

Islam and the Development of Medicine in Nigeria: Lessons from the Sokoto Caliphate

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Abstract

A number of academic presentations have been made on the economic, political and social contributions of the Sokoto Caliphate to address various problems of the contemporary Nigeria. However, little attention has been given to its contributions to the development of health care services in the country. Although, the medicinal writings of the Caliphate scholars were intended to address the needs of their contemporary people, their application on Nigerian health care system will go a long way to minimize the health crisis in the country. The Caliphate scholars especially, the triumvirate developed a kind of specialization in their academic pursuits whereby Sheikhs Usman and Abdullahi bn Fodiyo concentrated on Aqidah (creed). Sheikh Muhammad Bello bn Fodiyo on the other hand was much concerned with issues like defence and security, social justice, land and labour as well as social welfare particularly medicine. It is against this backdrop that the paper presents some of the Bello's medicinal treatises and shows how their application can enhance the contemporary health care services in Nigeria.

Introduction

It is truism that one of the greatest contributions of Islam and Muslims to modern civilization was its innovations in the field of medical science. Medicine is that branch of science that concerns itself with the maintenance of health and the prevention as well as cure of diseases.¹ In recognition of the importance of medicine therefore, Islam makes adequate provision for its two major constituents namely, preventive and curative medicine. Islamic religion as a complete way of life reveals a quite number of guides towards prevention of diseases and cure of illnesses. According to Ibn Qayyim, Allah has sent down diseases as well as remedies in order to invite the people particularly Muslims to research and to place one's confidence in

¹ W.D. Halsey (ed.), *Merit Students Encyclopedia*, (N.P. MacMillan Educational Corporation, 1975, p. 86 and also see New Encyclopedia Britanica, Vol. 7, 15th Ed. (Chicago: Encyclopedia Britanica Inc. 1986, p. 1005

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Allah.² Muslim physicians and scientists also made important discoveries and advances in the field of medical sciences.³ Similarly, of all religions and cultures, Islam stresses cleanliness the most in all aspects of life.⁴ In Islam, cleanliness and purity are very central in the well-being of people. Their importance is seen in the fact that both physical and spiritual cleanliness are stressed in the first few revelations sent by Allah to Prophet (S.A.W.). Strict injunctions regarding private and public hygiene are derived from Islamic law, Islamic dietary rules; such as completely abstaining from alcoholic drinks and pork, fasting for one month each year and avoiding over eating.⁵ In one of the earliest chapters of the Holy Qur'an, Prophet Muhammad (S.A.W.) commanded thus: "And the garment do purify and uncleanliness do shun"⁶

Sokoto Caliphate was one of the largest polities in the 19th century Central Sudan. It was indeed the second largest Islamic State in the world in terms of population, land mass and ethnic diversity.⁷ The polity was run based on Islamic principles in political, economic and social ramifications. The Caliphate was established on a sound academic and intellectual foundation and its pioneering administrators presented themselves as scholars and teachers than political leaders. They commanded the respect and confidence of their followers as religious and saintly people than administrators. After its establishment and consolidation, one of the major challenges faced by its leaders was how to address a number of social problems bedeviling the masses. Ill Health was one of the major social problems that attracted the attention of the Caliphate scholars, particular Muhammad Bello.⁸

The major effort of the Caliphate leaders in order to address the health problems in the area was their intellectual contributions towards educating the masses on the importance of sanitation and personal hygiene in Islam and well-being. Emphasis was also laid on the

² M.U. Bunza, "The Contribution of *Amirul Muminina* Muhammad Bello (1781-1837) to the Development of Medicine in the Nineteenth Century Hausaland" *M.A. Dissertation*, Department of History, UDUS, 1995, PP. 21-31

³ A.K. Hassan, "Contextualizing the Islamic Medicinal Principles in the Qur'an and Hadith with Special Reference to Honey and Fasting", A Paper Presented at the First International Conference on *Islam and the Development of Science and Technology* Held at UsmanuDanfodiyo University Sokoto, 9-12th January, 1994, p. 2

