

Tabular From In Four Arabic Medical Texts From The 11th Century

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Introduction

A rare and fascinating quadruple event occurred in medical circles between c 1050 and c 1150 AD. During these one hundred years, a completely new medical literary style appeared, namely the tabular form. Four similar, yet different, Arabic medical books written by four different physicians who lived in three different cities (Cairo, Baghdad, Qonya) were all written in tabular form (Table). The subject matter of the first two books is health, and the subject matter of the last two is therapeutics.

Ibn buTlaAn

The first author, abuw alHasan almuJtaAr ibn alHasan ibn `abduwn ibn sa`duwn ibn buTlaAn, was a Christian physician from Baghdad who migrated to Cairo around 1047 and studied under ibn raDwaAn with whom he later quarreled. He then traveled to Constantinople and died in a cloister in Antioch after 1068 AD.

His book taqwiym alSiHHa [Tables of Health] consists of 40 tables in which he set the conditions under which health could be preserved. The form is short, synoptic and synthetic without long-winded discourses nor arguments, nor lengthy discussions. According to ibn buT-laAn, health depends on the

proper balance between six areas:

1. The elements and air,
2. Food and drink,
3. Movement and rest,
4. Sleep,
5. Bowel movement,
6. Emotions: joy, anger, fear and distress (1)

The book was translated several times into Latin, both in its abbreviated form, and in to, under the title of "Tacuinum sanitatis" by Cremona, Faragut and by others. A Latin version was printed in Argentor in 1531 AD.

Ibn jazla

The second physician, abuw `aliy yaHyaY ibn `iysaY ibn jazla, was also a Christian physician, but, he embraced Islam in 466H/1074 AD, and became the secretary to the Hanafiy qaADiy of Baghdad. He died in 1100, in June.

His book taqwiym alabdaAn [Tables of the Body] (Fig 1) [2, 3, 5, 12 p 42] was written for Caliph almuqtadiy bi'amr al-laAh (467H/1075 AD to 487H/1094 AD). ibn jazla divided diseases into 44 categories (Fevers, Tumors, Animal bites, Toxicology, Diseases of the eye lids, Dentistry, Diseases of the stomach,

Table. Four authors of tabular medical texts

<u>N°</u>	<u>Date</u>	<u>Author</u>	<u>Book</u>	<u>City</u>
1	c 1050	ibn buTlaAn	taqwiym alSiHHa	Cairo
2	c 1100	ibn jazla	taqwiym al'abdaAn	Bagdad
3	1151-61	al'alaA'iy	almunjiH	Qonya
4	1150-62	altifliysiy	taqwiym al'adwiya	Bagdad

