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The Non-medical Side of Epidemics and Plagues in Islamic Egypt¹

Samah Abd El-Rahman Mahmoud $^{\rm a}$, Shaaban Samir Abd El-Raziq $^{\rm b}$ Nermeen Rashad El-Fouly Mohamed Abd El-Wahab $^{\rm c}$

- ^a Professor of Tourist Guidance, Tourist Guidance Department, Faculty of Tourism and Hotels, Minia University
- ^b Assistant professor of Tourist Guidance, Tourist Guidance Department, Faculty of Tourism and Hotels, Minia University
- ^c PhD researcher, in the Tourist Guidance Department, Faculty of Tourism and Hotels, Minia University

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Abstract

Epidemics and plagues were frequent in Islamic Egypt (from the Fatimid to Ottoman period). In this time Plague was a mystery that baffles minds. People could not determine the real reasons of the epidemic outbreaks. And this ignorance of the medical reasons and cures of epidemics and plagues led the people to adopt nonmedical reasons and interpretations for the epidemic outbreaks. According to the human nature of hating the unknown, many interpretations were adopted by people, just to feel relief, even if these interpretations were not right or were illogical ones. Usually religious interpretations were adopted by people to understand the reasons of the outbreaks, in addition to other kinds of beliefs as well. So this paper is dedicated to the nonmedical side of the epidemics and plagues. It surveys the reasons of the plague and epidemic outbreaks according to people's beliefs, and common point of views. This research is also survey the attempts made by sultan, officials and people to end the epidemics.

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Introduction

This search is focusing on the plague for being the major epidemic of this era. The plague repeated and it was causing a big and huge problem because of the lacking of effective medical understanding of the disease in this time, plague posed the threat of death in a particularly horrible form.² Plague was a mystery that baffles minds in this time³, people did not understand the reasons, or cures for such epidemics or bacterial infection⁴. People were handicapped by their ignorance of plague's pathology. This limited knowledge led them to wrong interpretations which partly explain their failure to differentiate between epidemic diseases⁵. This paper is dedicated to the nonmedical side of the epidemics and plagues. It survey the reason of the plague according to these beliefs, this search is also survey the attempts made by sultan, officials and people to end the epidemics

Plagues and Naming of Epidemics

Plague or $\bar{T}\bar{a}$ \bar{u} n in Arabic was a well-recognized disease in Muslims society because of its effects on the Islamic history⁶. The plague word could be applied also for diseases with high death rates⁷. While according to Ibn Hajar in his book "bazl el ma'on fe fadl El $\bar{T}\bar{a}$ \bar{u} n" the plague or the Arabic $\bar{T}\bar{a}$ \bar{u} n is more specific and more dangerous than epidemic word or wab \bar{a} , and he confirmed that not every epidemic is plague, but every plague is epidemic⁸.

Although people of this time didn't know the real reasons or the cures of the epidemics, but they succeeded in giving names to these epidemics. Many names were given to the epidemics and diseases that occurred in Egypt during the Islamic era. These names could be called after:

• Name of the ruler when the disease occurred, such as plague of Ja'far or chapter of Ja'far (fasl Ja'far) in 1028 A.H. ⁹, and the plague of Bayram¹⁰ Pasha (or *fasl Bayram*)¹¹

² Michael W. Dols, The Second Plague Pandemic and its Recurrences in the Middle East(1347-1894), Journal of the Economics and social History of the Orient, Vol. 22,No. 2 (May 1979), Brill, p. 163 قبل منشورة، كلية العلوم الإنسانية والاجتماعية، جامعة أنونس الأولى، 1997، ص. 34

⁴ Jordan McMullin(book editor), *The Black Death*, Greenhaven Press, New York, 2003, P 10

⁵ Micheal W. Dols, The Black Death in the Middle East, Princeton University Press, New Jersey, 2019, p. 7

⁶ Michael W. Dols, *The Second Plague Pandemic*, p. 163

Elizabeth A. Martin, Concise Medical Dictionary, Ninth Edition, Oxford University Press, 2015, p. 591

⁸الحافظ أحمد بن على بن حجر العسقلاني؛ تحقيق أحمد عصام عبد القادر الكاتب، بذل الماعون في فضل الطاعون، دار العاصمة، الرياض، ص. 103- 104