⁴ M. Dangana, "Islamic Values for Health Services Management: Lessons from the Time of Prophet (S.A.W.)" A Paper Presented at *International Seminar on Islam and Development of Science and Technology*, Organized by Islamic Research Centre, Sokoto, at the Congregation Hall UsmanuDanfodiyo University, Sokoto, 9th – 12th January, 1994, p. 2

⁵ A.K. Hassan, "Contextualizing the Islamic Medicinal Principles in the Qur'an and Hadith with Special Reference to Honey and Fasting", A Paper Presented at the First International Conference on *Islam and the Development of Science and Technology* Held at Usmanu Danfodiyo University Sokoto, 9-12th January, 1994, p. 2

⁶ Al-Qur'an, 74:4-5

⁷ A.A. Kware & M.A. Rufa'i, "Poverty Reduction Strategies of the Sokoto Caliphate and the Lessons to Contemporary Northern Nigeria States", *Kaduna Journal of Historical Studies (KJHS)*, VOL. 4, Sept. 2012, p. 93

⁸ A.A. Kware & M.A. Rufa'I, "Poverty Reduction Strategies of the Sokoto Caliphate ... p. 93

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curative aspect of Islamic medicine in order to provide the Muslim community with their basic health care needs. The medicinal works by the Caliphate scholars went a long way in educating the Ummah on Islamic medicine and subsequently minimized the level of poor condition of health among the masses. This paper is a reflection of their intellectual contributions to the development of Islamic medicine with specific reference to Muhammad Bello's medicinal treatises.

The Medical Works of Sultan Muhammad Bello bn Fodiyo

The great intellectual treasure left behind by scholars on different fields of knowledge became the basis of intellectual contributions of the Sokoto Caliphate scholars including medical sciences. Of all the Caliphate scholars, four were popular in the field of medical writings.⁹ However, Muhammad Bello Ibn al-Sheikh Usman Ibn Fodiyo was the leading figure in terms of intellectual contributions to the development of medicine among the Ummah in the Caliphate. Bello wrote about ten treatises on different aspects of spiritual and general medicine with emphasis on eye diseases and piles. The other books by Bello are on kidney and other diseases, their medicine as well as the methods of their preparation for treatment. He also stressed the relevance of different types of diets as they relate to promotion of good health.¹⁰

A number of reasons prompted Muhammad Bello to emphasize on the need for medical knowledge and its dissemination among the Ummah. Muhammad Bello and other scholars wrote their medical books in order to meet the needs and request of people in the Caliphate. For instance, Bello in his book on the kidney diseases mentioned that he received a letter from the Emir of Zaria complaining that he was suffering from a serious kidney problem. This provided ground for Bello's treatise on kidney diseases and their treatments. However, the most important reasons for Bello's medical works were firstly to develop knowledge among the Muslims so as to benefit his brethren. Secondly, he intended to provide medical assistance to sick people as well as checking infectious diseases and description or identification of contagious diseases. Consequently, most of Bello's medical works are specifically on the

⁹ Muhammadu Bello Ibn Sheikh Usman Fodiyo, Al-Sheikh Abdullahi bn Fodiyo, Al-Sheikh Muhammadu Tukur al-Fulani and Umar bn Muhammadu al-Bukhari bn Shaikh Usman. See B.O. Ahmed, "The Contribution of Sokoto Jihad Scholars to the Development of Medicine", A Paper Presented at International Conference on *Islam and the Development of Science and Technology*, Organized by the Islamic Research Centre, Sokoto, 10th – 12th, January, 1994, p. 2

¹⁰ B.O. Ahmed, "The Contribution of Sokoto Jihad Scholars to the Development of Medicine"... p. 2

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prevention and cure of a particular disease.¹¹ The third reason was to establish practical methods in identifying different diseases and their remedies based on Islamic concept of disease and medicine. These reasons were in all for blocking the chance of soothsayers, magicians from leading Muslims astray with their remedies mixed with sorcery and soothsaying which are unacceptable in Islam. The following are some of Muhammad Bello's medical treatises:

