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## Epidemic Outbreaks in Mamlūk Egypt and Social Responses<sup>1</sup>

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### Keywords

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### Abstract

A well-known relationship between the existence of human being and the outbreak of diseases and epidemics. Starting with the early history and up till now, Egypt had witnessed many different diseases and fatal epidemics. These diseases and epidemics have affected human life in different ways financially, politically and socially. Most of epidemics are studied and recognized as biological entities which are exclusive field of scientists, but this research will study epidemics as social event that affecting the people lives. The research will track the state of people through the epidemics outbreaks in Mamlūk Egypt when it faced different and repeated plagues. The paper will define the plague, its kind and its infection and its transmission process. The paper will also provide a survey of the social attitude, response, and reaction toward the epidemic outbreaks, in addition shedding the light on the role of the sultans and the officials in such crisis.

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## Introduction

Epidemics and plagues were frequent in Islamic Egypt. As Egypt was qualified for such disaster because of the existence of the predisposing factors for their occurrence, including the failure to bury quickly with the large number of dead, the lack of preventive medicine, and the spoilage of water as well as the famines that caused the death of many people. Epidemics and plagues were highly dangerous; they caused many crises in Islamic Egypt, because of the destruction of many of the country's population and the waste of human powers<sup>2</sup>. These diseases and epidemics have affected human life in different ways financially, politically and socially. The research will track the state of people through the epidemics outbreak in Mamlūk Egypt when it faced different plagues. The paper will define the plague, its kind and its infection and its transmission process. The paper will also provide a survey of the social attitudes, responses, and reactions toward the epidemic outbreaks, in addition to the role of the sultans in such crisis.

## The Plague

The English word of plague, is derived from the Latin *plaga* which means a blow, a wound, referring to the mark that left by something striking one: something with which one has been stricken<sup>3</sup>. Plague term or the word itself used for referring the epidemic infection by *bacillus pestis* in its different forms<sup>4</sup>. The word also could be applied for diseases with high death rates<sup>5</sup>, and the ten disasters of Egypt in the Exodus (Bible)<sup>6</sup>. According to modern medicine, the plague is an acute epidemic disease of rats specifically and other wild rodents. It caused by the bacterium called *Yersinia pestis*, which is transmitted to humans by the fleas of rats<sup>7</sup>.

## Types of the plague

Plague has three types bubonic, pneumonic and septicemic<sup>8</sup>. The symptoms differed according to type and severity. The ancient doctors could only recognize one type of plague<sup>9</sup> which is the bubonic plague. While the pneumonic plague they consider it as a different disease<sup>10</sup>. The Bubonic plague was the most common one<sup>11</sup>.

## Infection and Transmission of the Plague

Plague originally is a zoonosis disease spread between rats by the rat flea vector through spreading plague bacteria in the process of feeding on the<sup>12</sup> blood of rats.

<sup>2</sup> محمد بركات، الازمات الاقتصادية والأوبئة في مصر الإسلامية،

<https://www.alukah.net/culture/0/24665/#ixzz6OcC8q3iM>

<sup>3</sup> Mack A., *In Time of Plague: The History and Social Consequences of Lethal Epidemic Disease*, New York University Press, 1991, P. VIII

<sup>4</sup> Mack A., *In Time of Plague*, P. VII

<sup>5</sup> Elizabeth A. Martin, *Concise Medical Dictionary*, Ninth Edition, Oxford University Press, 2015, P. 591

<sup>6</sup> Mack A., *In Time of Plague*, P. VIII

<sup>7</sup> Elizabeth A. Martin, *Concise Medical Dictionary*, P. 591

<sup>8</sup> Mack A., *In Time of Plague*, P. VII

<sup>9</sup> اسماعيل رشدي، السر المكنون في ابحاث الطاعون، الطبعة الاولى، مطبعة الشعب بشارع محمد على، 1904م - 1322هـ، ص. 86

<sup>10</sup> اسماعيل رشدي، السر المكنون في ابحاث الطاعون، ص. 87

<sup>11</sup> Elizabeth A. Martin, *Concise Medical Dictionary*, p. 591

<sup>12</sup> Borsch S.; Sabraa T., *Plague Mortality in Late Medieval Cairo: Quantifying the Plague Outbreaks of 833/1430 and 846/1460*, p. 116.

