also clinical epidemiologists.

- Dr. Suhail Doi. MBBS, MClinEpid, FRCP(Edin), PhD, Professor, Department of Population Medicine, College of Medicine, Qatar University
- Dr. Giridhara Rathnaiah Babu, MD, PhD Professor, Department of Population Medicine, College of Medicine, Qatar University
- Dr. Salma M. Khaled, PhD Associate Professor, Department of Population Medicine, College of Medicine, Qatar University
- Dr. Habib Hasan Farooqui MBBS, MD, Lecturer, Department of Population Medicine, College of Medicine, Qatar University
- Dr. Tawanda Chivese, PhD, Associate Lecturer, Department of Population Medicine, College of Medicine, Qatar University
- Dr. Muhammad Naseem Khan. MBBS, MSPH, PhD, Associate Professor, Department of Population Medicine, College of Medicine, Qatar University

* The scientific planning committee has reviewed all disclosed financial relationships of speakers, moderators, facilitators and/or authors in advance of this CPD activity and has implemented procedures to manage any potential or real conflicts of interest.

* "This activity is an Accredited group learning activity (Category 1) as defined by Ministry of Public Health's Department of Healthcare Professions - Accreditation Section and is approved for a maximum number of 3 Hours."

* "CPD-HP (QU—Health) is accredited by Ministry of Public Health's Department of Healthcare Professions - Accreditation Section (DHP – AS) as a provider of continuing professional development."

برنامج التطوير المهني المستمر للعاملين في القطاع الصحي
Continuing Professional Development of Health Professionals

جامعة قطر
QATAR UNIVERSITY

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وزارة الصحـــة العامـــة
Ministry of Public Health
دولـــة قطـــر
State of Qatar

Activity schedule:

Time & Speaker(s)	Learning objectives
Workshop 1: Introduction to Stata for clinical research. 4th September, 2024	
15: 30 – 17: 00 Dr. Naseem Khan	Apply tools in Stata to undertake basic descriptive analyses of clinical research data.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Tawanda Chivese	Apply tools in Stata to undertake basic inferential analyses of clinical research data.
Workshop 2: Diagnostic tests. 11th September, 2024	
15: 30 – 17: 00 Dr. M. Naseem Khan	Apply sensitivity, specificity, and predictive values used in diagnostic accuracy studies.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. M. Naseem Khan	Apply likelihood ratios, and ROC methodology used in diagnostic accuracy studies.
Workshop 3: Directed Acyclic Graphs for variable selection in multivariable analysis. 18th September, 2024	
15: 30 – 17: 00 Dr. Suhail Doi	Describe sources of bias in clinical research studies.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Tawanda Chivese	Apply and interpret DAGs to evaluate confounding and other sources of bias in clinical research studies.
Workshop 4: Multivariable Modelling (Linear Regression). 25th September 2024	
15: 30 – 17: 00 Dr. Salma M. Khaled	Describe the process and assumptions of multiple linear regression in clinical research including the selection of appropriate predictor variables and the evaluation of model fit.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Salma M. Khaled	Apply and interpret multiple linear regression in clinical research.
Workshop 5: Multivariable Modelling (Logistic Regression). 2nd October 2024	
15: 30 – 17: 00 Dr. Tawanda Chivese	Describe the process and assumptions of multiple logistic regression in clinical research including the selection of appropriate predictor variables and the evaluation of model fit.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Tawanda Chivese	Apply and interpret multiple logistic regression in clinical research.
Workshop 6: Multivariable Modelling (Survival Analysis). 9th October 2024	
15: 30 – 17: 00 Dr. Salma M. Khaled	Describe the process and assumptions of Cox proportional hazards regression (survival analysis) in clinical research including the selection of appropriate predictor variables and the evaluation of model fit.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Salma M. Khaled	Apply and interpret Cox proportional hazards regression (survival analysis) in clinical research.

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Workshop 7: Design and conduct of Clinical Trials. 16th October 2024

15: 30 – 17: 00 Dr. Giridhara Babu	Distinguish clinical trials from observational clinical studies.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Giridhara Babu	Describe the design and implementation of clinical trials.

Workshop 8: Management of Clinical Trials. 23rd October 2024

15: 30 – 17: 00 Dr. Giridhara Babu	Relate administrative aspects of clinical trial management to the conduct of a clinical trial.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Giridhara Babu	Describe the role of a clinical trials unit in the management of clinical research studies.

Workshop 9: Analysis of a clinical trial. 6th November 2024

15: 30 – 17: 00 Dr. Suhail Doi	Describe and apply the analytical aspects of clinical trials, distinguish this from observational clinical studies.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Suhail Doi	Discuss heterogeneity of treatment effects in the context of analysis of a clinical trial.

Workshop 10: Introduction to Economic Evaluation. 13th November 2024

15: 30 – 17: 00 Dr. Habib Hasan Farooqui	Demonstrate an understanding of the principles of the measures used in economic evaluations.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Habib Hasan Farooqui	Describe major types of economic evaluations and their utility in decision making

Workshop 11: Methods of Economic Evaluation. 20th November 2024

15: 30 – 17: 00 Dr. Habib Hasan Farooqui	Apply the methods of health economics to undertake a cost-effectiveness analysis.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Habib Hasan Farooqui	Discuss and describe different modelling approaches that could be used to improve the external validity of cost-effectiveness analysis.

Workshop 12: Critical appraisal of the Economic Evaluation. 27th November 2024

15: 30 – 17: 00 Dr. Habib Hasan Farooqui	Demonstrate an understanding of factors associated with internal and external validity of the results of economic evaluations.
17:00 – 17: 30	Coffee break
17:30 – 19: 00 Dr. Habib Hasan Farooqui	Select and apply an appropriate tool for appraisal of economic evaluation and decision modeling studies.