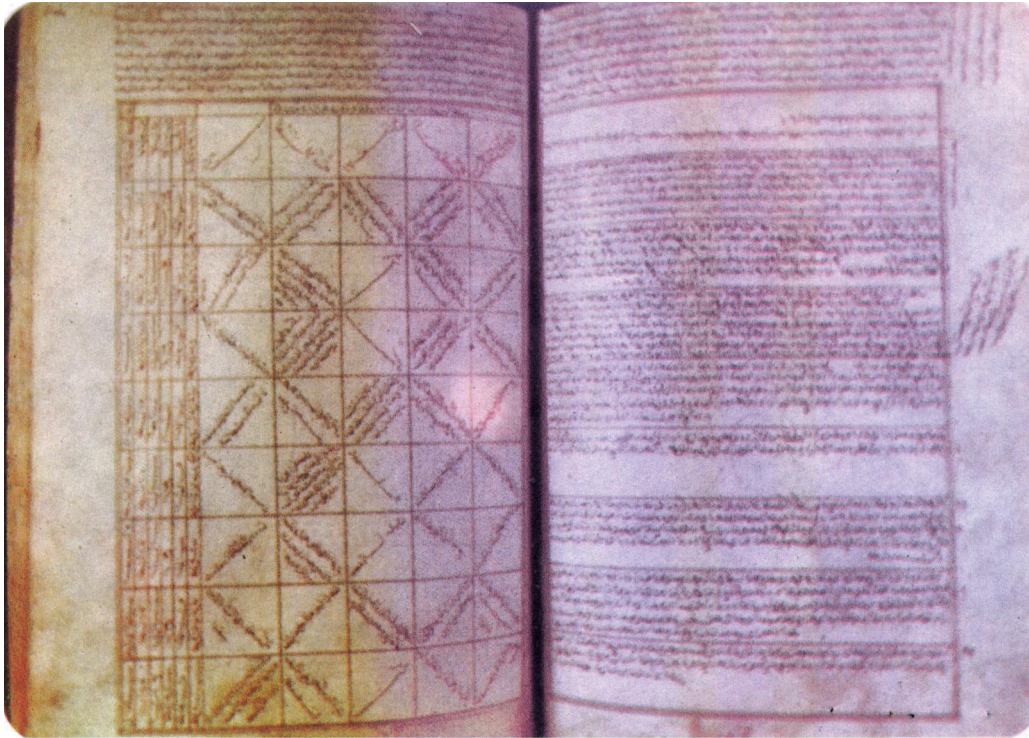


Figure 1- A page from ibn jazla's taqwim al'abdaAn [Tables of the Body] folio size 18 x 28.5 cms (manuscript, originally in the author's library, was acquired by the WIHM in 1985)

Diseases of the kidneys [lithiasis, hematuria, tumor, pyuria, polyuria] Gynecology, Breast diseases, Diseases of the hips, ENT, Ophthalmology etc ...); each category comprises 8 conditions; each condition is discussed in 12 columns with the following titles: Name of the condition or the disease, Humors, Age, Seasons, Countries, Prognosis, Causes, Signs, Diaphoresis, Royal treatment, Simple treatment, and Remarks (9).

In previous communications (6-8) we described an ingenious method for the retrieval of foreign bodies from the gullet which we thought was devised by CiyraAziy. The method consists of having the patient swallow a sizable piece of food or sponge to which is attached a string; after the patient swallows the sponge, it is pulled out with the string, thus pulling out the foreign body. From a study of ibn jazla's book, it appears that ibn jazla had described it more than a century before CiyraAziy (8).

The book was printed in Damascus in 1333/1914. Our manuscript was used to print the HijaAz edition (12).

Al'alaA'iy

The third physician, abuw sa'iyd ibn 'ibraAhiym almagribiy almutaTabbib alma`ruwf bi [known as] al'alaA'iy wrote his book between 546H/1151 AD and 557H/1161 AD for a vassal of the Sultan of Qonya whose title was za`iyum juyuwC almu'miniyn wa `umda 'amiyr almu'miniyn al'amiyr `alaA' aldiyn 'abiy CujaA`.

In his munjiH [Success], (2, 4) al'alaA'iy describes 550 medications listed in alphabetical order and tabulated in 16 columns under the following titles: Name, Description, Type, Experimental, Humors, Strength, Use in Diseases of the Head, Use in Respiratory Diseases, Use in Digestive Diseases, Use in the body as a whole, Method of administration, Dose, Contraindication, Antidotes, Substitutes (Fig 2). The book has an eight-page addendum which contains 230 entries, and is entitled "Medications that have two or three names" (10, 14, 16).

