Clinical Trials Regulations in Lebanon

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Ministry of Public Health
“I, Rasha Hamra” declare to meeting attendees that there are no financial relationships with any for-profit companies that are directly or indirectly related to the subject of my presentation.
New Regulations by Ministry of Health?
Where am I?

You're 30 meters above the ground in a balloon.

You must be a researcher.

Yes. How did you know?

Because what you told me is absolutely correct but completely useless.

You must be a policymaker.

Yes, how did you know?

Because you don’t know where you are, you don’t know where you’re going, and now you’re blaming me.
Clinical Trials

- Defined as research studies conducted by researchers on human subjects who volunteer to test treatments (medicinal products) or interventions (surgical procedure, a medical device, others) as means to prevent, detect, treat or manage various diseases or medical conditions; no costs to participants.

- CT that involve investigational medicinal products are done to:
  - Discover or verify clinical, pharmacological or other pharmacodynamic effects of one or more medicinal products.
  - Identify any adverse reactions to one or more such products.
  - Study absorption, distribution, metabolism and excretion of one or more such products with the object of ascertaining the safety or efficacy of those products.
When was the First Clinical Trial Conducted? & Where?
May 20, 1747 - Scottish physician James Lind conducted the first clinical study of the treatment of scurvy on 12 sailors. Lind discovered that of six therapies, oranges and lemons had the greatest positive effect on the sailors' health.
Reasons for Conducting Clinical Trials

- Designed to add to medical knowledge related to the treatment, diagnosis, and prevention of diseases or conditions
- Evaluating one or more interventions (drugs, medical devices, surgery) for treating a disease, syndrome, or condition
- Finding ways to prevent initial development or recurrence of a disease or condition
- Medicines, vaccines, lifestyle changes, among other approaches
- Evaluating one or more interventions aimed at identifying or diagnosing a particular disease or condition
Who Conduct Clinical Trials?

• Usually led by a Principal Investigator, who is often a medical doctor
• Research Team: doctors, pharmacists, nurses, social-workers and other health care professionals
• Sponsored, or funded by: Pharmaceutical Companies, academic medical centers, voluntary groups, and other organizations, governmental agencies, doctors, other health care providers can also sponsor clinical research
Why Do we Need to Regulate Clinical Trials?
Vaccination

• Vaccination is widely considered one of the greatest medical achievements of modern civilization

• Childhood diseases that were common less than a generation ago are now increasingly rare because of vaccines

Origin of Vaccinations was Discovered

Based on Unethical Clinical Trial
Edward Jenner performed an experiment that eventually led to the development of a vaccination for smallpox and founded the origin for vaccination. He saved countless lives in the process and eradicated one of the worst diseases that humanity faced.

In 1796, Jenner vaccinated James Phipps, an 8-year-old son of his gardener, with material obtained from a cow who had cowpox. A few weeks later, he deliberately infected Phipps with smallpox to see if he would develop the disease.

What could be more unethical than exposing a young boy to one of the most deadly diseases in the world simply to see if an unknown procedure would work?
Unethical Clinical Trials

• 1932–72 Tuskegee experiment on syphilis
• 1939–45 Nazi experiments
• 1944–74 Human radiation experiments by U.S. government
• 1963–66 Willowbrook Study, involving hepatitis research on mentally retarded children

Historical documented Cases of Unethical Research have Contributed to how CT are Regulated today
International Codes of Ethics for Research

- 1947 Nuremberg Code outlining ethical principles required to protect research participants
- 1948 United Nations adoption of Universal Declaration of Human Rights
- 1964 Declaration of Helsinki international agreement on recommendations for the ethical conduct of medical research
- 1979 Belmont Report promoting three principles for research
- 1980 Food and Drug Administration regulations
- 1996 International Conference on Harmonization of Good Clinical Practice Guidance
- Requirements to have Institutional Review Boards (IRBs) for ethical approvals at the clinical setting

Ethics Committees will balance risks to patients against expected benefit and will also review confidentiality, consent issues and vulnerability of the participants.
Why Do we Need to Regulate Clinical Trials?

• Protect the rights, safety and wellbeing of patients/participants participating in clinical trials

• Create an environment that is favorable to conducting CT by standardizing the regulatory process

• Increased transparency of trial information

• Greater benefits to patients without exerting administrative burden on researchers and sponsors
Regulations in Lebanon

• Ministry issued decree no. 569/2 in 1996 that limited conduction of clinical trials to teaching hospitals or hospitals affiliated with a medical schools

• Memo no. 27 followed by Memo no. 72, both in 2012 enforcing registration of Interventional clinical trials in the country

  This step was a pre-requisite for importation of investigational products

• Ministerial Decree no.1159, in 2014 set Requirements for Clinical Trials Approval
Requirements for CT Approvals