و عبد العزيز جمال الدين، تاريخ مصر من خلال مخطوطة تاريخ البطاركة لساويرس بن المقفع،الجزء الثامن، الهيئة العامة لقصور الثقافة، القاهرة،2012، ص. 203

¹⁰ Bayram Pasha (the first deputy of Sultan Murad)

¹¹ عبد العزيز جمال الدين، تاريخ مصر، ج8، ص, 209

- **Severity of the disease**, such as the plague occurred in the time of Bakir pasha¹² in 1148¹³, which called was called the plague of ko (ta'on ko) it was also called the obstacle chapter (*elfasl el 'aaek*)¹⁴.
- **Lasting period of the disease** whether being long or short one, such as the bloody acute diseases that occurred in 888 A.H. which called the short chapter (*el fasl el sagheir*) ¹⁵.
- lasting period of the disease together with its death rate, such the one occurred in Shaʿbān 831A.H. in upper Egypt causing uncountable deaths 16.then in Rabīʿ al-Thānī 833 A.H. the plague spread in lower Egypt causing also large number of deaths and it called the large chapter(*el fasl el kabeer*). it was considered to be one of the well-known plagues occurred in Egypt which spread in the middle of winter, unlike the rest of plagues which usually spread in the beginning of spring 17.
- A specific event happened before or after its outbreak such as, in Safar 1097 A.H. the plague spread in Egypt during the reign of Hamaza Pasha, which called the plague the torrent or the chapter of the torrent (ta'on E- sail or fasl el sail) as it was preceded by a horrible torrent 18. Also another example of the plague of the fire (Ta'on El Nar or fasl El Nar) which occurred in the time of Wali pasha, in 1125 A.H. and it was called after a fire accident in this time 19.
- A specific effort of people, such as the chapter of Ibn Ghorab (fasl Ibn Ghorab), who opened a *maghsal* beside his house in the area of Beshtak's mosque and dedicated himself to shroud and bury foreign and strange people in the disease spread in 806 A.H. ²⁰.

¹² عبد الرحمن بن حسن الجبرتي؛ تحقيق عبد الرحيم عبد الرحمن عبد الرحيم؛ تقديم عبد العظيم رمضان، عجائب الآثار في التراجم والأخبار (عن طبعه بولاق)، الجزء الاول، مطبعه دار الكتب المصرية بالقاهرة، 1997، ص. 253

¹³ عبد العزيز جمال الدين، تاريخ مصر من خلال مخطوطة تاريخ البطاركة لساويرس بن المقفع، ج 9، الهيئة العامة لقصور الثقافة، القاه ة، 2012، ص 179

¹⁴ الجبرتي؛ تحقيق عبد الرحيم عبد الرحمن ؛ تقديم عبد العظيم رمضان، عجائب الآثار، ج، 1، ص. 255

¹⁵ محمد بن احمد بن أياس الحنفي؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، الجزء الثالث، الهيئة المصرية العامة الكتاب، القاهرة، 1404هـ- 1984م، ص. 200

¹⁶ محمد بن احمد بن اياس الحنفي؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور* ، الجزء الثاني من سنه 815 الى سنه 872 ط1، يطلب من فر انز شتاينر فيسبادن 1972، طبع بدار إحياء الكتب العربية القاهرة، ص. 120

¹⁸ عبد العزيز جمال الدين، تاريخ مصر، ج8، ص ص-262- 263

¹⁹ عبد العزيز جمال الدين، تاريخ مصر، ج8، ص. 387

²⁰ محمد بن أحمد بن إياس الحنفي؛ تحقيق: محمد مصطفى، بدائع الزهور فى وقائع الدهور، الجزء الاول القسم الثاني، الهيئة المصرية العامة للكتاب، القاهرة، 1403- 1983، ص. 685- 686

Predictions and Signs Indicating the Coming of Epidemics

According to Ibn Sina there are many signs indicating the coming of epidemics, this sign differed according to the season weather being in winter or summer. For example The signs of the winter epidemic are:

- 1- The increasing of shooting stars²¹ in the beginning of autumn, and in July.
- 2- Also the blowing of winds during the two months of Kanoun (Assyrian months).
- 3- The dry-cloudy weather in winter.

