We attended the 10th National Conference for Clinical Research 2016 (NCCR). The objectives of this conference were to (1) discover the usage of ‘Big Data’ – its impact and challenges in research and healthcare, (2) examine its potential and discover the profound benefits to patient and population, (3) consider the enhancement to clinical outcomes and healthcare and (4) present health economics and use of Big Data. Twenty speakers from Malaysia, USA, United Kingdom, Singapore, Australia, Korea and Taiwan were invited to communicate their passion and struggles to inspire the new generation. This year, more than 500 participants from all over the world attended this conference.

This conference was held on 27th and 28th July 2016 at Hotel Istana, Kuala Lumpur. Apart of the lectures, the highlight of the conference was the research award competition consisting of Oral and poster presentation. Two of our CRC staff, Yang Su Lan (pharmacist) and Lilyiana Pengui (CRC Admin Manager) were selected to participate in the poster presentation.

(Further details on big Data will be discuss in next page: continuing medical learning section).

Su Lan (pharmacist) and Lilyiana Pengui (CRC Admin Manager) were selected to participate in the poster presentation.
Continuing medical education (Tuesday CME Corner)

Study Design

Definition: A study design is a specific plan or protocol for conducting study which allows the investigator to translate the conceptual hypothesis into a operational.

Type of study design:

Big data driving clinical research: National Conference of Clinical Research 2016

21st century is an information era. We are surrounded by data and information. In the healthcare industry, with the constant influx of information, healthcare professionals are constantly inundated by heaps data, also known as big data. All this data collected but unable to be fully utilized, to provide meaningful value to guide clinician or decision-makers or policymaker. Other than policymaking and guidance to clinician decision, big data can also help the researchers to speed up the process of their research. Thus, the theme for this year’s Malaysia National conference for Clinical Research (NCCR), “Big Data Driving Clinical Research for health”.

What is Big data?

Big data is a term that describe the large volume of data both structured, semi-structured and unstructured. It often means ‘dirty data’ and the fraction of data inaccuracies increases with data volume growth.” It can be characterized by 3Vs (Volume, Variety, Velocity)- the extreme volume of data, must be processed to become meaningful information.

Ministry of Health, Malaysia plan on big data

Ministry of Health Malaysia collaborates with health informatics center to create a system for Malaysia Health Data Warehouse (MyHDU). The intention is to collect all data at every visits in all healthcare facilities and for future linkages. All healthcare facilities include all facilities belonging to Ministry of Health, Ministry of Education, Ministry of Defense and Private Hospital. The coverage of visits data will include wellness and screening. Within the clinical coverage there will be registries, drugs, medication, procedure and clinical support activities like physiotherapy.

Computer science and “Big data” will be the transformation of healthcare system. In Malaysia, we need more talents to support and invest in this area, to make “dirty data” meaningful for policymaker and clinician in order to facilitate decision making.

Reference:

NCCR 2016 Big data Driving clinical research for health NCCR speakers’ Abstract (page 26) http://arvensystech.com/img/prd3.jpg

Written by,
Dr. Yen CH, Sulan
HQE II CRC

How can big data change science? Here’s how medical research traditionally works:

1. Come up with a question or hypothesis.
2. Design an experiment to test it. Wait for new data to come in.
3. Form your conclusion.

Big data changes step
Online, searchable databases provide instant answers, speeding up research.

How can big data change science?
In conjunction with the launching of EQ-5D validation project, the EQMYS committee organized the first national EQ-5D symposium in Penang. The objective of the symposium was to introduce and sensitize Malaysian healthcare professionals on the use of EQ5D questionnaire. EQ-5D is a standardised instrument to measure quality of life as health outcome. Unlike the disease-specific scoring instrument, EQ5D result is comparable across multiple diseases and able to facilitate the decision making. EQ5D is particularly useful in cost-utility analysis (CUA) and recently NICE has enforced the submission of CUA data prior to approval of new drug subsidy.

EQ5D has been validated in more than 100 languages in various countries and questionnaire is available freely for academic use. This questionnaire is user-friendly, hassle-free and time-saving. There is also an EQ5D-youth version where the questionnaire is aimed for paediatric subjects. Besides introducing the development and application EQ5D, this symposium also had a panel discussion on the challenges of bringing cost-utility analysis into healthcare decision-making in Malaysia.

This workshop was a collaboration of National CRC and Clindata. This workshop covers extensively on the following topics:

- Study design
- Randomization design and process
- Sample size determination
- Case report form design
- Essential elements of protocol (to follow the international standard)

Learning aside, this workshop serves as a networking platform. CRC Staff from different states came (experienced and new) to exchange ideas and experiences with each other. We learnt that each CRC has their own interesting researches and there might be a chance of collaboration in future for a national research.

Written by, Sulan
(HQE II CRC pharmacist)
Research Update

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IIR MONTHLY UPDATE:

FACTORS ASSOCIATED WITH SELF-CARE BEHAVIORS AMONG HEART FAILURE PATIENTS

This is single centre, cross-sectional study designed to assess the factors associated with heart failure self care behaviors among patients in Queen Elizabeth Hospital II and to evaluate the association between self care behaviors and sociodemographic variables, psychosocial variables and heart failure knowledge.

<table>
<thead>
<tr>
<th>Study started</th>
<th>1st February 2016</th>
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<tbody>
<tr>
<td>Recruit target</td>
<td>160</td>
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<tr>
<td>Recruitment until 31st August 2016</td>
<td>99 (61%)</td>
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</tbody>
</table>

COMING ISR

1. Pan Asia burden study
2. Pre DM with CVD

UPCOMING WORKSHOPS

Budget Impact Analysis
22—23th October 2016 (Saturday & Sunday)

Scientific Writing Workshop
5—6th November 2016 (Saturday & Sunday)

Research Camp
19-20th November 2016 (Saturday & Sunday)

Introduction to clinical audit
28-29th November 2016 (Monday & Tuesday)

RESEARCH CONSULTATION CLINIC

This Research Consultation Clinic is aim to assist researchers in:
1. Literature review search
2. NMRR registration
3. Protocol development
4. Protocol review
and many more.

Please do not hesitate to contact us for more information.

Please visit our website e CRC for more details.
Please scan here to register our workshop and booking research consultation clinic

Contact:
Tel: 088—324 600 (ext 2019)
Email: rcc.crchqe2@gmail.com