

## Recipes from Abulcasis Al-Zahrawi (c.936-c.1013) for Cough Treatment

Luisa Maria Arvide Cambra\*

Univeristy of Almeria, Spain

\*Corresponding author: Prof. Dr. Luisa Maria Arvide Cambra, Univeristy of Almeria, Spain

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### Abstract

The Kitāb al-Taṣrīf (Book of medical arrangement) is the master piece of the well-known Cordovan physician Abulcasis Al-Zahrāwī (c.936-c.1013). This autor was also an eminent surgeon, the first of Medieval Islam, and his influence reached as far as Renaissance Europe. The 22nd treatise of his work is an interesting treatise of neumology on deseases relatives to lungs and respiratory tract, as well as the correct treatment of these. It contains recipes of a great value to the fields of pharmacology and neumology. This paper is an approach to this treatise, and includes the translation to English from some of its fragments referring to recipes for beneficial cough remedies, according to the 5774th Arabic manuscript of the National Library at Paris, and the 502nd Arabic manuscript of the Süleymaniye Umumi Kütüphanesi from Istanbul.

**Keywords:** Abulcasis Al-Zahrāwī; Medieval Arab Medicine; Medieval Arab Pharmacology; Neumology; Kitāb al-Taṣrīf

### Introduction

Abulcasis Al-Zahrāwī (c.936-c.1013) [1] is one of the most outstanding physicians of Al-Andalus, besides an eminent surgeon, the first one of Medieval Islam [2].

The master piece of this well-known Cordovan author is titled Kitāb al-Taṣrīf (Book of medical arrangement) [3], that is divided into thirty treatises [4] and whose influence reached as far as Renaissance Europe [5].

In the field of pharmacology, which this article mainly is about, Abulcasis is a very representative figure due to his important achievements [6].

The 22nd treatise of this important work is an interesting treatise of neumology on deseases relatives to lungs and respiratory tract, as well as the correct treatment of these. This treatise that contains recipes of a great value to the fields of pharmacology and neumology is inedit nowadays and it is divided into three chapters:

- 1) Beneficial remedies for hot cough
- 2) Beneficial remedies for cold cough
- 3) Beneficial remedies for intermediate hot and cold cough

I am currently preparing a study with a Spanish translation of its pages.

Below is the English translation of some texts taken from the first chapter and referring to seven recipes for beneficial hot cough remedies, according to the 5774th Arabic manuscript of the National Library at Paris, and the 502nd Arabic manuscript of the Süleymaniye Umumi Kütüphanesi from Istanbul.

### Recipes for Hot Cough Treatment

#### 1. Recipe of a beneficial electuary for both chronic and recent cough and it also facilitates expectoration [f.122v<sup>o</sup>]

This electuary is amazing and well known for chest diseases treatment.

Take licorice root, poppy seed, white tragacanth, weakling and spikenard, from each, 30 dirhams; and gum arabic, licorice syrup, sweet flag, broad bean flour, ennel seed, lettuce seed, starch, purslane seed and peeled sweet pumpkin seed, from each, 5 dirhams. Then, crush, sift and knead it with honey. The dose is 3 dirhams.

#### 2. Recipe of an electuary made with poppy from Ishāq ibn 'Imrān [7] beneficial for all chest diseases due to colds and bad cough [f.122v<sup>o</sup>-f.123r<sup>o</sup>]

Take 30 dirhams of peeled licorice root, after having crushed ind sifted it some times; weakling, spikenard and peeled sweet almond, from each, 36 dirhams; white tragacanth, gum arabic and broad bean flour, from each, 1 ounce; 10 dirhams of barley; [f.123r<sup>o</sup>] coriander, maidenhair, fennel seed, anise and purslane seed, from each, 1 ounce; and 20 dirhams of poppy seed. Crush each one separately, sift what you like and knead it with honey. Then, it is collected in a flat clay container and used according to the patient's symptoms.

#### 3. Recipe of a beneficial remedy for cough with fever and thick sputum difficult to expectorate [f.125r<sup>o</sup>]

Take 10 dirhams of maidenhair; 5 dirhams of melon seed; and sealing wax, cucumber seed and broad bean flour, from each, 5 dirhams. Everything is combined, previously crushed and sieved, and it kneaded with violet syrup. The dose is 4 dirhams.

#### 4. Recipe of beneficial poppy pills for dry cough as well as

**for catarrhs and colds [f.125r<sup>o</sup>-f.125v<sup>o</sup>]**

Take 30 dirhams of white poppy; pumpkin seed, cucumber seed and white henbane seed, from each, 15 dirhams; and starch and gum Arabic, from each, 15 dirhams. Everything is combined, previously crushed, sieved and kneaded with psyllium mucilage, and make with this some pills of 3 dirhams in weight, The dose is one pill taken with poppy syrup and barley wáter. It is good for cough with fever and sputum.

