



Opinion

Copyright © All rights are reserved by Mister Seun Ayoade

Farcial Futile Pharmacy Fiasco -Let Pharmacy Return to Its Apothecary Roots

Mister Seun Ayoade*

Independent Researcher, Alumnus, College of Medicine University of Ibadan, Oyo State, Nigeria

*Corresponding author: Mister Seun Ayoade, Independent Researcher, Alumnus, College of Medicine University of Ibadan, Oyo State, Nigeria.

Received Date: March 03, 2020

Published Date: April 05, 2021

Opinion

Below are some of the most important drugs ever invented in the last 100 plus years and the discipline/profession/occupation of the inventors and discoverers (Table 1).

Table 1.

Drug	Inventor	Discipline
Insulin	Sir Frederick Grant Banting	Orthopaedic surgery
Levothyroxine	Charles Harington	Chemical Pathology
Penicillin	Alexander Fleming	Medicine, Microbiology
Prontosil	Gerhard Domagk	Medicine
Cortisone	Edward Calvin Kendall Philip Showalter Hench	Chemistry
Lidocaine	Nils Lofgren	Chemistry
Lysergic acid diethylamide (LSD)	Albert Hofmann	Chemistry
Chlordiazepoxide	Leo Sternbach	Chemistry
Furosemide	Calvin L. Stevens	Chemistry
Ketamine	Calvin L. Stevens	Chemistry
Phenylhydrazine	Emil Fischer	Chemistry
Paracetamol	Harmon Northrop Morse	Chemistry
Phenazone	Ludwig Knorr	Chemistry
Benzocaine	August Bischler	Chemistry
Quinazoline	August Bischler	Chemistry
Amphetamine	Lazăr Edeleanu	Chemistry
Adrenaline	Takamine Jōkichi	Chemistry
Arsphenamine	Alfred Bertheim	Chemistry

Vitamin C	Tadeusz Reichstein	Chemistry
Oxytocin	Henry Hallett Dale	Medicine
Phenytoin	Heinrich Biltz	Chemistry, Natural Science
Phenobarbital	Joseph von Mering	Medicine
	Franz Joseph Emil Fischer	Chemistry
Thyroxine	Edward Calvin Kendall	Chemistry
Ergotamine	Arthur Stoll	Chemistry
Viagra	Ian Osterloh	Medicine and Surgery
	Robert Francis	Biochemistry
	Furchgott Peter Dunn	Chemistry
	Nicholas Terrett	Chemistry

There is not one pharmacist on the list! Some may say what of Sir David Jack [1924-2011] who discovered Beclometasone? He took a combined honours degree in BOTH chemistry AND pharmacy so was not a stand-alone pharmacist. The same thing applies to Nagai Nagayoshi [1844-1929] discoverer of ephedrine, who studied medicine, pharmacy and organic chemistry. Even John Stith Pemberton (1831 to 1888) creator of Coca Cola who many pharmacists claim as "the most famous pharmacist" was actually a medical doctor! Right up to the start of the industrial revolution apothecaries were at the forefront of the discovery and invention of drugs. In those days medicine, surgery, and pharmacy [apothecary] were three distinct professions. A sick person would visit the doctor (or the doctor would visit the sick person) for a diagnosis. The doctor could recommend a surgery (which the surgeon would be called upon to perform) or prescribe a medication. The patient would head for the apothecary [pharmacy] where the apothecary who also manufactured the medication would sell it to the

patient. Medicine and surgery have since been combined into one profession. Pharmacy remains alone and is the worse for it! The same professional (medical doctor) today diagnoses, prescribes, and cuts. The pharmacist still sells the medicine but does not manufacture it any longer. How sad!

Perhaps it is because the pharmacy profession lost its highest meaning (drug manufacture) in its disjointed transition from apothecary that the profession now desperately seeks to ape medical doctors and has become so inward looking and hostile to other professions that it will not permit even a medical doctor or a holder of a first-class degree from a related discipline (e.g., pharmacology) to pursue a master's degree in pharmacy! Let pharmacy return to the apothecary model or be downgraded to a diploma occupation! [1-2] India has set an excellent example in this regard [3].

Acknowledgement

None.

Conflicts of Interest

No conflicts of interest.

References

1. Mister Seun Ayoade (2020) The Ongoing Erosion of Division of Labour Spells Doom for Healthcare Delivery. *LOJ Phar & Cli Res* 2(2).
2. Mister Seun Ayoade (2020) Wanted: A 21st Century Flexner. *LOJ Phar & Cli Res* 2(3).
3. Am J Pharm Educ (2010) Pharmacy Education in India Subal C Basak 74(4): 68.