## IIIM Conference Proceeding

## Muslim Sicily and the Beginnings of Medical Licensing in Europe

Leonard C Chiarelli, PhD Salt Lake City, Utah

## Abstract

One of the legacies of Arab rule in Sicily is in the area of medicine, its study, and practice. Those who study the history of medicine seem to agree the first regulations on the licensing of physicians and pharmacists in Europe can be traced to 1140, when the Norman king of Sicily, Roger II (1095-1154), established the requirement of physicians taking an examination before they could practice medicine. Later, the Hohenstauffen king of Sicily, Frederick II (1194-1250), went further in his Constitutions of Melfi by legislating that for a physician to practice medicine or to heal, he first must be approved in a convened public examination by the master of the School of Salerno. Thus, with the adoption of this legislation, the procedures for the practice of medicine in Europe began and soon spread to Spain and France. The origins of these regulations, however, seem to have their roots in the medical practices of the Arabs, who via North Africa, transferred them to Sicily. The period of Muslim rule on the island had also introduced schools teaching the art of medicine and established hospitals. The Norman conquest, together with the licensing of physicians, the schooling, examining, and practicing of the medical arts, brought these traditions to medieval Europe, where they became the foundation of Western medical customary practice.

Key words: Medieval medicine, medieval Sicily, Muslim Sicily, medical licensing.

ne of the legacies of the period of Arab rule in Sicily is in the area of medicine, its study, and practice. Scholars in the history of medicine appear to agree that the first regulations governing the practice of physicians in Europe dates to 1140, when the Norman king of Sicily, Roger II (1095-1154), established in his laws, the "Assizes," the requirement that physicians must be exam-

From the Marriot Library University of Utah Salt Lake City, Utah

Reprint Requests: Leonard C Chiarelli, PhD Marriot Library University of Utah Salt Lake City, UT 84112 ined before they could practice medicine.1 The relevant text reads; "Whoever in the future desires to become a physician should present himself to our officials and judges for an examination according to their judgment."2 Later, the Hohenstauffen King of Sicily, Frederick II (1194-1250), went further in his Constitutions of Melfi (Liber Augustalis) by legislating that "in the future no one may dare otherwise to practice or to heal, pretending the title of physician, unless he has first been approved in a convened public examination by the Masters of Salerno," and that "testimonial letters concerning his trustworthiness and sufficient knowledge" should be presented before the examining body before he may "obtain the license for healing from us." Those making medicines were obliged to take an oath to "make them faithfully."2 The adoption of this legislation in 1231 appears to have set the procedures for the practice of medicine in Europe, and soon they are found in the other parts of Italy, then in Spain and France in the following century.<sup>3</sup> The origins of these regulations, or at least their inspiration, seem to have their roots in the medical practices of the Arabs<sup>4</sup> who, via North Africa, transferred them to Sicily.

The possible influence of Islamic medical practices upon medieval Europe has hardly been studied, although it is known that Arabic medical texts had a profound impact on scientific learning of Europe. In an article addressing the antecedents of the Norman legislation on medical examinations and licensing, the American medievalist James M Powell states that the Latin Norman texts, and the practices themselves, evidence Byzantine influence. He goes on to mention, however, that the Greek text upon which his conclusion is based is not clear and that there is no definitive picture of the medical profession practiced in Byzantium. He even declares that the "precedents" for the Norman laws on medical practice are largely unknown.5 Nowhere in the article does he mention that these laws, or their inspiration, may have had a connection with the Arabs who ruled the island for 200 years prior to the arrival of the Normans, and whose institutions were still in practice when King Roger II promulgated these laws.\*

The licensing of medical practitioners appears to have begun in Baghdad in 931, when a man died due to a physician's error. The Abbasid caliph, al-Muqtadir (908-932), alarmed by this death, decreed that the Inspector of Markets, "Muhtasib" or "Ṣāḥib al-Sūq" should not allow anyone to practice medicine unless he was licensed by the caliph's chief physician.<sup>7</sup> He first had to examine the qualifications of the prospective practitioner before issuing a "'Ijāzah," a certificate or license.<sup>8</sup> The 'ijāzah was usually a letter issued by a student's teacher attesting that he had successfully completed a set course of study under his supervision, and that he was certifying that he was competent to teach the said subject.<sup>9</sup>

