A Neglected Historio-Therapeutic Response to Covid-19 Pandemic: African Ebers Papyrus Revisited

Godwin Onuh ODEH, PhD
Department of History,
Sokoto State University, Sokoto
E-Mail: goddyodeh@yahoo.com

Abstract
Colonialism has grave consequence on Africa given the western values it installed and the dislodging of African values; if not, how could one explain decades of importation of vaccines for treatment of the bulk of African population without looking inward to home-grown remedies. This is what fires the attempt to explore the relevance of Ebers Papyrus that appeared to have been undermined in Africa’s response to Covid-19 pandemic. The paper finds that Ebers Papyrus is one of the oldest medical documents developed by the Egyptians dating to about 1500 BCE. It has over seven hundred prescriptions and remedies for various ailments. Most of the known symptoms of Covid-19 pandemic are sufficiently captured in the Ebers Papyrus. The therapeutic significance of the Papyrus appears to have been undermined since the outbreak of the pandemic probably because of colonial disorientation and disarticulation. Against this background, it makes case for indigenous medicines in times of epidemics breakouts since foreign drugs and vaccines are not better than African products. It further finds that no single discipline has answers to societal challenge that appears cumulus and multi-dimensional in nature. Thus, scholars and scientists across disciplinary backgrounds should step forward in the curious search for solution to Covid-19 within the context of African medicines. The paper concludes that African governments, businessmen and well wishers should join hands and support researches for further investigation of prescriptions of the famous Ebers papyrus. This might be what the Madagascar did that was to lead to its claim discovery of Covid-19 pandemic therapy.

Keywords: Ebers Papyrus, Therapeutic, Covid-19, Corona virus and Pandemic

Introduction

Africa is the second largest continent occupying about one-fifth of the world land mass. It is popularly refers to as the “Mother Continent”, because it is the oldest having been peopled by humans dating to over five million years ago.\(^1\) African States are fifty four, with Nigeria, known as the largest political entity. Around early 1960s, when several countries of Africa were coming out of colonial holds, its population was about 300,000,000\(^2\), and according to the United Nations, as at January 2020, her population stands at about 1,326,906,180, which is equivalent to 16.72 per cent of the world total.\(^3\) Despite the richness of the continent and its rich history of civilization that dates to several millennia, its people are subjected to severe hardships as a result of underdevelopment caused by poor governance and leadership. Arising from this, the continent found itself in a footnote position receiving the poisons of globalization. The most dangerous of the poisons is in the area of health. According to World Health Organization (WHO), Africa carries about 25 per cent of the world diseases burden, but shares only 1 per cent of the global health expenditure. More worrisome is the revelation
that, it manufactured less than 2 per cent of the medicines consumed in the continent, indicating that the remaining came from American, Asian and European countries. One of the deadly and poisonous health is the Covid-19 pandemic that the people of the continent and the world have been fighting since December, 2019⁴. The efforts of nations to finding remedies to the pandemic and the need to develop an “African made” pharmaceutical response and other related and subsequent health emergencies brings to the fore the purpose of this paper. For a comprehensive discourse the paper is structured into five sections. One; is the introduction, two; conceptual clarifications, three; Corona virus pandemic in historical perspective, four; the relevance of Ebers papyrus as therapeutic response to Covid-19 pandemic, and the conclusion.

Conceptual Clarifications

This section puts into perspective the underlining concepts of Ebers Papyrus, therapeutic, Covid-19 and pandemic. Papyrus is derived from a plant, cyperus papyrus⁵, also known as paper plant. The plant was popularly grown in ancient Egypt for its stem and central pith cut into thin, pressed together and dried to produce smooth thin writing surface. Apart from paper document or scroll it produces, papyrus was used in the production of cloths, sails, mats and cords. The famous hieroglyphics, (picture writing), was the exclusive preserve of priests. Consequently, the need to keep account of revenue and related matter culminated into the establishment of schools, which leads to the art of writing being made public. When Herodotus, the acclaimed father of history visited Egypt during the age of pyramid, 3400BC-2700BC⁶, papyrus was already in-used. Paper made from papyrus was therefore the major writing material in ancient Egypt. It was adopted by the Greeks and afterward by the Romans. The papyrus was not only used for production of books (roll or scroll) as noted, but also for correspondence, legal document and in our case, medical document. However, as time progresses, paper made from other plant fibres emerged around 8th and 9th centuries CE, thereby bringing into gradual and sharp decline the relevance of the Egyptian papyrus. Therefore, in Europe by the 3rd century CE, it began to be replaced with less expensive vellum, while its usage for book continued to circa 12th century.⁷

Papyrus in the context of the paper or study is a medical document or scroll that contains varieties of prescriptions for multiple ailment or diseases, which in the view of the paper, the global dreadful Covid-19 pandemic is not out of the range of its prescriptions, though the name corona virus might have been unknown or not yet invented.