While the signs of summer epidemic are

- 1- Lack of rain and cold weather in spring season.
- 2- Unstable weather, with increasing of southern unclear winds blowing for days, followed by a good weather for a week, and then followed by cold night weather and turbid hot morning weather.
- 3- Also if the summer weather was turbid and was not very hot. And its followed autumn has meteors, shooting stars, and fires.
- 4- Changing of the air direction in the same day.
- 5- The changing of the weather condition every day.
- 6- The increasing of frogs and insects.
- 7- The rapid escaping of underground-inhabitants animals.
- 8- The escaping of smart animals and birds such as the stork²².

Some people were predicting the outbreak of epidemics by dreams that, during the time of Al Ashraf Qaitbāy, in Rabī' al-Thānī 897 A.H. many rumors were spread about of plague outbreak in Egypt. A Turkish man dreamed that, the angel of death told him that; I came to take many souls, that the plague is going to break out in Egypt, so the man asked him if he will take his soul in this epidemic, and the death angel told him that, he'll die after seven days. The man woke up panicked and wrote his will. Indeed plague broke out in Egypt in this year after the absence of 16 years. It had been said that this man died after seven days!.²³

Reasons behind the Epidemic Outbreaks:

The middle age medicine couldn't determine the reasons of plagues and combined it with other epidemical diseases. The doctors and *foqaha* who focused in this matter they adopted many different kinds of reasons for this phenomenal. The doctors adopted rational explanations that linking the corruption of air in nature with the beginning of plagues²⁴. While *foqaha* adopted metaphysical, moral and illogical

²¹ ابن سينا؛ وضع حواشيه محمد امين الضناوي، *القانون في الطب*، الجزء الثالث، دار الكتب العلمية، لبنان، 1999، ص. 88

²² ابن سينا؛ وضع حو اشيه محمد امين، *القانون في الطب*، ج 3، ص. 89

²³ ابن ایاس؛ تحقیق محمد مصطفی، بدائع الزهور ، ج 3، ص. 286

reasons. These reasons were not adopted only in Islamic world, it also adopted in the western Christian world of this time. ²⁵

A- According to the old historians

According to El Maqrīzī, the disease and epidemic outbreaks were happened because of:

Changing happens in the air

The changing of the air from its nature is either, by becoming hotter than its usual, colder than it usual, drier than its usual, or mixed with mold and rot.

And the rotten or the corruption condition is either near or far, for Hippocrates and Galen say that there is nothing to prevent an incoming disease from occurring in the country of the Greeks, because of the corruption of the air happened in El Ḥabasha and descended upon the Greeks, and brought upon them the incoming disease.

Changing happens in the water

The changings happens in water could be due to, the level of the water wither being increased or decreased, or the water itself could be mixed with mold and rot and people drank it.

Changing happens in the foods

Food also is a reason for this disease, as it could be spoiled or people cannot afford its price.

Changing happens in the people's psychology

people's psychology could also cause disease according to El Maqrīzī, that when people are afraid of some rulers or when they expecting drought, they escape and the condition gets worse, the digestion became worse, their temperature changed, they get panicked and their movement and diligence in saving things and food increase, and their distress increase too leading to diseases. And when the number of the patients increased in one place, a lot of vapor rises from their bodies, which help in changing the nature of the air leading to epidemic outbreak²⁶.

The strength of the disease is depending on the strength of the reason it caused with. If the disease is happened because of more than one reason the disease would be stronger and faster in killing ²⁷.

While according to Ibn Khaldūn, the reason of these diseases and epidemics is mostly the corruption of the air. According to him the abundance of urbanization causes the air to be mixed with moldiness and rotten moistures.

²⁵ بلقاسم الطبابي، الموت بمصر والشام ،ص. 33

²⁶ تقي الدين احمد بن علي المقريزي؛ تحقيق محمد زينهم؛ مديحه الشرقاوي، المواعظ والاعتبار بذكر الخطط والاثار، الجزء الاول، مكتبه مدبولي، 1998، ص. 143

²⁷ المقريزي؛ تحقيق محمد زينهم؛ مديحه الشرقاوي، الخطط المقريزية، ج1، ص. 144

And when the air gets corrupted, and humans breathe it, the humans get sick. if the corruption is strong, the disease will occur in the lung (plagues and its form specified to the lung), while if the corruption was not that strong, fevers will spread and cause death ²⁸.

Other historians of this era noticed that the outbreak and spreading of plagues and epidemics are related to winds, such as the *khamaseen* winds in Egypt²⁹. That plague in Egypt was predictable in the beginning of spring, especially during or by the coming of the *Khamaseen* winds³⁰. And this reason for the spreading of epidemics, people were espoused it for a long time³¹.