Soon this procedure spread throughout the Muslim East and West, but with some variations. For example, it is known that students who received their education and training in a hospital would receive their license from the head practicing physician.10 Then, in order to practice, the medical practitioner was obliged to be examined by the multasib, who thereafter administered to him the Hippocratic Oath and issued a permit or license." In many cases, the prospective physician would first be examined by the chief physician who was appointed by the government to be "head of his craft"12 and subject to the control of the multasib,13 an appointed government official who was under the authority of the "Qadi," a municipal judge, and whose major function was to be guardian of public morals and the regulating of all trades in the market. His duties embraced the various aspects of public life, from keeping the walkways and baths clean, to protecting the public from fraud. As such, he was charged with licensing physicians, pharmacists, oculists, and blood-letters, etc.14 as well as making certain that the weights and measures of the merchants in the market were accurate. Handbooks were compiled that detailed his responsibilities

and the procedures he was to follow in order to allow merchants and health practitioners to carry on their business.

The office of the multasib seems to date back to the 9th century<sup>13</sup> but soon became widespread, extending within a century to North Africa, Spain, and Sicily.<sup>16</sup> At times, in addition to the 'ijāzah, the aspiring physician had to present a certificate of good conduct issued by the "Sahib al-shurtah," the chief of police.<sup>17</sup>

The study of medicine among the Arabs began soon after the 9th century, when the learning center, the House of Wisdom (Bayt ul-Hikmah), started translating into Arabic the ancient Coptic, Greek, Sanskrit, Nabataen, and Syriae medical works.<sup>18</sup> In a short period of time, the study of these ancient texts spread to the Muslim West, where under the Aghlabid dynasty in Ifriqyah (Tunisia) a House of Wisdom, modeled after the one in Baghdad, was established.<sup>19</sup>

The Aghlabids launched their conquest of Sicily in 827, and, with the occupation of the whole island by 902, remained under Muslim rule until the Norman conquest in 1086. However, the Arab element in the government and its bureaucracy, as well as its culture, continued in much of Sicily for another 150 years. The Tunisian scholar Hasan Husni abdul Wahhab stated that after the invasion of Sicily, the Aghtabid "Amirs" (princes) utilized the Sicilian monks by bringing them to Qayrawan in order to have them translate the classics into Arabic. He also speculated that these monks were charged with doing the same on the island.<sup>20</sup>

The Aghlabids also established medical learning circles at Raqqadah and Qayrawan, where by the 11th century, Ifrigyah became a center for the teaching of medicine. Eminent physicians from Egypt and Baghdad were asked to settle in Qayrawan in order to teach and practice medicine among the members of the amir's court. Such well known figures as 'Ishaq ibn 'Umran (fl. 9th century), 'Ishaq ibn Sulayman al-'Isra'ili (d. 955), and his student, ibn al-Jazzar (d. 980), taught and wrote renowned works on disease and the practice of medicine. The writings produced there made Qayrawan a center for medical learning, which came to influence the whole of North Africa, including Spain and Sicily.<sup>21</sup> Along with schools teaching medicine, they established hospitals, known there by the Berber word "dimnah," which made their appearance around 831 in Qayrawan but soon spread throughout the larger cities of Ifriqyah.22

Surviving letters of Jewish merchants of the period, known collectively as the Geniza documents, clearly demonstrate that Qayrawan was an active medical learning center for Jews and Muslims alike.<sup>23</sup>