Therapeutic is derived from the Greek word therapeutikos, from therapeuein, meaning “to attend” or “treat”.⁸ Generally, the concept relates to healing, soothing, which may not necessarily be tied to medicine, but any activity that makes one feel rejuvenated. The psychological angle to this perception is rewarding, because Africans, apart from administration of drugs for healing or curing, need restoration of confidence on what is made in Africa including drugs. Shiel, puts therapeutic as the branch of medicine that is devoted specifically to the treatment of diseases. He further avers that therapeutic dose of a drug is the quantity needed to treat a disease.⁹ Therapeutic as used in the paper is the art and science of treating a particular disease, in the case of the paper, Corona virus (Covid-19), which Ebers Papyrus appears to promise a great deal to treat. But as pointed out by Shiel, the issue of dosage or dose has been the challenge of African traditional herbal medicine. However, this could be overcome. Besides, the paper is not seeing the prescriptions of the papyrus from the traditional administration of it to treating Covid-19, but how the materials could be developed into modern tablets and capsules by African scientists as most known drugs are produced from plants.
Central to the discourse is the concept of Corona virus. The word *corona* is Latin, meaning crown.\(^9\) It was first coined and applied to a virus’s family known as corona viruses by June Almeida and David Tyrrell and was first published in 1968.\(^10\) Going by the name *corona*, the virus has an image resemblance of solar corona or halo. Corona viruses are enveloped single stranded Ribonucleic Acid (RNA) viruses that are zoonotic in nature known to cause symptoms ranging from the popular common cold to more serious respiratory enteric, hepatic and neurological symptoms.\(^11\) The novel corona is called Covid-19: (Co=Corana, Vi= Virus, D=Disease, 19=2019). Covid-19 therefore, is a new stream of previous corona virus infectious diseases that is currently affecting thousands and millions of people across the globe.\(^12\) It is new even as the name indicates (Covid-19), because it was identified as the cause of the respiratory illness in Wuhan, Hubei province, China in December, 2019. The people infected with it could experience mild to moderate respiratory illness and may recover without treatment. Older people with underlying medical problems such as cardiovascular disease, diabetes, chronic respiratory disease and cancer whose body may not be able to mount up necessary immunity to fight it are at greater risk.\(^13\) Against the backdrop of its sharp modes of transmission, regular washing of hands, cleaning of surfaces that are always touched, coughing and sneezing into bent elbow and social distancing have been prescribed.

Pandemic is derived from the word *pan*. The word *pan* is Greek’s, meaning all.\(^14\) Bailliere’s Nurses’s Dictionary defined pandemic as an epidemic spreading over wide area, sometimes all over the world.\(^15\) The application of epidemic most times while conceptualizing pandemic gets people confused and as a result, it is interchangeably used. As an epidemiological concept Kelly, puts it as diseases that spread over a large area as in the entire country, continent and the globe.\(^16\) This conception appears to have set pandemics and epidemics apart, but the fundamental unity is that both are diseases that are mostly infectious and spreads rapidly, but differ in time, space and effect. The geography of the consequence of pandemic is larger and longer in scale compared to an epidemic. Pandemic as used in the paper refers to Covid-19 whose origin is traced to Wuhan, Hubei province of China, which within a short time got to almost all countries of the world. A popular example of a pandemic is HIV/AIDS. In the subsequent part of the paper, historical consideration of Corona virus shall be considered.