B- Astronomical Explanations for Epidemics

Egyptians and historians in this era related the occurrence of the epidemics famines and crisis to the astronomy and the movement of stars and zodiacs. That when the sun is in the Aries and the moon is in Taurus, El Qahera increases in architecture and be in good state. While if Saturn reached Aries Egypt suffers a famine, and the rich people decrease and the poor people increase, and death spread among people. And when Saturn became parallel to Aries the conditions in Egypt became worse. For example in the time of el Zaher Rkn El Deen Bybars in 664 A.H., Saturn reached Aries so prices of food raised. While in the end of 694 A.H. and the beginning of 695 A.H. in the time of El Adel Katbugha, Saturn became parallel to Aries so Egypt suffered high prices and epidemic outbreak together³².

C- Religious and Moral Reasons

Medicine during this time did not make any step to be mentioned in this field, and it couldn't figure out the real reason of epidemic. They related the occurrence of epidemic to moral aspects, for example the bad behavior of women is one of the reasons, that according to Bn Taghri in his book "El-negom El-zahera fe melok masr wal-Qahera" The sultan Seif El Deen Bersbāy asked some foqaha and wisdom men, about the relationship between people's sins and the diseases outbreak, and they answer him that, if fornication happened in a society the plague would follow it as a punishment and in this situation women were involved. That women walking in streets night and day wearing makeup and flashy clothes. They advised him to prevent women from walking in the streets, while some other refused the idea, but the sultan decided to prevent women from getting outside of their houses, thinking that by keeping women home, the plague will end. In all of Cairo streets, it was announced that women are prevented to go outside their houses, and if any woman gets outside

²⁸ ابن خلدون؛ تحقيق عبدالله محمد الدرويش، مقدمة ابن خلدون ،الجزء الاول، الطبعة الاولى، دار يعرب، دمشق، 2004، ص. ²⁸ ابن خلدون؛ بلقاسم الطبابي، *الموت بمصر والشام، ص.* 33

³⁰ Michael W. Dols, *The Second Plague Pandemic*, p. 181

³¹ بلقاسم الطبابي، الموت بمصر والشام، ص. 34

³² تقي الدين احمّد بن علي المقريزي؛ تُحقيق محمد زينهم؛ مديحه الشرقاوي، المواعظ والاعتبار بذكر الخطط والاثار، الجزء الثاني، مكتبه مدبولي، 1998،ص. 81

her house, she will be punished. Patrols were settled in streets to prevent any woman to walk in streets³³. They couldn't visit their patient relatives, nor go to bury their sons if they died or even visit their graves³⁴.³⁵

Religious reasons were adopted also to be the reason of epidemics outbreaks. That the plague was a punishment and torment, as it came in some prophetic *hadiths*. According to *sunnah* or the prophetic traditions, the plague was considered to be what was left from an old punishment the God has sent for specific nation according to the *hadith* of:

Transliteration:" haza elṭāʿūn baqyet regez wa ʿazab orsel ʿozeb beh qaoum, faiza kan be-ard fla tahbeṭo ʿalih, we eza waqaʿ be-ard wa antom behaa fla takhrago ʿanhu."

Translation: "this plague is what is left from a punishment, that God has sent it to specific nation, and if you heard it in specific area Do Not enter it and if it occurs in the area you are already in DO Not live it"³⁷.

This *hadith* also set regulations of quarantine of the modern time. Preventing a not-infected person from entering the land of the epidemic may be understandable without the need for accurate knowledge of medicine. But preventing the residents of the infected town from going out, especially the healthy ones seems difficult to understand without extensive knowledge of modern medical sciences. That logic and reason dictate that a healthy person who lives in an epidemic town must come to a healthy town so that he does not get infected. But according to modern medicine now it became clearly that a healthy person in the epidemic area may be a carrier of the microbe without being sick but he can transmit the disease. While on the other hand, this healthy resident of the infected area could be in the incubation period³⁸ of the disease, so he can also transmit the disease. And if he left that town, the epidemic

