FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

Hacettepe University Faculty of Pharmacy
Department of Pharmacy Management
Selen YEĞENOĞLU & Bilge SÖZEN

40th ICHP 13-17 September, BERLIN-GERMANY
FROM LABORATORY TO FACTORY:
Pharmaceutical Industry in Türkiye (1833-1954)
The book is written by Turhan Baytop who was a pharmacognosy professor in İstanbul University Faculty of Pharmacy.

(T. Baytop is on Left)

He had written books on History of Pharmacy as well as on Pharmacognosy discipline.
• Aim of the book is to provide information and documents for the initial phase of Turk Pharmaceutical Industry.

• In this presentation we aimed to emphasize the important parts of the book.
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)


- It is dedicated in the memory of the pioneering pharmacists.

- Their success stories are explained briefly in this book of Turhan Baytop’s.
The book covers five chapters.

**INTRODUCTION (1st Chp.)**

Galenos (accepted as the ancestor of pharmacy profession) was born in Pergamon (Bergama). His hand-made drugs like Theriaca, Terra Sigilatta, and Hiera is known as the oldest medicines.
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

• In the first years of 1800s, Ottoman Pharmacies were selling only two ready-made drugs: 1- Tiryak (Thériaque)

2- Melisa Ruhu (Esprite de Mélisse). And in those years ready-made drugs were first produced in İstanbul at “English Pharmacy”.
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

• The first Turk pharmacist preparing ready-made drugs was Halil Hamdi who opened his pharmacy in 1880. At the laboratory of his pharmacy he produced and sold the followings: Cola Hamdi, Elixir digestive Hamdi, Kéfîr, Liqueur de goudron, Dermophile, Sirop iodotannique phosphaté.
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

• LOCAL READY-MADE DRUGS (2nd Chp.)

The initial and progressive phases of local drugs, drug laboratories, and drug promotions are introduced. English Pharmacy (Pharmacie Britannique)(1883), whose owner was Noël Canzuch (and after him his son Joseph) pioneered in producing locally ready-made drugs.
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

• The roots of the Turk Pharmaceutical Industry began in late Ottoman Period by producing ready-made drugs. Pharmacists such as Beşir Kemal, and Ethem Pertev can be listed among the producers. The production process first began in the pharmacies, then, passed to the laboratories. And finally after the establishment of Turk Republic, drug labs were transformed to drug factories.
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

- In some periods of Turk Pharmaceutical Industry, the importation of foreign drugs were forbidden in order to support the local drug producers and accelerate the local production.
In the first years of Turk Republic, domestic drug production showed a rapid development. During 1928-1933, 306 ready made drugs got licence. The names of these drugs and their producers are listed in this chapter.
FROM LABORATORY TO FACTORY:
Pharmaceutical Industry in Türkiye (1833-1954)

The presentation of the local and foreign drugs to the public and physicians began in the newspapers and journals.

Drug promotion in a newspaper
FROM LABORATORY TO FACTORY:
Pharmaceutical Industry in Türkiye (1833-1954)

Examples of Drug Promotions
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

LOCAL READY MADE DRUG PRODUCTION (3rd Chp.)

Turhan Baytop classifies the period of drug production into 4 phases.

1. Pharmacy Phase (1833 - 1928)
2. Laboratory Phase (1928 - 1954)
3. Factory Phase (1954 - …)
4. Active Ingredient Production Phase (1970 - …)
Pharmacy Phase begins with the opening of English Pharmacy where first ready made-drug is produced. First ready-made drugs produced in the labs of İstanbul pharmacies. These were simple preparations that do not need a complex technology (i.e. Energy supplying syrup, scar ointment, analgesics, corn drug, laxative, anticonstipation drug)
FROM LABORATORY TO FACTORY:
Pharmaceutical Industry in Türkiye (1833-1954)

*Laboratory Phase* begins with the acceptance of the “Act on the Pharmaceutical and Medical Products”. In this phase four pharmacists’ laboratory is important. Because they still exist today as being big drug companies.

i. Abdi İbrahim Laboratory:

Pharm. Abdi Nadir (1888-1926) opened his pharmacy in 1912 in İstanbul. There he produced his first drugs. Then in 1919 he closed down his pharmacy and opened “Abdi İbrahim Lab.”
After his death in 1926, his wife Fatma Mehveş took over the laboratory. Then Abdi Nadir’s son İbrahim Hayri Barut took over the lab. from his mom and he produced nearly 40 drugs.
After İbrahim Hayri Barut’s death in 1961, Mekin Alpay (MD) ruled the laboratory for 20 years and in 1975 the laboratory became a Co. Inc.