**Corona virus (Covid-19) Pandemic in Historical perspective**

The Covid-19 Corona virus pandemic is not the first in human history. However, the divergence has been the epicenter and geography, spread and magnitude of deaths. The following among others, are test cases of devastating pandemics the world has experienced over the centuries and decades: the Justinian plague of the 6\(^{th}\) century, which killed about 50 million people, the Black Death of the 14\(^{th}\) century, with 200 deaths, Spanish Flu of 1918 leading to about 50 to 100 million deaths, more than the number of deaths recorded during world war 1, and HIV/ AIDS pandemic that has killed more than 32 million people and infected about 75 million people since 1980s.\(^17\) Others of global significance in recent times are: Severe Acute Respiratory Syndrome (SARS-Cov-2) with about 770 fatalities between 2002 and 2003, Middle East Respiratory Syndrome (MERS) in 2012, with 870 deaths, Ebola in 1976, which resurfaced in 2014, and the Covid-19 since December, 2019, which has killed about 422, 805 persons and infected many globally as at 11\(^{th}\) June, 2020.\(^18\)

In the last two decades or so, Corona virus has caused two horrible pandemics, the SARS and the MERS respectively. Besides, SARS Cov-2, six Corona viruses exist in human, namely: H.Cov-229E, H.Cov-OC43, SARS-Cov, H.Cov-NL63, H.Cov-HKUI and MERS.\(^19\) As noted, the zoonotic nature of the Corona virus implies that domestic and wild animals such as
camels, cattl, cats, bats etc., could be possible hosts. While it may be argued that generally, animal corona viruses do not spread among humans, there are exceptions. In the case of Covid-19, initial contacts were traced to Huanan Seafood market in Wuhan, China pointing to possibilities of early infections as a result of animal-to-person transmission. Consequently, cases were discovered among medical staff and persons with no history of encounter with the market or Wuhan, indicating human-human transmission.\textsuperscript{20} Cases in African states with people without contact to China and other countries and continents ravaged by Covid-19 pandemic argues for the human-human transmission too. It typically spread via close contact with infected person through droplets from cough or sneezing. To date, it does appear there is no drug or vaccine for treating the novel Covid-19. However, the paper claims Ebers Papyrus promised solutions to it, but unfortunately undermined by Africans and the entire world. In the subsequent part, prescriptions of the papyrus and its possibilities to curing Covid-19 pandemic shall be explored.

\textbf{Ebers Papyrus and its Therapeutic Relevance to Covid-19 Pandemic}

Humans across time and space faced challenges of health and devised therapeutic to it. Africans and early Egyptians in particular caught in the web of health challenges, found medicinal means of solving it. Egyptians of old have considerable knowledge of diseases and prescribes cure to it. Herodotus notes that there was a high degree of specialization among Egyptian physicians.\textsuperscript{21} One of the ways their expertise was showcased is in Ebers papyrus containing over 700 remedies to various ailments.\textsuperscript{22} The papyrus dates to about 1550 BC and regarded as one of the oldest and most important documents on general medicine yet recovered.\textsuperscript{23} Edwin Smith an American adventurer residing in Cairo in 1862, is known to have bought it and put it as part of his collections up to 1869, before it was placed for sale and bought at Luxor (Thebes) in 1873 by the German Egyptologist and novelist, George Maurice Ebers.\textsuperscript{24} Though the source of the papyrus is yet unclear, evidence from medical archaeology shows it was discovered at the leg of a mummy in the El-Assasif district of Theban necropolis. Evidence garnered from papyrus 856a indicates its earlier origin dating to the first dynasty 3000BCE, which made many, believed it was a copy of ancient book belonging to the reputable fathers of Medicine, Alchemy and Pharmacy, Thot.\textsuperscript{25} Presently, the papyrus is kept in the library of Leipzig University, Germany. The reader may be interested in having a page view of the papyrus.

\textbf{Plate 1: The picture below shows a page view of Ebers Papyrus}

\begin{center}
\includegraphics[width=0.5\textwidth]{papyrus_page.png}
\end{center}

The above is the nature of the papyrus. It measured about 20.23 meters in length, 30 centimeter height and 110 pages. It is written in hieratic Egyptian writing, which resembles cursive hieroglyphics.