³³ جمال الدين أبي المحاسن يوسف بن تغري بردي الأتابكي؛ تحقيق ابر اهيم على طرخان؛ مراجعه محمد مصطفى زياده، النجوم النزاهرة في ملوك مصر والقاهرة ، الجزء الخامس عشر، الهيئة المصرية للتأليف والنشر، 1971، ص. 93 محمد مصطفى، بدائع على؛ مراجعه محمد مصطفى، النجوم الزاهرة، ج15، ص. 95؛ ابن اياس؛ تحقيق محمد مصطفى، بدائع الزهور، ج2، ط1، ص. 182

³⁵ While for their needs, some men volunteered to bring them what they need from the markets. But later after discussions, the sultan ordered to let the women servants *Jouary* and old ladies to walk in streets, and go markets to bring their needs. Also they were allowed to go to hamamt, but didn't get late at night. For more info see;

بن تغري؛ تحقيق ابراهيم على؛ مراجعه محمد مصطفى، النجوم الزاهرة ، ج 15، ص ص.94- 95؛ ابن اياس؛ تحقيق محمد مصطفى، بدائع الزهور ، ج 2 ، ص. 182 بدائع الزهور ، ج 2 ، ص. 182 ³⁶ حديث رقم 6558

حميت رسم 1958. ³⁷ ابي بكر أحمد بن الحسين بن على البيهةي؛ تحقيق محمد عبد القادر عطا، *السنن الكبرى*، الجزء الثالث، الطبعة الثالثة، دار الكتب العلمية، بيروت لبنان، 2003، ص. 527

³⁸ The incubation period, which is the period of time that precedes the appearance of symptoms of the disease. During which the microbe multiplies and divides inside the body of the infected person without showing any symptoms

would soon appear on him, and he would infect others and transmits this disease to thousands of people, but to millions of people ³⁹

Plague also could be punishment of committing sins in public shamelessly according to the *ḥadith* of:

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" وعن ابن عمرو رضي الله عنهما قال: قال رسول الله صلى الله عليه وسلم " يا مَعْشَرَ الْمُهَاجِرِينَ! خَمْسٌ إِذَا
ابْتُلِيتُمْ بِهِنَّ، وَأَعُوذُ بِاللَّهِ أَنْ تُدْرِكُوهُنَّ: لَمْ تَظْهَرِ الْفَاحِشَةُ فِي قَوْمٍ قَطُّ، حَتَّى يُعْلِنُوا بِهَا، إِلَّا فَشَا فِيهِمُ الطَّاعُونُ،
وَالْأَوْجَاعُ الَّتِي لَمْ تَكُنْ مَضَتْ فِي أَسْلَافِهِمُ الَّذِينَ مَضَوْل...<sup>40</sup>"
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Transliteration: ".... Lam tazhar elfaḥesha fe qoum qat, ḥata ya'leno beha, ila fasha feihm elta'ūn, wa elawga' altee lam takon fe aslafehm elzeen mado.."

Translation: ".... There is no nation who commits sins in public shamelessly unless the plague and new diseases that they never heard of occurred"41

While plague consider to be a kind of mercy to the *moa'mens* or the believers that the believer could be granted the position of the *shahied* or the martyr according to the *hadith* of:

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"عن عبد الله بن بريدة، عن يحيي بن يعمر، عن عائشة أم المؤمنين رضى الله عنها انها سألت رسول الله عن الطاعون فقالت: حدثني نبي الله ص انه عذاب يبعثه الله على من يشاء فجعله رحمه للمؤمنين، فليس عبد يقع الطاعون فيقيم ببلده، ايمانا واحتسابا يعلم انه لن يصيبه الا ما كتب الله له الا كان له مثل اجر الشهيد))<sup>42</sup>"
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Transliteration: elsaidah 'aisha sa'lat rasoul allah 'an elṭā'ūn fqalet: ḥadthani nabi Allah inho 'azab yab'thaho Allah 'ala mn yasha'a fja'laho rahmah lelmo'mneen, flais 'abd yaq' elṭā'ūn fayoqim bebaldhe, imanan wa iḥtesaban ya'lm inho lan yousibaho ila ma katab Allah laho ila kan laho methl ajer elshaheed.