Altifliysiy

The fourth physician, abuw alfaDl HubayC ibn 'ibraAhiym ibn muHammad almutaTabbib altifliysiy,

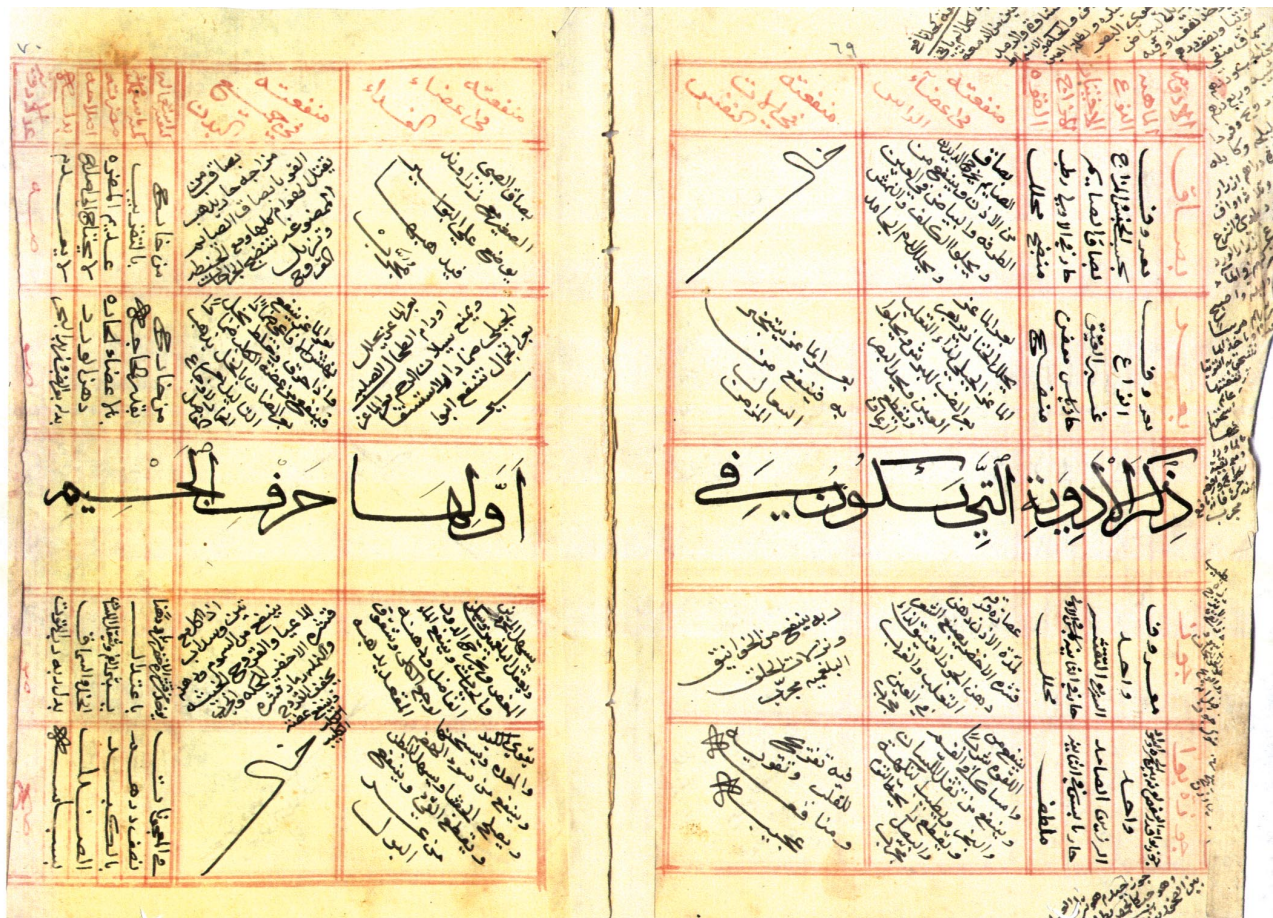


Figure 2- A page from al'ala'iy's munjih [Success] (manuscript N° 34 in the author's library, folio size 13.5 x 19 cms)10

is said to have written several books between 545H/1150 AD and 558H/1162 AD.

altifliysiy's book which interests us in this study is his taqwiyim al'adwiya [Tables of Drugs] (2, 13, 15) which was dedicated to naqiyb alnuqabaA' alwaziyr alSaAHib Caraf aldiyn 'abiy alqaAsim `aliy bin TarraAd alzaynabiy who, was the vizir of Caliph almustarCid in Baghdad in 1122 AD. Its first part contains material about 740 medications arranged alphabetically in 13 columns (Fig 3). The names of the medications are mentioned in the following languages: Arabic, Persian, Syriac, Byzantine (!) and Greek. The following columns came after the name: Description, Choicest, Nature, Uses, Side effects, Rectification, Dose, Quotations from medical authors (11).