In 1976 Abdi Nadir’s grandson Nezih Abdi Barut joined to the managerial team of the company after graduating from the School of Pharmacy. In 1997 Abdi İbrahim Drug Co. was producing the drugs of 25 foreign drug firms.
FROM LABORATORY TO FACTORY:
Pharmaceutical Industry in Türkiye (1833-1954)

ii. Eczacıbaşı S. Ferid Drug and Cosmetics Factory:

Süleyman Ferit Eczacıbaşı began his professional life with being a community pharmacist first in 1909 in İzmir. He was a hospital pharmacist at the same time.

He produced Türkiye’s first colognes like lemon, magnolia, lilac and jasmin.
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

Nejat Eczacıbaşı (PhD) got his biochemistry diploma from Heidelberg University in 1934 and built the laboratory in 1940. He produced vitamins, etc. In 1952 he opened “Eczacıbaşı Drug Factory” with the presence of the president his father, and family members.
With this opening “factory” period began in Turk Pharmaceutical Industry.

iii. Dr. İbrahim Etem Laboratory:
He was graduated from Military Medical School in 1903. Before establishing his own lab (1918) he worked in many labs of the hospitals.
FROM LABORATORY TO FACTORY: Pharmaceutical Industry in Türkiye (1833-1954)

In 1909 while he was working as the manager of a well known pharmacology laboratory he felt there is a need for drugs and active ingredients in the country. He met this need by establishing his laboratory. There he produced active ingredients by using local raw materials as well as various medicines (i.e. vitamins, syrups, veterinary drugs). İbrahim Etem (MD) was both a researcher and a drug producer. After his death in 1943, his wife with his 4 sons (pharmacist, biochemist, chemistry engineer, professor) took over the management of the lab.
FROM LABORATORY TO FACTORY:
Pharmaceutical Industry in Türkiye (1833-1954)

This management team transformed the laboratory to a Co. Inc. in 1952 and in 1956 production facilities became active. After this, the “factory phase” began for Dr. İbrahim Etem Laboratory. In 1996, 100 different types of drugs were being produced and the annual drug production capacity was 35 million boxes.
iv. **Mustafa Nevzat Laboratory:**

Pharm. Mustafa Nevzat Pısak was graduated from Military School of Medicine’s Pharmacy Class. He worked in the military, then as a lecturer in Galenic Pharmacy (Pharmaceutical Technology). Finally he resigned.
The laboratory was established by him in 1920 in İstanbul. He produced intensely injectable ampules. In 1957 the laboratory became a Co. Inc.

After M. Nevzat his daughter Pharm. Nevhiz Pak continued to produce drugs and active ingredients.
Besides the mentioned laboratories Pharmacist Ethem Pertev who won medals for his ready-made drugs in international exhibitions is a significant person in Turk History of Pharmacy.

The kiosk of Pharm. Ethem Pertev at Bosphorus.
Medals won by Pharm. Ethem Pertev
Pharm. Ethem Pertev owned a pharmacy and then a laboratory as well. He produced “Pertev syrup, quinine, carbonate tablets, cosmetics, etc.”
FROM LABORATORY TO FACTORY:
Pharmaceutical Industry in Türkiye (1833-1954)
SYMBOLS OF DOMESTIC DRUG FIRMS (4th Chp.)

ABDİ İBRAHİM

MUSTAFA NEVZAT

İBRAHİM ETHEM

ECZACIBAŞI
SUMMARY AND CONCLUSION (5th Chp.)

At the initial phase Turk drug industry were importing all active ingredients and other raw materials from abroad.

Today (1997) about 100 drug producers make 4000 types of drug with 13,000 employees. Moreover drug need of the country is met by 90%.
We thank for your attention 😊

Any questions?