Translation "*El-Saidah* Aisha asked the prophet about the plague, the prophet told her that; the plague is a torture sent by the God to whoever he wants. and the God make it mercy for the believers, that when it outbreaks in an area and the worshiper settled in his place without escaping out of sincere faith and in pursuit of God's satisfaction, knowing that Nothing will happen to him except what the God has decreed for him, unless The God reward him just like the martyr reward'⁴³

³⁹ محمد عبد الحميد البوشي ؛ تقديم وتحقيق عبد العزيز رضوان، *الإسلام والطب*، ص. 66؛ ابر اهيم الخطيب، "الطاعون في الطب النبوي والطب الحديث"، هدى الإسلام مج 31، ع3، 1987: 92-97، ص ص. 95 -96 مسترجع من http://search.mandumah.com/Record/188479

⁴⁰ باقي الحديث " وعن ابن عمرو رضي الله عنهما قال: قال رسول الله صلى الله عليه وسلم " يا معشر المهاجرين، خمس إذا ابتليتم بهن، واعوذ بالله أن تدركوهن، لم تظهر الفاحشة في قوم قط حتى يعلنوا بها، إلا فشا فيهم الطاعون والأوجاع التي لم تكن في أسلافهم الذين مضوا، ولا نقص في المكيال والميزان إلا ابتلوا بالسنين وشدة المئونة وجور السلطان، وما منع قوم زكاة أموالهم إلا منعوا القطر من السماء ولولا البهائم لم يمطروا، ولا خفر قوم العهد إلا سلط عليهم عدوهم من غيرهم فأخذوا بعض ما في ايديهم، وما لم تحكم بكتاب الله ويتخيروا مما انزل الله الا جعل الله بأسهم بينهم".

⁴¹ الحافظ ابي عبد الله محمد بن يزيد القرويني ابن ماجه؛ تحقيق محمد فؤاد عبد الباقي، سنن، الجزء الأول، مطبعة دار إحياء الكتب العربية، (بدون تاريخ)، ص. 1333

⁴² حدیث رقم 6560

⁴³ البيهقي؛ تحقيق محمد عبد القادر ، السنن الكبرى ، ج 3 ، ط 3 ، ص. 527

Attempts to End the Epidemic

Many attitudes were adopted by Egyptians, sultans and high official as a way to stop the epidemic including; gathering people in the desert to pray and supplicate the god to end the epidemic. In the plague of 749 A.H., when the plague and its victim numbers increased, people were asked to be grouped in mosques to pray and ask the god to remove this epidemic, indeed people grouped in most of Cairo mosques, and read El Bokhary and asked the God to help them. Then they went to the dome of El Nasser's dome with *Al-amir* Shikhon and the Minster Mangk El Yousfi ⁴⁴. Religious men also asked people to forward to desert beneath the red mountain, and do as they used to do in *El Istesqa*. People obeyed and made their supplications to the god to end the plague⁴⁵.

The same situation was repeated again In 822 A.H., when people were asked to go to the desert, with the sheikhs and masters accompanied with Al-Mu'ayyad, who forwarded from the citadel to the desert, wearing ordinary cloth of white wool *Mulota* and a small turban, and riding an ordinary horse without the kings fancy garment nor the horse garment, without any silk fabric and silver or gold decorations. He was reciting *Tasbeeḥ* and *Takbeer* in reverence⁴⁶. Groups of people, and officials followed the sultan carrying Qur'ans and reciting *Tahleel* and *Takbeer* out loud. The Sultan arrived the desert, accompanied with the caliph, the judges, the scientist, the sheikhs and the public. The Sultan Al-Mu'ayyad raised his hand performing supplication to the god, he was praying, begging, and asking Allah to remove the plague and the entire crowd was saying amen after him⁴⁷. The same situation was repeated in the time of Al Ashraf Seif El Deen Bersbāy in Jumādā al-Awwal 833 A.H ⁴⁸. People also were asked by the Imams and sultans, to fast three followed days and go to pray in the mosques and to supplicate for ending the epidemic and the high prices⁴⁹.

People donated their money in order to end the epidemic, the rich people from the *amires* and ministers renounced their wealth and felt that they are about to die, so they wanted to do good and distributed money to the poor, in many parts of the villages of Egypt. Such as the vizier Manjk who sent the *mestaofy eldawla*, and *moqadem eldwala* to Snbat, Samanod, Bosir,Sanhor,Abshia, and other villages to distribute money for the needy poor people⁵⁰. (during the plague of 749 A.H).