Discussion

Three of the authors gave the title of their books as "taqwiyim", an Arabic word which is used to

denote a list or a calendar. The word «taqwiyim» was taken verbatim into the Latin language by the translators of the Middle Ages who made it look Latin by adding "um" at the end; it thus became "Tacuinum". On several other occasions, Latin translators have borrowed Arabic words and used them verbatim, especially when they could not find the appropriate Latin idiom. Here are a few examples: "soda" from the Arabic "SudaA'" meaning migraine, "mari" from the Arabic "mariy" meaning |sophagus, "alembic" from the Arabic "al'inbiyq", etc.

It is very fascinating to speculate about the sudden appearance of this new medical literary style, the tabular form, almost simultaneously, in three different cities, used by four different physicians. Did this idea come to each of them independently, or did the later authors know about the previous books which were written about some 50 years before ? Recently we found evidence that, in the long list of his sources

اسماء الادوية					
بالمصري	بالفارسي	بالاسبانية	بالبربرية	باليونانية	بالمصرية
جنتان	كلتان	روبو زوماني	فولسيوس	اوقينا	زهر جبار وهو سفوف
جوار	مشهور	معرفة	كلبيوس	بالهندية	معرفة وهو ب
جناح	بال	كيا	افنديرا	افيروس	معرفة وهو مختلف
جندل يادوست	ميا نخرد	الشاكر ارا	اخزونوس	فستور فونوس	من الاوز والسيجا
جندل يانا	مشهور	مهرشانا	حافلانا	معرفة	من الاوز والسيجا
جوزن بوا	كوزن بوا	كوزن بوا	معرفة	فوتيج	جوزمندر صفص
جوزن الهندي	كوزن هندي	كوزن هندي	يقوقين	بركليون	معرفة وهو نازيل
جوزن سرو	كوزن سرو	كوزن سرو	فوقيريس	اسميا	قوة شهوة السمرو
جوزن عائل	كوزن عائل	كوزن عائل	فياقور يوزن	فروسيمي	يشه لوز عليه

Figure 3- A page from altfliysiy's taqwiyim al'adwiya6 [Tables of Drugs] (Original manuscript in the author's library, folio size 23.5 x 36 cms)11

which is found in his introduction, altfliysiy mentions ibn jazla's book among several others such as Galen, Dioscorides, Hunayn, alraAziy, almasiyHiy, ibn buTlaAn, ibn siynaA and `aliy ibn `iysaY; it is therefore fairly reasonable to conclude that altfliysiy had knowledge of ibn jazla's book. As for ibn jazla and al`alaA'iy, one can speculate whether they saw the books of their predecessors in their own towns, or they traveled, as was then a common custom, to Baghdad or Cairo and saw the books there; or, curiously enough, did the idea of using tabular form occur to each of the four authors independently ?

These new styled books in tabular form must have captured the fancy of physicians in general and

especially the German physicians. Less than four centuries after these four books in tabular form were written, when printing started to become popular, and when the Germans began to replace their Latin scientific venue by the German language, the first book "taqwiyim alSaHHa" [Tables of Health] by ibn buTlaAn was translated into German and was published in Strassburg in 1532 AD; and the second book "taqwiyim al'abdaAn" [Tables of the Body] by ibn jazla) was also translated into German, and the translation was published in Strassburg in 1533 AD. In fact, these were two of the first medical books to be printed in the German language [12 p 56].

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