Muhammad Bello's *Kitab al-Rahmati fi-al-Tibb wa al-Hikmah* is specifically on *materia medica* in which over one hundred cases were presented in the book. It is a compilation of Bello's personal experimentation and observation on causes, symptoms and cure of diseases. The materials he recommended were tested by him and their medical efficacy was established. That is the reason why at the end of every entry or prescription he concluded by saying tested and found effective. In the book also, Bello provided a chapter specifically on natural sciences. Bello recommended so many things that are helpful in maintaining one's health such as regular cleanliness of the body, clothes and environment, sexual satisfaction and protection from excessive heat and cold.¹²

In another treatise titled *Mawarid al-Nabawiyah fi Masail al-Tibbiyyah*, Muhammad Bello emphasized generally on prophetic medicine by accounting for varieties of mineral materials, supplications and methods recommended by the Prophet (S.A.W.) in the treatment of diseases,¹³ likewise *Ujlat al-Rakib fi al-Tibb al-Sa'ib* on prophetic medicine. The position of Islam on the study of medical sciences has been presented at the first part of the book. The position of Muhammad Bello in the book is that, it is compulsory upon Muslim community to train experts in medical sciences who will take charge of their health needs at the individual and communal levels. This according to him will make Muslims independent of the non-Muslim practitioners among the pagans and their like. Bello lamented very seriously on the neglect of these sciences by Muslims which resulted into superstitious belief and magic as well as sorcery that engender the Muslim faith. He also discussed on preventive medicine as

¹¹ B.O. Ahmed, "The Contribution of Sokoto Jihad Scholars to the Development of Medicine"... pp. 3-4

¹² M.U. Bunza, "An Overview of Medicinal Arabic Manuscripts of the Sokoto Caliphate" A Paper Presented at the International Conference on Literary Tradition in Nigeria, Organized by the Arewa House and the US Embassy, Kaduna: Nigeria, 6th – 8th March, 2007, p. 8

¹³ Graduate Documents Center, BUK, doc. No. 566 Quoted in M.U. Bunza, "An Overview of Medicinal Arabic Manuscripts of the Sokoto Caliphate"... p. 9

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well as promotion of public health in the book. Bello strongly recommended the use of honey, milk and garlic for medication.¹⁴

Another work of Muhammad Bello on prophetic medicine is entitled *Kitab al-Tibb al-Nabawi*. In the introductory part of the book, the author dedicated himself to the examination of the position and significance of medicine in human society and the appeal for Muslims to pay attention to the study of medicine. He mentioned that the study of medicine is a specific obligation among the Muslim Ummah. The other part of the book discussed different aspects of medicine from herbs, minerals and supplications from the Holy Qur'an and the Sunnah of the Prophet (S.A.W.).¹⁵

Muhammad Bello's *Kitab Tibb al-Muhini al-Musamma bi Tibb al-Hain* is mainly on the treatment of different eye diseases. In the text, the author identified various eye problems ranging from diseases that cause dryness, redness and discharge from the eye as well as some causes of blindness and short sightedness. The discussion on diseases was followed up by prescriptions of a number of drugs and preparation of eye lotion and eye drops for treatment.¹⁶ Bello's *Musug al-Lijain al-Musamma bi al-Tib al-Hain* is on eye diseases where several ways of treating a number of eye problems, especially preparation of antimony and applying it in the eye for treatment are mentioned.¹⁷ Also *Kitab al-Adwiyat lil-Uyun* emphasizes on the diets to be taken by patients suffering from eye problems. Bello recommended the best use of milk and eggs in addition to some prescribed drugs in the medication.¹⁸

Muhammad Bello's *Rialat al-Amrad al-Kilyah wa Ilajihah* is another medicinal treatise that emanated from a letter sent to the author by the then Emir of Zazzau. In the letter, the Emir complained that he suffered from an illness. In response to the letter, Bello wrote a treatise and mentioned that from the description and symptoms of the Emir's ailment as contained in the letter, the Emir was suffering from a kidney problem. Bello identified three main problems associated with kidney such as wind in the kidney, swelling of the kidney and blockage or stone in the kidney. For each of these three kidney diseases, Bello prescribed drugs to be taken