⁴⁴ جمال الدين أبي المحاسن يوسف بن تغري بردي الأتابكي، النجوم الزاهرة في ملوك مصر والقاهرة ، الجزء العاشر ،طبعه مصورة عن طبعة دار الكتاب، وزارة الثقافة والارشاد القومي المؤسسة المصرية العامة للتأليف والترجمة والطباعة والنشر ، ص. 205 محمد بن احمد بن اياس الحنفي ؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور ، الجزء الاول، القسم الاول، فرانز شتاينر - فيسبادن 1395-1975 ، ص. 531 فيسبادن 531 جمال الدين أبي المحاسن يوسف بن تغري بردي الأتابكي ؛ تحقيق محمد حسين شمس الدين، النجوم الزاهرة في ملوك مصر والقاهرة ، الجزء الثالث عشر ، الطبعة الاولى، دار الكتب العلمية، بيروت لبنان، 1992 ، ص. 227

⁴⁷ بن تغري؛ تحقيق محمد حسين، *النجوم الزاهرة*، ج 13، ط 1، ص. 228 ⁴⁸ بن تغري، *النجوم الزاهرة*، ج 14، ص. 338؛ ابن اياس؛ تحقيق محمد مصطفي، *بدائع الزهور*، ج 2، ط1، ص. 128 ⁴⁹ بن تغري، *النجوم الزاهرة*، ج 14، ص. 338؛ ابن اياس؛ تحقيق محمد مصطفي، *بدائع الزهور، ج2،* ط1، ص. 128 ⁵⁰ تقي الدين أبي العباس أحمد بن علي بن عبد القادر؛ تحقيق محمد عبد القادر عطا، *السلوك لمعرفة دول الملوك*، الجزء الرابع، الطبعة الأولى، دار الكتب العلمية، بيروت لبنان، 1997، ص. 84

Sultans adopted sacrificing as a way to end the epidemic. Such as Al-Mu'ayyad Sheikh in 822 A.H. who slaughtered himself about 150 sheep and many cows and give them to the poor people, he also disrupted over one thousands loaf of bread in order to reduce the epidemic⁵¹. The vizier El Tag present the meet to the poor people in the courtyard and to the people of the mosques, and khanqas, *Qabt* El Imam El Shafa'i, *El-Mashahd* Al-Nefeesy and zawaias. He also presented about⁵² 28 loaf of bread and huge containers of food to the people. From this day on, the plague started gradually decreases, and in Jumādā al-Awwal the plague decreased much more, and according to the records of the *diwan*, the number of the plague deaths became 77 deceased⁵³.

While according to being the women one of the reasons of the epidemic outbreaks, some sultan were advised to prevent **Women from Getting Outside their Houses**. thinking that by keeping women home, the epidemic will end. Such as the privouslyy mentioned example took place in the time El Ashraf Seif El Deen Bersbay in Ramaḍān 841A.H. when the plague increased, and the Sultan complained for the four judges and the sheikhs the increasing of plague. some of them advised the sultan to prevent women going outside except for the *hamam*. and indeed women prevented to go outside their houses, and the *wali* and the *hojab* stayed in the streets insuring that there is no woman walking around. while about the female dead washers, they were taking an permission from *El Mohtaseb* and she sew it to her head wear, so everyone can see it.

Sultan also released prisoners in order to end epidemics. Sultan El Ashraf Seif el Deen Bersbāy in the plague of 841A.H, he released all of the prisoners, and closed all the prisons hoping to end the plague, but led to the spreading of robbery in Cairo⁵⁴. **Preventing Bad Behaviors,** many officials decrees were issued to prevent bad behaviors in order to end the epidemics, such as, the *mohtesb* in the plague of 822 A.H. he followed all the places of *fasad*. He poured and broke thousands of wine jars, prevented women from mourning over the dead, prevented drugs such as hashish, and prevented prostitutes ⁵⁵. While in the plague of 841 A.H., that Sultan El Ashraf Seif el Deen Bersbāy prevented wine and ordered *amir* Asnbgha el Tiary to attack all the Christians, and Jews houses and break any liquor they have⁵⁶. Also Sultan Qunsouh El