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when the numbers of rats collapsed and the numbers of fleas increased, at that point there are many fleas for few remaining rat hosts, so the fleas forced to find another source of food, and in turn it shift their focus to the humans<sup>13</sup>. It also could be shifted to humans when there were cases of fleas from wild rodents reaching domestic rodents on the edges of urban cities. Then the disease spreads rapidly among domestic rodents and kills a large number of them. And thus it became close to humans when the final step takes place, which is the transmission of fleas from infected and dead rats to humans<sup>14</sup>.

While about the transmission of the plague, Plague could be imported from central Africa the Sudan to Egypt and North<sup>15</sup> Africa. The transmission of Plague can be by land or sea from Syria, Palestine, North Africa, India, and western Arabia (especially because of the traffic of pilgrimage). While Egyptians were responsible for carrying the disease outward in all directions. The transmission of the disease over long distance was only by the movements of men (the migration of the tribes) and merchandise<sup>16</sup>.

### Plague outbreaks

The plague was one of the terrifying and deadly epidemics that people feared greatly, and which doctors and religious scholars dealt with throughout the ages to find explanations for it on one hand, and to prevent its recurrence on the other hand. This disease used to come suddenly to kill a large number of residents of cities and villages, and then suddenly disappears without anyone knowing the reason for its coming or disappearance in this time<sup>17</sup>. Plague was a frequent in Islamic Egypt, the Mamlūk Empire suffered a serious series of plagues. Urban and rural areas suffered depopulation, and because of that orchards and corps were neglected and sometimes food production dropped. Epidemic outbreak spread faster in cities. Sources reported continues funeral processions were carried out of the city gates to the cemeteries. Cairo's surrounding areas were abandoned and had fallen into ruin<sup>18</sup>.

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<sup>13</sup> Borsch S.; Sabraa T., *Plague Mortality in Late Medieval Cairo*, p. 118.

<sup>14</sup> جليل أبو الحب، الحشرات الناقلة للأمراض، عالم المعرفة الكويت، 1982، ص. 63

<sup>15</sup> 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. 179

<sup>16</sup> Michael W. Dols, *The Second Plague Pandemic*, p. 180

<sup>17</sup> محمد السيد، الاحوال الطبية في مصر والشام في عصر الدولة الايوبية (1171-1250م/648-567هـ)، رسالة دكتوراه، جامعة طنطا، كلية الاداب قسم التاريخ، 2007، ص. 4

<sup>18</sup> Vernon O. Egger, *A History of the Muslim World to 1405: The Making of a Civilization*, Pearson Education, Inc., Upper Saddle River, New Jersey, 2004, p. 282

The following table is showing the years in which epidemics broke out in the Mamlūk period;

695 A.H. <sup>19</sup>	736 A.H. <sup>20</sup>
749 A.H. <sup>21</sup>	761 A.H.
764 A.H. <sup>22</sup>	779 A.H. <sup>23</sup>
781 A.H.	783 A.H. <sup>24</sup>
790 A.H. <sup>25</sup>	791 A.H. <sup>26</sup>
809 A.H. <sup>27</sup>	810 A.H. <sup>28</sup>
813 A.H. <sup>29</sup>	816 A.H. <sup>30</sup>
818 A.H. <sup>31</sup>	819 A.H. <sup>32</sup>
821 A.H. <sup>33</sup>	833 A.H.
841 A.H. <sup>34</sup>	847 A.H.
848 A.H. <sup>35</sup>	852 A.H.
853 A.H. <sup>36</sup>	864 A.H. <sup>37</sup>
873 A.H. <sup>38</sup>	881 A.H.
897 A.H.	903 A.H. <sup>39</sup>
904 A.H. <sup>40</sup>	909 A.H.
910 A.H. <sup>41</sup>	919 A.H. <sup>42</sup>