¹⁴ ms, C.I.S, 3/8/107, Quoted in M.U. Bunza, "An Overview of Medicinal Arabic Manuscripts of the Sokoto Caliphate"... p. 9

¹⁵ ms SSHB, 3/30/109 cited M.U. Bunza, "An Overview of Medicinal Arabic Manuscripts of the Sokoto Caliphate"... p. 10

¹⁶ NAK/SOKPROF/NO.12/A/AR9

¹⁷ SSHB. Acc. No. 150, cited in M.U. Bunza, "An Overview of Medicinal Arabic Manuscripts of the Sokoto Caliphate"... p. 10

¹⁸ NAK/SOKPROF/NO.2/NO.A/AR2

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and ways of their administration. The Emir followed the prescription sent to him by Bello and got cured of the ailment.¹⁹

Muhammad Bello's *Qaul al-Manthur fi Adwiyat Illat al-Bathur* is a book on piles. A number of treatments such as fumigation and diets that the patients should be taken for quick recovery of the disease are discussed. In the last part of the book, Bello identified some causes of liver problem and prescribed medication with a mixture of garlic, honey and other ingredients. The treatise is one of the highly scientific texts by Bello.²⁰

Another scientific treatise by Muhammadu Bello is *Kitab al-Qaul al-Senna*. This text is on a plant called *cassia cenna* botanically. Sultan Bello provided its names in Fulfulde Hausa and Tuareg and traced its originality to the Arabian Peninsula. The medicinal uses and efficacy as well as identification of how to administer the plant are all discussed. The leaves of the plant according to Bello can be used in different ways such as drying and grinding them to make powder, boiling and grinding of fresh leaves to be administered with honey or tamarind, milk or added to nitro or salt. In the administration of this plant as seen above, Bello prescribed each for the cure of ailments ranging from plague, bile disease, diabetics, constipation and stomach problems. The scientific nature of this work has been further strengthened in Bello's description of doses especially as related to nursing and suckling mothers and how the quality of the drugs changes based on the period of when the leaves were plucked e.g during the rainy or dry season.²¹

Muhammad Bello's *al-Nabzhah fi adwiyat al Dedan* is basically on diseases associated with worms in human beings. In the text, Bello identified different types of worms that are prevalent in human beings. The symptoms associated with diseases caused by worms are mentioned and the author lastly indicated that the diseases are more prevalent among children than adults. For the tapeworm, Bello estimated its length at maturity to approximately 35cm. This work is also highly scientific in its investigation and prescription.²²

¹⁹ The letter is contained in the compilation of correspondences of Sultan Muhammad Bello by Wazir Gidado bn Lema

²⁰ ms C.I.S. 3/9/122 cited in M.U. Bunza, "An Overview of Medicinal Arabic Manuscripts of the Sokoto Caliphate"... p. 11

²¹ ms SSHB. Acc. No. 263 cited in M.U. Bunza, "An Overview of Medicinal Arabic Manuscripts of the Sokoto Caliphate"... p. 12

²² Available at Waziri Junaidu Personal Library 13/13

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Finally, a mention of Muhammad Bello's poem in which he mentioned the types of diets, variety of diets and explained them minutely, becomes imperative. This poem was for the Caliphate leaders as well as Muslim Ummah to memorize for their good health.²³ As earlier mentioned in the introduction, a number of medical works were written by Sultan Muhammad Bello whose observance is important in the minimization of the sufferings of the masses, this poem became very popular among the Ummah who observed its provision with faith.