The significance of the papyrus rests on the quantum of herbal remedies and explanations of the categories of toxins it illuminates. Below are some of the herbs highlighted in the script:

I. Acacia (*acacia nilotica*): vermifuge - eases diarrhea, and internal bleeding, also for treatment of skin diseases;

II. Aloe vera -worms, relieves headache, soothes chest pains, burns, ulcers and skin diseases and allergies;

III. Basil (*ocimum basilicum*): excellent for heart functioning;

IV. Balsam Apple (*malus sylvestris*) or apple of Jerusalem- laxative, skin allergies, soothes headaches, gum and teeth, for asthma, liver stimulant, weak digestion;

V. Bay berry (*Myrica cerifera*) - stop diarrhea, soothes ulcers, shrinks hemorrhoids, repel flies;

VI. Belladona - pain reliever,

VII. Camphor tree - reduces fever, soothes gums, soothes epilepsy;

VIII. Caraway (*Carum carvi; Umbelliferae*) - soothes flatulence, digestive, breath freshener;

IX. Cardamom (*Eletarria cardamomum; Zingiberacae*) - Used as a spice in foods, digestive, soothes flatulence;

X. Colchicum (*Citrullus colocynthis*) also known as “Meadow Saffron”, soothes rheumatism, reduces swelling;

XI. Common Juniper tree (*Juniperis phonecia; Juniperus drupacea*) - digestive, soothes chest pain, soothes stomach cramp;

XII. Cubeb pepper (*Piper cubeba; Piperaceae*): Urinary tract infections, larynx and throat infections, soothes headaches;

XIII. Dill (*Anethum graveolens*) - soothes, flatulence, relieves dyspepsia, laxative and diuretic properties;

XIV. Fenugreek (*Trigonella foenum-graecum*) - respiratory disorders, cleanses the stomach, calms liver, soothes pancreas, reduces swelling;

XV. Frankincense (*Boswellia carterii*) - throat and larynx infections, stops bleeding, cuts phlegm, asthma, stops vomiting;

XVI. Garlic (*Allium sativa*) - give vitality, soothes flatulence, and aids digestion, mild laxative, shrinks hemorrhoids, rid body of “spirits” (note, during the building
of the Pyramids, the workers were given garlic daily to give them the vitality and strength to carry on and perform well), taking together with olive oil is beneficial for bronchial and lung (bronchial- pulmonary) problem including colds and influenza;

XVII. Henna (Lawsonia inermis)- astringent, stops diarrhea, close up open wounds (and used dye);

XVIII. Honey: Widely used, natural antibiotic and used as a base for healing unguents, as well as castor oil, coriander, beer and other foods;

XIX. Licorice (Glycyrrhiza glabra)-mild laxative, expels phlegm, soothes liver, pancreas and chest and respiratory problems;

XX. Mustard (Sinapis alba) induces vomiting, relieves chest pains;

XXI. Onion (Allium cepa)-diuretic, induces perspiration, prevents colds, soothes sciatica, relieves pains and other cardiovascular problems;

XXII. Parsley (Apium petroselinum)- diuretic;

XXIII. Mints (Mentha piperita)- soothes flatulence, aids digestion, stop vomiting, breath freshener;

XXIV. Sandalwood (Santallum album)- aids digestion, stops diarrhea, soothes headaches and gout (used, of course in incense);

XXV. Sesame (Sesamum indicum)- soothes asthma;

XXVI. Tamarind (Tamarindus indica), laxative;

XXVII. Tumeric (Curcumae longa)- closes up wound and for dying skin and cloth and;

XXVIII. Poppy (papaver somniferum)-relieves insomnia, headaches, anesthetic, soothes respiratory problem and deaden pains.26

Others mentioned in the Papyrus are opium, cannabis and myrrh. Prescriptions of the papyrus are in-exhaustive. However, it promised great news to Africa and the global community in the fight against Covid-19 pandemic.

Given the symptoms of Covid-19, which includes, fever, dry cough, tiredness, aches and pains, conjunctivitis, headache, loss of taste and smell, rash on skin, difficulty in breathing, chest pain or pressure, loss of speech, diarrhea, among others in common and severe cases, the therapeutic for it may be located within the following prescriptions isolated from the above: Acacia (acacia nilotica), Balsam Apple (malus sylvestris) or apple of Jerusalem, Belladona, Camphor, Common Juniper tree, Cubeb pepper, Fenugreek (Trigonella foenum-graecum), Garlic (Allium sativa), Henna (Lawsonia inermis), honey, Licorice (Glycyrrhiza glabra), Mustard (Sinapis alba), Onion (Allium cepa), Sandalwood (Santallum album) and Poppy (papaver somniferum).
Be that as it may, from the above, one notes confluence of functions in some of the material prescriptions. What should be done in the instance is appropriate blend of ingredients extracted from the concerned plants. In ancient Egypt as noted, the physicians were highly specialized and drugs were administered based on prescribed procedures considering the age of the patient, effectiveness of the drugs and seasons of the year. If this feat was achieved in ancient Africa, contemporary African physicians could do better with modern facilities at their disposal. The charge before African scientists and scholars is that, the therapy for covid-19 cannot escape the prescriptions of Ebers Papyrus. There is therefore an urgent need to get the above materials along with other necessary ones, extracted and tested for the production of drugs and vaccines for the novel Corona virus pandemic. The charge becomes crucial because Africa is rich with a lot of herbal resources that have possible answers to global health challenges. After all, Madagascar shocked the world as the first country that claim to have gotten the remedy to the dreadful Covid-19. Probably, its health experts and practitioners might have used one or two of the plants enumerated above in the Ebers Papyrus. It may be interesting to note that Cyperus, the plant from which papyrus derived its name is a native to Madagascar, though the focus of the paper is not the medicinal value of it per say. However, Madagascar Covid-19 solution should serve as a wakeup call to all other African countries to look inwards for pharmaceutical solutions.