Table (1) showing the years of the plague outbreaks in Mamlūk Egypt

- <sup>19</sup> بن تغري، *النجوم الزاهرة في ملوك مصر والقاهرة*، الجزء الثامن، طبعه مصورة عن طبعة دار الكتاب، وزارة الثقافة والإرشاد القومي المؤسسة المصرية العامة للتأليف والترجمة والطباعة والنشر، ص. 71
- <sup>20</sup> محمد بن أحمد بن إياس الحنفي، *بدائع الزهور في وقائع الدهور*، الجزء الأول، القسم الأول، يطلب من دار النشر فرانز شتاينر- فيسبادن، 1395-1975 طبع بدار إحياء الكتب العربية القاهرة، ص. 471
- <sup>21</sup> ابن إياس، *بدائع الزهور في وقائع الدهور*، ج1، ق1، ص. 523
- <sup>22</sup> السيوطي؛ تحقيق محمد أبو الفضل إبراهيم، *حسن المحاضرة في تاريخ مصر والقاهرة*، الجزء الثاني، الطبعة الأولى، بدون دار نشر، 1968، ص. 303
- <sup>23</sup> محمد بن أحمد بن إياس الحنفي؛ تحقيق: محمد مصطفى، *بدائع الزهور في وقائع الدهور*، الجزء الأول، القسم الثاني، الهيئة المصرية العامة للكتاب، القاهرة، 1403-1983، ص. 199
- <sup>24</sup> ابن إياس الحنفي؛ تحقيق: محمد مصطفى، *بدائع الزهور في وقائع الدهور*، ج1، ق2، ص. 282
- <sup>25</sup> بن تغري، *النجوم الزاهرة في ملوك مصر والقاهرة*، الجزء الحادي عشر، طبعه مصورة عن طبعة دار الكتاب، وزارة الثقافة والإرشاد القومي المؤسسة المصرية العامة للتأليف والترجمة والطباعة والنشر، ص. 251
- <sup>26</sup> بن تغري، *النجوم الزاهرة في ملوك مصر والقاهرة*، ج11، ص. 382
- <sup>27</sup> بن تغري؛ تحقيق محمد حسين شمس الدين، *النجوم الزاهرة في ملوك مصر والقاهرة*، الجزء الثالث عشر، الطبعة الأولى، دار الكتب العلمية، بيروت لبنان، 1992، ص. 22
- <sup>28</sup> السيوطي؛ تحقيق محمد أبو الفضل، *حسن المحاضرة*، ج2، ط1، ص. 308
- <sup>29</sup> بن تغري؛ تحقيق محمد حسين، *النجوم الزاهرة في ملوك مصر والقاهرة*، ج13، ط1، ص. 129
- <sup>30</sup> السيوطي؛ تحقيق محمد أبو الفضل، *حسن المحاضرة*، ج2، ط1، ص. 309
- <sup>31</sup> محمد بن أحمد بن إياس الحنفي؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور*، الجزء الثاني من سنة 815 إلى سنة 872 ط1، يطلب من فرانز شتاينر فيسبادن، 1972، طبع بدار إحياء الكتب العربية القاهرة، ص. 19؛ بن تغري، *النجوم الزاهرة في ملوك مصر والقاهرة*، الجزء الرابع عشر، ص. 26
- <sup>32</sup> ابن إياس؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور*، ج2، ص. 27
- <sup>33</sup> بن تغري؛ تحقيق محمد حسين، *النجوم الزاهرة في ملوك مصر والقاهرة*، ج13، ط1، ص. 287
- <sup>34</sup> السيوطي؛ تحقيق محمد أبو الفضل، *حسن المحاضرة*، ج2، ط1، ص. 309
- <sup>35</sup> بن تغري؛ تحقيق إبراهيم علي طرخان؛ مراجعه محمد مصطفى زياده، *النجوم الزاهرة في ملوك مصر والقاهرة*، الجزء الخامس عشر، الهيئة المصرية العامة للتأليف والنشر، 1971، ص. 359
- <sup>36</sup> بن تغري؛ تحقيق إبراهيم علي؛ مراجعه محمد مصطفى، *النجوم الزاهرة في ملوك مصر والقاهرة*، ج15، ص. 387-389
- <sup>37</sup> ابن إياس؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور*، ج2، ص. 357
- <sup>38</sup> محمد بن أحمد بن إياس الحنفي؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور*، الجزء الثالث من سنة 872 إلى سنة 908 هـ، الهيئة المصرية العامة للكتاب القاهرة، 1404 هـ-1984 م، ص. 28
- <sup>39</sup> ابن إياس؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور*، ج3، ص. 122-286-387
- <sup>40</sup> ابن إياس؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور*، ج3، ص. 411
- <sup>41</sup> محمد بن أحمد بن إياس الحنفي؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور*، الجزء الرابع من سنة 906 إلى سنة 921 هـ، الهيئة المصرية العامة للكتاب 1984 م-1404 هـ، القاهرة، ص. 63
- <sup>42</sup> ابن إياس؛ تحقيق محمد مصطفى، *بدائع الزهور في وقائع الدهور*، ج4، ص. 296