Most importantly is that these intellectual contributions were followed up by observance. Muhammad Bello made sure that medicine was introduced in the curriculum of the study in the Caliphate during his reign. According to Ismail Bello, it was the first time to introduce *ATTIB* (medicine) as a subject of study in Hausaland, after providing necessary materials and encouragement for its study.²⁴ Bello also did well in the promotion of public health where he verbally emphasized that lack of proper hygiene was responsible for common sicknesses like skin infections and diarrhea which can be prevented through proper hygienic environment. Added to that, like Muhammad Bello said in one of his books Abdullahi Ibn Fodiyo said studying the art of medicine is compulsory on Muslims in their community. He further stressed that the origin of medical knowledge is from Almighty God through his revelation to His prophets. Therefore, medicine in Islam is regarded as collective obligation, aiding the welfare of humanity, assisting those in desperate need (patients), and an act of worship.²⁵

The Relevance of Bello's Medical Works to the Contemporary Nigeria

The Jihadists generally believed that the writings of contemporary scholars had very direct bearing on their environment than the previous works. This was however, due to the fact that the works of the contemporary scholars are very current and were more elaborated towards the needs and understanding of the local population. Nevertheless, it is imperative to note that most of Islamic contributions in the field of medicine are today evident in the modern health care service even though their Islamic origins have not been widely acknowledged. An example, is the emphasis placed on good diet as a determinant factor in promoting good health. According to Adeloje, health could be maintained through food and medical

²³ B.O. Ahmed, "The Contribution of Sokoto Jihad Scholars to the Development of Medicine", *Ibid.* p. 4

²⁴ H.A. Ismail, "Medicine in 19th Century Arabic Literature in Northern Nigeria: A Report", Post-graduate Seminar History Department, BUK, 1979, p.12

²⁵ M.U. Bunza, "The Contribution of Amirul Muminina ... p. 56

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treatment.²⁶ Likewise Muhammad Bello in his *Kitab al-Adwiyat lil-Uyun* and *Qaul al-Manthur fi Adwiyat Illat al-Bathur* discussed the centrality of good diets in curing eye and pile diseases. Similarly, just like prohibition of drinking of alcohol in Islam, most of the modern-day countries realized the danger of intoxicants and drugs and therefore, provided stiff punishment for culprits. Modern medicine also recognizes blood-cupping and nature as potent cure for most diseases. An example of the recognition of the power of nature in curing diseases is expressed in the repeated statement of a French surgeon, Ambroise Pare, which states that “I dressed him and God healed him”.²⁷

The above mentioned medical works by Muhammad Bello are deposited with quite a number of scholars as well as a number of research centres like National Archives Kaduna. Some are Arabic manuscripts but their English and Hausa translated versions are also available. Through consulting those works, Nigerian health care services will be better off. Islamic preventive and curative medicines are all discussed in the works, especially the importance of personal and general hygiene. Because of the relevance of personal hygiene towards promotion of health, Islam makes ritual bath compulsory. The water to be used for the bath and ablution must be clean and pure, polluted water, therefore, cannot be used. Similarly, Islam does not allow impurities to be used in food and it does not allow its adherent to pass urine or stool and pollute his clothes or body. That is why it is recommended that with the passing out of urine or stool, water should be used to clean up. All these teachings and many more are well treated in the voluminous medical works of Sultan Muhammad Bello.

Through Bello’s works also, the efficacy of the Holy Qur’anic chapters and verses as cures for many diseases would be understood and tested. These chapters and verses may be recited and administered on the sick within the permissible limits. It is believed that through this, the fear that no cure could be found for some diseases as it is happening today can be allayed. A number of Prophetic medicines including supplications are vividly discussed in the works.

The fact that Muhammad Bello medicinal treatises emerged partly as a reaction to the health care needs of his people means that a rulers should always be responsible for the well-being of

²⁶ A. Adelola, ed. Nigerian Pioneers of Modern Medicine Ibadan: Ibadan University Press, 1977, pp. 133-4

