

# **SUMBANGAN PENELITIAN KEDOKTERAN ISLAM**

- "Tidak ada penyakit yang Allah telah menciptakan, kecuali bahwa Dia juga telah menciptakan pengobatannya."
- "Manfaatkan perawatan medis, karena Allah tidak membuat penyakit tanpa menunjuk obat untuk itu, dengan pengecualian satu penyakit, namanya usia tua."
- "Allah telah menurunkan baik penyakit dan obatnya, dan Dia telah menunjuk obat untuk setiap penyakit, maka anggaplah dirimu medis."
- "Yang diturunkan penyakit diturunkan obatnya."
- "Untuk setiap penyakit, Allah telah memberikan obat."

- Kepercayaan bahwa ada obat untuk setiap penyakit mendorong Muslim awal untuk terlibat dalam penelitian medis dan mencari obat untuk penyakit yang mereka kenal. Banyak penulis awal yang mengembangkan kedokteran Islam adalah ulama dan bukan dokter, dan mereka menganjurkan praktek-praktek tradisional medis yang diterapkan pada zaman Rosulullah Muhammad, seperti yang disebutkan dalam Al-Qur'an dan Hadis.

- Tiga metode penyembuhan yang disebutkan di dalam hadist adalah madu , Hijama ( cupping basah ), dan kauterisasi (kay) menggunakan logam panas untuk penyembuhan penyakit), meskipun ia pada umumnya menentang penggunaan kauterisasi kecuali "sesuai dengan penyakitnya".

- Dari abad ke-9, Hunayn ibn Ishaq diterjemahkan sejumlah karya-karya Galen ke dalam bahasa Arab, diikuti dengan terjemahan Samhita Sushruta , Charaka Samhita , dan Persia Tengah karya dari Gundishapur. dokter muslim segera mulai membuat banyak kemajuan yang signifikan sendiri dan kontribusinya obat-obatan, termasuk bidang allergology , anatomi ,bakteriologi , botani , kedokteran gigi , embriologi , environmentalisme , etiology , imunologi , mikrobiologi , kebidanan , optalmologi , patologi , pediatri , perinatologi , fisiologi , psikiatri ,psikologi , pulsiology dan sphygmology , operasi , terapi , urology , zoology , dan ilmu farmasi seperti farmasi dan farmakologi

- Obat awalnya Islam dibangun di atas tradisi, terutama pada pengetahuan teoretis dan praktis dikembangkan di Saudi, Persia, Yunani, Roma, dan India.
- Galen dan Hippocrates adalah karya yang banyak disadur, serta dokter India Sushruta dan Charaka, dan Helenistik sarjana di Alexandria.
- Ulama Islam menerjemahkan tulisan-tulisan produktif mereka dari Yunani dan bahasa Sansekerta ke dalam bahasa Arab dan kemudian menghasilkan pengetahuan medis baru berdasarkan teks-teks

# CIRI PEGOBATAN ISLAM

- **Scientific method**

This included the introduction of mathematization, quantification, experimentation, experimental medicine, evidence-based medicine, clinical trials, dissection, animal testing, human experimentation and postmortem autopsy by Muslim physicians, whilst hospitals in the Islamic world featured the first drug tests, drug purity regulations, and competency tests for doctors

- Mathematization

In the 9th century, al-Kindi (Alkindus), in De Gradibus, demonstrated the application of mathematics and quantification to medicine, particularly in the field of pharmacology. This includes the development of a mathematical scale to quantify the strength of drugs, and a system that would allow a doctor to determine in advance the most critical days of a patient's illness, based on the phases of the moon

## – Experimental method

- Razi (Rhazes) introduced controlled experiment and clinical observation
- Avicenna (Ibn Sina) introduced *The Canon of Medicine* (c. 1025), which was also the first book dealing with evidence-based medicine, randomized controlled trials, and efficacy tests
- According to Toby Huff and A. C. Crombie, the *Canon* contained "a set of rules that laid down the conditions for the experimental use and testing of drugs" which were "a precise guide for practical experimentation" in the process of "discovering and proving the effectiveness of medical substances."<sup>[37]</sup> Avicenna's emphasis on tested medicines laid the foundations for an experimental approach to pharmacology.<sup>[40]</sup> The *Canon* laid out the following rules and principles for testing the effectiveness of new drugs and medications, which still form the basis of clinical pharmacology and modern clinical trial

- Experimental method

In the 10th century, Razi (Rhazes) introduced [controlled experiment](#) and clinical [observation](#) into the field of medicine, and rejected several Galenic medical theories unverified by experimentation. He also introduced [urinalysis](#) and [stool tests](#) (test tinja).

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- "The drug must be free from any extraneous accidental quality."
- "It must be used on a simple, not a composite, disease."
- "The drug must be tested with two contrary types of diseases, because sometimes a drug cures one disease by its essential qualities and another by its accidental ones."
- "The quality of the drug must correspond to the strength of the disease. For example, there are some drugs whose heat is less than the coldness of certain diseases, so that they would have no effect on them."
- "The time of action must be observed, so that essence and accident are not confused."
- "The effect of the drug must be seen to occur constantly or in many cases, for if this did not happen, it was an accidental effect."
- "The experimentation must be done with the human body, for testing a drug on a lion or a horse might not prove anything about its effect on man

- Pembedahan dan Otopsi

One of the earliest physicians known to have performed human dissection and postmortem autopsy in his medical experiments was Ibn Zuhr (Avenzoar), who introduced the experimental method into surgery, for which he is considered the father of experimental surgery.

There were a number of other early practitioners of human dissection and autopsy at the time, including Ibn Tufail, Saladin's physicians al-Shayzari and Ibn Jumay, Abd-el-latif, and Ibn al-Nafis

- Peer review

The first documented description of a [peer review](#) process is found in the *Ethics of the Physician* written by **Ishaq bin Ali al-Rahwi** (854–931) of al-Raha, [Syria](#), who describes the first medical peer review process.

His work, as well as later Arabic medical manuals, state that a visiting physician must always make duplicate notes of a patient's condition on every visit. When the patient was cured or had died, the notes of the physician were examined by a local medical council of other physicians, who would [review](#) the practicing physician's notes to decide whether his/her performance have met the required standards of medical care. If their reviews were negative, the practicing physician could face a [lawsuit](#) from a maltreated patient

# Penerapan pada kedokteran modern

- Experimental method
- Evidence based medicine
- RCT
- Clinical trial
- Reviewed journal