It should be noted that the solution to every societal problem is rooted in the history of the people. Thus, it does appear the headache of earlier generation is still the headaches of today’s possibly with slight differences. This brings to the fore the idea of lessons of history, which points that; history is the sense and memory of a nation. Though some historians scarcely agree with the idea that history teaches lessons or repeats itself, it serves as a teacher for the future, because the rhythm of its changes may repeat itself in the sense that similar antecedents leading to similar consequences. Collingwood as cited in Odeh, casts light on this. Thus:

> History has a value; its teachings are useful for human life; simply because the rhythms of its changes is likely to repeat itself, similar antecedents leading to similar consequences; the history of notable events is worth remembering in order to serve as a basis for prognostic judgments, not demonstrable but probable, laying down not what will happen but what will likely to happen, indicating the points of danger in rhythms now going on.

History is replete with health challenges and solutions. Health challenges may have led to the development of Ebers Papyrus. The same challenges may have led to the development of drugs and vaccines in both ancient and contemporary times. Africa today looks up to America, Asia and Europe to solving her challenges including those in the field of health. Covid-19 pandemic is defiling all medical efforts, with numerous cases across continents. The relative minimal effect of the pandemic in Africa and the residual history of its ancient medicines show the possibilities of the continent rescuing the world from the grip of the pandemic.

**Conclusion**

Africa has a rich medical history that dates to antiquities. Colonial and imperial disarticulation and disorientation halted the continent’s productive forces and consequently made the people look at their heritage with utmost disdain. Thus, Ebers Papyrus under review
along with other home grown medical material is undermined in the fervid search for solution to the incurable novel Covid-19 pandemic. The destructive consequence of this cannot be properly gauged scientifically at the moment. However, it does appear that Africa, the cradle of man and civilization has continued to wallow in trouble in the midst of solutions. As it is one of the oldest medical documents yet recovered in human history, Ebers Papyrus has been neglected by Africa and the world in the cumulative fight against Covid-19. This paper therefore, draws the attention of Africa and the global community to the well over seven hundred prescriptions and remedies of the Papyrus, which it vehemently upheld; Covid-19 symptoms were aptly handled, though the name corona might be unknown. As an original home of man, rather than going to nations where man later emigrated, Africa should look inward; revisit Ebers Papyrus and other herbs to come up with the Covid-19 medicinal solution. Arising from the multi-dimensional nature of societal problems, scholars and scientists across disciplinary persuasions should come on board in the inquisitive search for solution to Covid-19 within the context of African medicines. This paper concludes that African governments, businessmen and well wishers should as well join hands and support researches for further investigation along this line.
References


12. Dr. Akinwumi, a practising Medical Doctor, Deeper life Christian ministry headquarters, Lagos constantly gave sensitization in all the programmes of the church during the two months or so period of the lockdown before Pastors W. F. Kumuyi’s message live transmission. His presentation may be regarded as one of the most lucid and best sensitizations on Covid-19.


19 S P. Adhikari, S. Meng, Y. Wu, etal, Epidemiology, Causes, Clinical Manifestation and Diagnosis, Prevention.....

20 S P. Adhikari, S. Meng, Y. Wu, etal, Epidemiology, Causes, Clinical Manifestation and Diagnosis, Prevention.....


27 B.L. Grant, Care of Papyrus plant-Growing Papyrus,....