The study and practice of medicine in North Africa surely had an impact in Sicily. Although specific documents related to medical learning and practice on the island have so far eluded us, there is some evidence to show that Sicily had been part of the medical regime of Qayrawan. Even though medical learning was concentrated in Ifrqiyah, Sicily not only had its medical practitioners but also personages who lectured in medicine. The renowned religious scholar, 'Abu Sa'id Luqman ibn Yusuf al-Ghassani (d. 931) of Qayrawān spent 14 years in Sicily teaching religious law and medicine.<sup>24</sup> A native Sicilian, 'Alī ibn al-Hasan ibn al-Tūbī (fl. 11th century) traveled abroad and then returned home as a learned physician who followed and taught the medical teachings of the famous 9th century Baghdad physician and teacher Yūhannā ibn Māsawaīh (d. 857).<sup>23</sup>

Another native of the island, 'Ali ibn Ibrāhim ibn 'Ali (d. 1137), called "Son of the Teacher", taught medicine and was known as an eminent grammarian and calligrapher.<sup>26</sup> Some of the government officials sent to the island from Qayrawān were skilled in medicine. For example, Muḥammad ibn 'Ibrāhīm ibn 'Abī Sābiḥ (d. 944), who was sent as the chief judge or "Qādī" of the island, was in addition to an expert in religious law, a well-known physician.<sup>27</sup>

The teaching of basic medicine seems to have had a place in the educational system on the island and there is no doubt that the ancient Greek works on medicine, mechanics, and philosophy, which were to be found in the libraries of Palermo and Syracuse, were utilized. It seems likely that the ancient Greco-Roman library in Syracuse continued to be active throughout the period of Arab rule since we read in a letter written by the Norman official and archdeacon of Catania, Henricus Aristippus (fl. 1150), that "you have in Sicily the Syracusan and Greek library."28 An indication of the knowledge and availability of the Greek works is indicated in the report that in 951, the Umayyad caliph of Spain, 'Abd al-Rahman III (912-961), sought the assistance of the Sicilian physician 'Abu 'Abd Allah (fl. 10th century) to help translate the "Materia Afedica" of Dioscorides. He was sought out because of his knowledge of the Greek language and his mastery of medicinal plants.29 Another Sicilian, whose name and work have been lost, wrote a book on materia medica and prescriptions entitled Kitāb al-Sigilli (The Book of the Sicilian), which covers many areas of pharmacology.30

It is even possible that there were female medical practilioners in Muslim Sicily. There is no direct information concerning their practice, but it is well known that female physicians thrived in the Islamic world,<sup>31</sup> and it is reported that in the 14th century Sicily had, along with Florence, the largest number of female medical practitioners in all of Italy.<sup>32</sup>

In regards to the establishment of hospitals, it appears that the hospital known as San Giovanni dei Lebbrosi located outside Palermo and attributed to Norman construction, is of older origin and was originally the Arab castle of Yahya. In fact, Sicilian historian Michele Amari states that there is no document that proves that it was built by the Normans.<sup>33</sup> The Spanish Muslim traveler ibn Jubayr saw this hospital in 1185 and noted that it was constructed on the model of the Muslim hospitals he saw in Acre and Tyre,<sup>34</sup> As far as the examining and licensing of physicians, it seems that Sicily had the same procedures as those found in North Africa. The office of multasib went under various titles at different times and places. Originally, the office went under the title of şāḥib al-sūq and remained under that name in some parts of the Muslim world. "Muhtasib" was a title predominately found in the Arab East, while in North Africa and Spain, we often find the title "Şāḥib al-sūq," "Âmil al-sūq," or even "Şāḥib al-shurtah" (chief of police).<sup>33</sup> It often occurred that the position of muhtasib and shurtah were joined, which may have been at the discretion of the appointing qādī.<sup>36</sup> The inspector of markets, then, could be called "muhtasib," "sāḥib al-sūq," or "sāḥib al-shurtah."