• Based on Ethical Principles of Helsinki Declaration 1996, 2013
• Allowing only Phase II & III, VI
• Allowed in teaching hospitals only
• Need IRB approval of teaching hospital
• Need responsibility declaration of Principle Investigator
• Enforcement of use of Informed Consent Forms
• Insurance Contract of study
• Study Protocol
• Investigator Brochure
• Registration of CT at country of Origin
• Declaration if any country refused to conduct the study
Requirements for CT Approvals (cont)

• Certificate of analysis/certificate of release

• Certificate of GMP

• Summery on all previous CTs & reported Side effects

• Summery of pharmacodynamics & pharmacokinetics

• Labeling of Investigational drugs

• Investigational drugs to be given free of charge

• Annual Safety Reports

• Closure of study with final report on results

  • Till date we have more than 250 clinical trial registered
IRB Authorization

• Requirements to have a multidisciplinary committee; at least 7 members; 3 medical doctors, 1 social worker, 1 lawyer, 1 independent member from community, 1 member with academic position

• IRB Objectives & Working Procedures

• IRB Funding Source

• Membership selection criteria & Duration

• List of documents required for submission

• Meeting procedures & Voting System

• Reporting Final Decision

• Archiving Duration
IRB Authorization (cont)

• Review committee to grant authorizations: 3 Medical Deans & High profile experts

• We received **26** files from Hospitals/Centers/Universities

• 23 were reviewed by the committee; others incomplete files

• Only **18** got authorized

• Lists published on Website
Next Steps

• Joint project with WHO-EMRO office to establish the first CT registry in the Arab Countries; second in the region after Iran; launching 2018

• Primary Registry within International CT Registry Platform (ICTRP) ; global initiative established by WHO since 2006;

• Aims to make information about all clinical trials involving human beings publicly available; voluntary platform to enhance access to information by researchers, patients, families, patient groups and others
Results should be published regardless if positive, negative or inconclusive

- Identify gaps in research
- Facilitate the building of research infrastructure and capacity
- Improve trial design, conduct and reporting
- Prevent unnecessary duplication and encourage necessary replication
- Improve health
ICTRP Current Registry Network

- USA
- UK
- Netherlands
- Germany
- Iran
- India
- Sri Lanka
- China
- Republic of Korea
- EU
- Japan
- Brazil
- Peru
- South Africa
- Australia & NZ

Legend:
- African Region
- Region of the Americas
- South-East Asia Region
- European Region
- Eastern Mediterranean Region
- Western Pacific Region
Potential Data Providers for the Future

- Malaysia
- Mexico
- Singapore
- Spain
- Tanzania
- Lebanon
- Kenya
- Indonesia
- Singapore
- Indonesia
- Eastern Mediterranean Region
- South-East Asia Region
- African Region
- Region of the Americas
- Western Pacific Region
Statistics CT – Lebanon (cont)

- 33% are currently recruiting patients
- 80% interventional studies
- 70% sponsored by pharma
- 50% are Phase 3
- 50% are children related trials

http://www.who.int/trialsearch
Top Health Conditions - Lebanon

- Cancer: 18%
- Diabetes: 10%
- Multiple Sclerosis: 4%
- Sickle cell disease: 3%
- Hypertension: 3%
- Heart failure: 2%
- Other: 60%

http://www.who.int/trialsearch
Other Reasons for Regulations of Clinical Trials

• Shifting Research to Developing Countries;

• United States accounts for ~ 4 % of the world’s population vs. 84% for Developing Countries

• Average cost of CT across all therapeutic areas in USA 30-40 Million $ for (phase I to III) and roughly equivalent amount for post marketing studies

• Rare Diseases: Thalassemia, Hemophilia, Sickle Cell Anemia, …
Clinical Environment – from Test Tube to Patient

- The hospitals in Lebanon possess strong capabilities to carry out CT of different phases; and is cited very important in terms of their commitment to encouraging & participating in cutting-edge research

- Cost of conducting CT in Lebanon is relatively cheaper compared to developed countries

- As a big positive, organizations participating in clinical trials are compliant to global clinical standards & procedures

Need for Regulations is a Must
Role of Pharmacists in Research

- Pharmacists have a vital role in relation to clinical research, which is to safeguard participants, healthcare professionals by ensuring Investigational Medicinal Products are appropriate for use and are procured, handled, stored and used safely and correctly.
Role of Pharmacists in Research

- To ensure that IMP are managed and dispensed to patients in accordance with the protocol
- To ensure that all pharmacy clinical trial procedures comply with relevant guidelines and regulations
Research will make Eight-Star Pharmacists

A World Health Organization Concept

- Caregiver
- Decision-Maker
- Communicator
- Manager
- Researcher
- Life-Long Learner
- Teacher
- Leader
Concentration Quiz

- What was the Researcher doing in the First Story?
- What were the Fruit/Vegetables mentioned in Second Story?
- What was the Animal mentioned in the Third Story?
- Why do we need Regulations for Clinical Trials?
THANK YOU