**5. Recipe of an oil composed by Ibn Al-Jazzār [8] for a young woman who was suffering from a dry cough [f.127r<sup>o</sup>]**

The patient was extremely thin and with a very weak and complaining nature, and benefited greatly from this remedy:

Take mustard grain and marshmallow seed, from each, 10 dirhams; and flowers of violet, melon seed starch, pumpkin seed starch and white tragacanth, from each, 5 dirhams. Put that together in 1 pound of pomegranate water and roasted pumpkin water, ½ pound of violet oil and ½ pound of sweet almond oil, and simmer until dry without liquid. Then, take the oil and filter it into a glass container. The dose is 5 dirhams mixed with water. This remedy certainly soothes and relieves.

**6. Recipe of a beneficial oil for cough due to fever that was composed by Ibn Māsawayh [9] [f.127v<sup>o</sup>]**

Take marshmallow seed, violet leaves, licorice root and pitted raisins, from each, 10 mithqāls; and 100 mithqāls of sweet pomegranate. Crush these simple remedies and macerate them in pomegranate water for one night. Later add 50 mithqāls of violet oil and let this simmer until 2/3 of water evaporates and only 1/3 remains. Then, strain the oil bit by bit and put it in some jars. The dose is 1 mithqāl to be drunk along with 6 mithqāls of psyllium mucilage. It is a very fast acting oil.

**7. Description of a beneficial bandage for dry cough [f.128v<sup>o</sup>]**

Take pumpkin rind, barley flour and a little bit of marshmallow, mix everything with violet oil and apply from this on the chest and stomach.

**Appendix****-Glossary: Weights and Measures**

1 Dirham= 3,12 grams

1 Mithqāl= 4,68 grams

1 Ounce ((ūqiyya)= 28,34 grams

1 Pound (raṭl)= 453,59 grams

**-Authors cited in the text (in alphabetical order)****Ibn Māsawayh**

Abū Zakarīyā Yūḥannā ibn Māsawayh (c.777-857) is one of the main authors of science from Middle Ages. His knowledge involves a mixture of Hellenistic elements, Christian ideas and recipes from Orient, the result of which was to unite alchemy, medicine and astrology. He translated many Greek scientific works and belonged to the famous Bayt al-Ḥikma (House of Wisdom) in Baghdad, which he became the director of. Failing to obtain human subjects for dissection, a practice which was never encouraged by Islam, had recourse to apes. Under these conditions little progress was made in the science of anatomy, except possibly in studying the anatomical structure of the eye. He wrote the oldest systematic treatise on ophthalmology in Arabic, entitled Al-‘Ashr maqālāt fi l-‘ayn (The ten treatises

on the eye). According to the Arabic sources, Ibn Māsawayh wrote over forty works, but only ten remain. The Latin versions are more numerous

**Ibn Al-Jazzār**

Abū Ja‘far Aḥmad ibn Abī Khālid Al-Jazzār (d.circa 1005) is a famous Tunisian physician from Kairouan, belonging to a family of doctors, since his father and uncle were also. He was a philanthropist and wise and cared about healing not only the rich and powerful but also the poor and disinherited ones for whom he composed the book entitled in Arabic Kitāb ṭibb al-fuqarā’ (Medicine of the poor), unfortunately lost as well as all his medical production, about twenty, with the exception of two works, Risāla fī-ibḍāl al-adwiya (Epistle about substitute medicines) and above all Zād al-musāfir (Traveler's allowance). He also wrote about philosophy and history.

**Ishāq ibn ‘Imrān**

Born in Baghdad, he lived in the 10th century and died in Kairouan, Tunisia. He practiced medicine in North Africa, was also an instructor and teacher of doctors and had a very prominent role in the exercise of his profession. He stood out among the rest of colleagues for his books on botany, and his treatise on melancholy (Al-Maqāla fī l-mālījūlyā) achieved great influence and fame even after his death.

**Conclusion**

Abulcasis Al-Zahrāwī is, without any doubt, one of the most important medieval physicians and he influenced both Muslim world and Occident as far as Renaissance Europe. His main work is a masterpiece entitled Kitāb al-Taṣrīf li-man ‘ajiza ‘an al-ta’līf (Book of medical arrangement), which is in a high-ranking place within surgery, medicine and pharmacology of Al-Andalus. In addition, this book exemplifies the high level achieved by Arab scientific knowledge in the Middle Ages, and so it is essential to study its pages in order to make them known to other areas of knowledge. This article contributes to this. The texts translated and studied in this paper certify the relevance of this eminent author in the history of Islamic science as well as his prominent position in the history of universal science.

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