Sicilian documents indicate that the office of "sāhib alsūq," master of the market, was still in use in Sicily around 1145, i.e., during the period that Roger II's laws were made.<sup>37</sup> Later, documents from the period of Angevin rule (1264-1283) show that in 1282, the office and the title continued under the Latin form magistrum mercii.<sup>38</sup> During the same period, another document also used the title "magistris Surte mercii," i.e., "chief of police of the markets."<sup>39</sup>

Historical documents indicate that during the period of Muslim rule, Sicily followed the same administrative framework as other Muslim regions, with the office of chief physician and muhtasib active in examining, certifying, licensing, and overseeing medical practitioners. The procedure appears to be that the medical student received a license or diploma from his mentor on completion of his studies. Then, if he wished to practice medicine, he was examined first by a government-appointed chief physician whose position was similar to a master of a trade guild. Thereafter, if approved, he would receive a license to practice from a judicial official, the muhtasib or sahib at-sūq.

The laws of Roger II appear to have adopted and codified the process, and in doing so, incorporated some of the laws of the Muslim community.<sup>10</sup> There is ample evidence to show that Islamic law continued to be used on the island up through the 12th century.41 The Assizes promulgated by Roger II were meant to fix the obligations and competence of the royal officials," of which the office of multasib was probably included. At the time the laws were drawn, Arab officials held many royal positions of importance," and the king sought via the new laws to unify the administrative system so that it would embrace the traditions of Latin and Greek Italy with those of Muslim Sicily.44 As part of the king's administrative reorganization, he codified the obligations of the royal officials, thereby placing the office of muhtasib, and probably "chief physician" as examiner, under a centralized royal administrative system.

It appears that later Frederick II elaborated on Roger II's legislation in his *Constitutions of Melfi* by placing the responsibility of examining and licensing of medical practitioners upon a board of medical examiners at the medical school at Salermo<sup>2</sup> thus, not only codifying, but institutionalizing, the procedures for examining and licensing of physicians.

A detailed study, however, of the *Liber Augustalis* and the *Assizes* is needed to deduce if their contents concerning the provisions on health were influenced by the Muslim community, on the island and especially if the literature of the office of multasib had any impact.<sup>45</sup> The formalized regulations of Frederick II appear to have had an impact on the European mainland where the study and practice of medicine was beginning to flourish in the great medical schools of France, Italy, and Spain.

## References

1. Conrad LI: The western medical tradition, 800 BC to 1800 AD. Cambridge: Cambridge University Press, 1995:162.

2. Powell JM, editor and translator: The Liber Augustalis. Syracuse: Syracuse University Press, 1971:131.

3. Shatzmiller J: Jews, medicine, and medieval society. Berkeley: University of California Press, 1994;14-5.

4. McVaugh MR: Medicine before the plague. Cambridge: Cambridge University Press, 1993:69,78.

5. Reference 2: 63-4.

6. Takayama H: The administration of the Norman Kingdom of Sicily. Leiden: EJ Brill, 1993:165.

7. Makdisi G: The rise of humanism in classical Islam and the Christian west. Edinburgh: Edinburgh University Press, 1990:249.

8. Ibn Rídwan A: Medieval Islamic medicine, Dols MW, editor and translator. Berkeley: University of California Press, 1984:32.

Stanton CM: Higher learning in Islam. Savage, Maryland: Rowman & Littlefield Publishers, Inc., 1990:125,168.
 Meyerhof M: Science and Medicine. In: Arnold T, editor. The legacy of Islam. Oxford: Oxford University Press, 1943:336.

11. 'Abd al-Rahman ibn Naşr al-Shayzari: Kitāb Nihāyat al-rutbah fī talab al-hisbah. Al-Baz al-'Arini S, editor. Cairo: Association of Authorship, Translation and Publications Press, 1946:97-9.

12. Ibn al-'Ukhuwwah: Al-Ma'ālim al-Qubrā fī Aḥkām al-Hisbah. Levy R, editor and translator. London: Luzac & Co., 1938:57,166.

 Sa'id al-Andalusi: Science in the medieval world: "Book of the categories of nations." Salem SI, Kumar A, editors and translators. Austin: University of Texas Press, 1991:73.
 Buckley RP: The Muhtasib. Arabica 1992;39:90.

15. Hainameh SK: Origins of pharmacy and therapy in the Near East. Tokyo: Naito Foundation, 1973;47,

16. Hamarneh SK: Origin and function of the hisbah system in Islam and its impact on the health professions. Health Sciences in Early Islam, 2 vols. Anees MA, editor. Blanco, Texas: Noor Health Found and Zahra Publications, 1983;1:114.