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15 ابن اياس؛ تحقيق محمد مصطفي، بدائع الزهور، ج 2، ط1، ص. 45- 46؛ بن تغري؛ تحقيق محمد حسين، النجوم الزاهرة، ج 13، ط 1، ص. 227- 228
52 بن تغري؛ تحقيق محمد حسين، النجوم الزاهرة، ج 13، ط 1، ص. 228
53 بن تغري؛ تحقيق محمد حسين، النجوم الزاهرة، ج 13، ط 1، ص. 229
54 بن تغري؛ تحقيق محمد حسين، النجوم الزاهرة، ج 13، ط 1، ص. 229
55 بن اياس؛ تحقيق محمد مصطفي، بدائع الزهور، ج 2، ط 1، ص. 182
55 تقي الدين أبي العباس أحمد بن علي بن عبد القادر العبيدي المقريزي؛ تحقيق محمد عبد القادر عطا، السلوك لمعرفة دول الملوك، الجزء السادس، الطبعة الأولى، دار الكتب العلمية، بيروت لبنان، 1997، ص. 495
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Gouri in the plague of 919 A.H., he ordered the prevention of bad behaviors such as selling wine and drugs ⁵⁷.

Some illogical attempts were made to end the epidemics, such as Gathering 40 Ashraf called Mohammed and ask them to forward to the mosque of Al Azhar and recite Qura'n after El Goma'a prayer till the next prayer of Al 'asr and supplicate Allah with the worshipers. Then the shreefs were asked to ascend the roof of the mosque and call for the athan and then they perform the prayer of Al 'asr and leave. Such as in the plague of 833 A.H. when El-Shareef Shehab El-Deen kateb el ser bi eldiar el masrya, according to sultan El Ashraf Seif El Deen Bersbay's orders⁵⁸. Believing in the power of materials, some was convinced that wearing specific material could help them in surviving, such as Sultan Qunsouh El Ghouri in the plague of 919 A.H.⁵⁹ when his advisors advised him to wear red ruby rings as ruby helps to prevent plague. Indeed the sultan ordered the making of two golden rings with red rubies and after they were finished he wore them in his hand⁶⁰.

Preventing Specific Kinds of Foods, in the time of El Hakem he ordered the prevention of eating or selling specific kinds of food in ordered to avoid the side effects of these foods in health and to prevent diseases. The foods which were prevented were including, Molokhia, watercress, pumpkin, El Motaoklia (a plant used to make a soup), and El Dalines⁶¹ (which is a kind of seashell, exist in the intersection between the Nile and sea water, especially in Rashid. It could be ate with adding salt.⁶²) and lupine⁶³.

⁵⁷ محمد بن احمد بن اياس الحنفي؛ تحقيق محمد مصطفى، بدائع الزهور، الجزء الرابع، الهيئة المصرية العامة للكتاب، القاهرة،

⁵⁸ بن تغرى، *النجوم الز اهرة*، ج 14، ص. 343؛ ابن اياس؛ تحقيق محمد مصطفى، *بدائع الز هور*، ج 2، ط1، ص. 132

⁵⁹ ابن اياس؛ تحقيق محمد مصطفى، بدائع الزهور، ج 4 ، ص. 296 60 ابن اياس؛ تحقيق محمد مصطفي، بدائع الزهور، ج4، ص. 297

¹⁰ حمد عبد الرازق احمد، تاريخ واتَّار مصر الإسلامية من الفتح العربي حتى نهاية العصر الفاطمي، دار الفكر العربي، 1999، ص.

⁶²أبي عبد الله محمد بن محمد بن عبد الله بن إدريس الشريف الإدريسي؛ اعتنى به: الشيخ احمد فريد المزيدي، نزهة المشتاق في اختراق الافاق، دار الكتب العلمية، 2020، ص. 32

¹⁸⁴ عبد الرازق، تاريخ واثار مصر الإسلامية، ص. 184

Conclusion

- According to the misunderstanding of the disease people adopted different interpretation for the epidemics outbreaks.
- People named the epidemics according to name of the ruler when the disease occurred, severity of the disease, lasting period of the disease, lasting period of the disease together with its death rate, a specific event happened before or after its outbreak, a specific effort of people
- People adopted different non-medical reason for the epidemics outbreaks; according to the contemporary historians the reasons were changing happen in the air, water, food, or in the people psychology. Or according to astronomical explanation, that the occurrence of the epidemics famines and crisis is usually related to the astronomy and the movement of stars and zodiacs. Or according to moral and religious reasons, that epidemics and disasters are nothing but earthly punishment that God imposes on humans because of their deviation from the divine laws.
- Different nonmedical methods were used to prevent and to end epidemic, including donating money and effort in helping people, repenting to God, performing prayers in groups, preventing bad behaviors, fasting, sacrificing, seeking help from the god, and preventing specific kinds of food.

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