²⁷ Harsey, Merit Students Encyclopaedia p. 89 Quoted in Y.O. Imam “Islamic Health Care Service in the Contemporary World”, A Paper Presented at the International Seminar on Islam and the Development of Science and Technology, Organized by the Islamic Research Centre Sokoto, Usmanu Danfodiyo University, Sokoto, 9th-13th January, 1994, p. 11
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his people. Bello in his delivery of health care services to his people educated them on the Islamic medicine as contained in the Qur'an and the Hadith as well as practices of the companions of Prophet Muhammadu (S.A.W.). Although, there was no such developments like construction of hospitals and other health care institutions as occurred in other Caliphate that predated the Sokoto Caliphate, Bello's treatises discussed extensively on that and explained the necessity of providing public health utilities.²⁸ The Ummah on the other hand observed the teachings of Islamic religion on health care as contained in the works by Sheikh Muhammad Bello. However, as the time of the Sokoto Caliphate passed-by for more than eleven decades (1804-1903) now, the people in Nigeria need to expand their use of Islamic medicine. This expansion is however, visible in incorporating of Islamic medicine in our modern hospitals; writing of suitable medical treatises in accordance with the health care needs of the contemporary Nigerians; construction of public baths; provision of other social amenities and good drainage system needed to promote good health.

The frequent outbreak of epidemic and endemic diseases in Nigeria is as a result of non-observance of the teachings of Islam with regards to environmental sanitation and personal hygiene as contained in Bello's work. A number of chronic illnesses can be easily cured if Islamic medical prescription is understood and fully observed with faith. The indirect function of sanitation as indicated in the teachings of Islam is protecting the body against skin, hair, mouth, nose, eye and ear diseases. Ablution with cold water is an effective means of stimulating blood circulation and lowering blood pressure.²⁹ This explains why the Prophet (S.A.W.) emphasizes on the principle of preventive rather than curative medicine. If one glances through the large number of the prophetic traditions on health services, one would notice that most of them teach Muslims how to prevent themselves from infectious diseases.³⁰

²⁸ A number of hospitals and other Islamic health care institutions were established by Islamic Caliphates that predated the Sokoto Caliphate. During Ummayyad period, al-Walid Ibn Abd al-Malik established an institution for the blind, lepers and other disabled; Abbasid Caliph Harun al-Rashi established a hospital in Bagdad and also created a separate governmental department of health. Under his administration several government dispensaries were established and run by this department and Caliph Muqtadir Billah commissioned several new hospitals and endowed large amount of funds for their maintenance. L.O. Jimoh, "Islam and Medical Institution: An Historical Perspective" A Paper Presented at the International Seminar on Islam and the Development of Science and Technology, Organized by the Islamic Research Centre Sokoto, Usmanu Danfodiyo University, Sokoto, 9th-13th January, 1994, pp. 1-3

²⁹ M. Dangana, "Islamic Values for Health Services Management: ... p. 6

³⁰ M. Dangana, "Islamic Values for Health Services Management: ... p. 6

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In this regards Muhammad Bello taught his people in his treatises that prevention is better than cure.³¹

Conclusion

The paper discussed the intellectual contributions of the Sokoto Caliphate scholars with emphasis on Muhammad Bello's medicinal works. It is clear that the writings of the *ulama* in the Caliphate were intended to address the needs of their contemporary situation. According to Sheikh Usman bn Fodiyo himself, the works of the contemporary scholars at any given moment were more relevant to their people as they address the specific needs of the situation.³² This is a clear indication that the rulers of the Caliphate were always responsible for the needs of their people. However, the relevance of Bello's medical treatises on the development of contemporary medical knowledge in Nigeria cannot be over-emphasized.

Although, a number of convergences can be found between the Islamic and contemporary health care services, however, modern health care services in Nigeria could still benefit a great deal from Islamic medicine for all irrespective of social status. This can be achieved through governmental provision of substantial amount to the health sector. It is important for government to acknowledge that health care should be one of its top-priorities. The idea of turning hospitals into mere consulting rooms where no more than prescription could be obtained free should be corrected and if government cannot sustain free health care services because of its other commitments, health care should be highly subsidized, so that it will not be beyond the reach of common man as it is today. Government should also intensify its campaign against deadly diseases. Sanitation as in the past is still central to the promotion of public health. The past idea of War Against Filth needs to be refashioned and resuscitated.

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³¹ Bunza M.U., "The Contribution of Amirul Muminina ... p. 56

³² M.U. Bunza, "The Contribution of Amirul Muminina ... p. 56

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