17. Goitein SD: Mediterranean Society, 6 vols. Berkeley: University of California Press, 1967-1990;2:250.

18. Hamarneh SK: Medical education and practice in Islam. In: Health sciences in early Islam, 2 vols. Anees MA, editor. Blanco, Texas: Noor Health Found and Zahra Publications, 1983;1:127.

19. 'Abdul Wahhāb HH: Waragat, 3 vols. Tunis: al-Manār, 1965-1972;1:196.

20. Reference 19: 200-3.

21. Jacquart D, Micheau F: La medecine arabe et l'occident medieval. Paris: Maisonneuve et Larose, 1990:111-3.

22. Reference 19: 274-94.

23. Goiten: Mediterranean Society, 1967-1990;2:203-4,240-60.521.

24. 'Iyād ibn Mūsā; Tartīb al-madārik wa-taqrīb al-masālik li-ma`rifat a`lam madhhab Mālik, 4 vols. Beirut: Maktabat al-Hayāh, 1967-68;3:312.

25. Ibn al-Qatta A: al-Durrāt al-khatīrah, Beirut: Dār al-Gharb al-Islāmī, 1995:172-3.

26. 'Alí ibn Yūsuf al-Qifti: Inbah al-ruqah 'ala anbah alnuhah. Ibrahim M, editor. 4 vols. Cairo: Dār al-kutub wal-wathā'iq al-qawmiyyah, 1950-1973;3:220-1.

27. Reference 24: 357.

28. Grant E: Henricus Aristippus, William of Moerbeke and two alleged medieval translations of hero's pneumatica. Speculum 1971;46:656.

29. Ibn 'Abi 'Uşaybi'ah, 'Uyun al-'Anbā' fi tabaqāt al-'atibbā'. 3 vols in 1. Beirut: Dār al-Fikr, 1956;3:76-7.

30. Griffini E: Nuovi testi arabo-siculi. In: Centenario della Nascita di Michele Amari, 2 vols. Palermo: Virzi, 1910;1:445.

31. Reference 1: 129.

32. Garcia-Ballester L, editor. Praactical medicine form Salerno to the black death. Cambridge: Cambridge University Press, 1994:17.

33. Amari M: Storia dei Musulmani di Sicilia. 2nd edition. 6 vols. Catania: R Prampolini, 1933-39;3:845.

34. Ibn Jubir M: The travels of ibn Jubir. Broadhurst RJC, editor and translator. London: Jonathan Cape, 1952:340-7.

35. Chalmeta P: El "senor del zoco" en espana: edades media y moderna, contribucion al estudio de la historia del mercado. Madrid: Instituto Espano-Arabe de Cultura, 1973:247,403.

36. Encyclopaedia of Islam, 2nd ed., s.v. Cahen C, Talbi M. "Hisba,"

37. Cusa S: I Diplomi Greci ed Arabi di Sicilia. 2 vols. Palermo: Lao, 1868;2:577.

38. Mazzarese FE: De Rebus Regni Siciliae (9 settembre 1282-26 agosto 1283), 2 vols. Palermo: Societa Siciliana per la Storia Patria, 1982;2:223.

39. Mazzarese FE: De Rebus Regni Siciliae, 1982;2:191.
40. Van Cleve TC: The emperor Frederick II of Hohenstaufen. Oxford: Clarendon Press, 1972;238.

41. Menager LR: La Legislation sud-italienne sous la Domination normande. In: I normanni e loro Espansione in Europa nell'Alto medioevo. Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1969:445.

42. Takayama H: The financial and administrative organization of the Norman kingdom of Sicily. Viator 1985;16:148.

43. Reference 42: 149.

44. Reference 42: 163.

45. `Abd al-Rahmān ibu Naşr al-Shayzari: Kitāb Nihāyat al-Rutbah fī (alab al-Hisbah. 1946:97-8.