## Population and death numbers

The intensity and the frequency of these epidemics within each generation prevented the population from replacing its numbers and caused demographic decline. The demographic decline was highly probable because of the short-term immunity to plague and the fact that the disease hit primarily children and young women, which helped in limiting fertility and replacement<sup>43</sup>. Death rates were usually high especially in the tough outbreaks such as the plague of 749A.H.

The numbers of deaths sometimes were not accurate; the sources were mentioning two different numbers. The number that the *diwan* declares is not matching with the real number of mortalities per day that the source mentions. For example On 17 Jumādā al-Awwal 864 A.H., the record was mentioning 170 deaths, while in the same day the number of who performed the prayer over in *mosalyat* Bab El Nasser only was 100, without mentioning the rest of the *mosalyat* which were about 17. Later amir Zain El Deen El-Astadar appointed people to count number of the deceased people in the *mosalyat* of Cairo, but the numbers were varied too in many cases<sup>44</sup>.

While sometimes the numbers were exaggerated that, in the Plague of 749 A.H., the number of the deaths per day was about twenty thousands, while the total number of deaths in Sha'bān and Ramaḍān together was about nine hundred thousand. This number was huge and never happened before even on the famous plague of early Islamic history<sup>45</sup>.

## Conditions , Reactions, and Social Responses

When diseases accompanied with famine and bad weather, the conditions of people get worse. In the year 695 A.H, a dark, black wind blew from the country of Barqa, gusting and carrying yellow soil that covered the crops of the country and the people were already severely affected by high prices of products. Few corps only were cultivated and they were spoiled by this wind, so prices increased, and this wind was followed by fever diseases that pervaded all the people<sup>46</sup>. Conditions get worse in Egypt, the hunger became great and people of need increased<sup>47</sup>. Hunger spread and increased, people were stealing bread from ovens and markets. The bread dough was guarded to be delivered to the ovens, and bread also was guarded when it came out from the ovens<sup>48</sup>. The people conditions also get bad when epidemics come alone without famine. That in the plague of 749 A.H. unlike the previous diseases and epidemics spread in Egypt, this plague remarked by its speed, people didn't visit doctors or tried to take medicine, as they already get die before doing that. In half of Shawwāl, streets and markets were filled with corpses. Some people donate themselves to burry these corpses, and other donate themselves to pray over them. by Zū al-Qa'dah Cairo became empty, streets were empty from passenger, a person could walk from Gate of Zwella down to Gate of El Nasser without meeting any one. As the people were busy by preparing their dead to be buried. Roads were heaped with sand

<sup>43</sup>Michael W. Dols, *The Second Plague Pandemic*, p. 174-175

<sup>44</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، الجزء السادس عشر، الهيئة المصرية العامة، ص. 140 - 141  
<sup>45</sup> ابن إياس، بدائع الزهور في وقائع الدهور، ج1، ق1، ص. 528؛ بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، الجزء العاشر، طبعه مصورة عن طبعة دار الكتاب، وزارة الثقافة والإرشاد القومي المؤسسة المصرية العامة للتأليف والترجمة والطباعة والنشر، ص. 195

<sup>46</sup> علي مبارك، الخطط التوفيقية الجديدة لمصر القاهرة ومدنها وبلادها القديمة والشهيرة، ج20، الطبعة الأولى، المطبعة الكبرى الاميرية - بولاق مصر القاهرة، 1306هـ، ص. 137

<sup>47</sup> علي مبارك، الخطط التوفيقية، ج20، ط1، ص. 138

<sup>48</sup> المقرئبي؛ تحقيق كرم حلمي فرحات، إغاثة الأمة بكشف الغمة، الطبعة الأولى، عين للدراسات والبحوث الإنسانية والاجتماعية الجيزة، 2007، ص. 108

and dust, people get masked, screams were heard everywhere. Every house contains a deceased, every street contains many deceased. The death rate was high, and funeral prayers were performed sometime over a two-lane line of corpses<sup>49</sup>.

Escaping was one of the reactions to the epidemic outbreaks. Despite the prophetic hadiths that prevent escaping from infected areas (the people of infected country should not leave it and should not let anyone to enter it)<sup>50</sup>. Escaping was one of the ways that Egyptians turned to, to protect themselves from the plagues and epidemics. Some officials and *amires* sent their sons to far places as a try to make them save from the epidemic. Such as *amir* Jan Berdi, *amir* Qanibāy *amir-akhor* and Qadi El Qodah El Hanafi Abdulbar who sent their sons to the Tur Mountain in Sinai (As this area was thought to be protected from the plague). And they come back when the plague ends<sup>51</sup>. Escaping idea may reached to the sultans, that in the plague of 749 A.H., the advisors of El Sultan Hassan asked him to spent the month of Ramaḍān in Seriaqōūs away from El Qāhera because of the plague. Indeed the sultan left El Qāhera and settled there<sup>52</sup>.

Donating and doing good was also another reaction and response to the epidemics; in the plague of 749 A.H. All people believed that they will infected and get the disease, they prepared themselves to die, they donate their money paying *Sadqah*<sup>53</sup>. While some people volunteered and worked in making coffins and deceased washing-beds for free to the *sabils*.<sup>54</sup> Also some *amires* volunteered in washing and preparing dead corpses to be buried such as *Amir* Shaikhon El 'Emari, and *Amir* Moghlai *Amir-akhor*<sup>55</sup>. While in the disease spread in Egypt in 806 A.H. in which people were drop dead on the streets, of cold, cough, fever and chest disease. A man called Ibn Ghorab donated and opened a *Maghsalah* beside his house in the area of the mosque of Bashtak. People used to transport the diseased to his door, and he shroud and bury them, he buried till the end of Shoal about 12700 dead. And this disease called after his name *fasl ibn Ghorab* or the chapter of Ibn Ghorab<sup>56</sup>

During such events of epidemic and diseases, people get panicked that in 833 A.H. great horror and disasters happened in this year. People were falling dead in the streets. Men and women wrote paper on their heads with their names, nicknames, addresses and the names of their neighbors, just to be known in case of they drop dead in the street!<sup>57</sup>. When plague increased, Imams were advising people to repent of their sins, and religion men asks people to forward to desert beneath the red mountain, to pray to the god and do as they used to do in *El Istesqa*. People obeyed and made their supplications to the god to end the plague as a trying to end the plague<sup>58</sup>

<sup>49</sup>بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج 10، ص. 206

<sup>50</sup>ابي بكر أحمد بن الحسين بن علي البيهقي؛ تحقيق محمد عبد القادر عطا، السنن الكبرى، الجزء الثالث، الطبعة الثالثة، دار الكتب العلمية، بيروت لبنان، 2003، ص. 527

<sup>51</sup>ابن إياس، بدائع الزهور في وقائع الدهور، ج4، ص. 298-299

<sup>52</sup>(ابن شاهين الظاهري) زين الدين عبد الباسط بن خليل ابن شاهين الظاهري الحنفي؛ تحقيق عمر عبد السلام تدمري، نيل الأمل في نيل الدول، الجزء الأول، القسم الأول، المكتبة العصرية، صيدا بيروت، ص. 171

<sup>53</sup>بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج 10، ص. 206

<sup>54</sup>بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج10، ص. 195

<sup>55</sup>بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج10، ص. 209

<sup>56</sup>ابن إياس؛ تحقيق: محمد مصطفى، بدائع الزهور في وقائع الدهور، ج1، ق2، ص. 686

<sup>57</sup>ابن إياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج2، ص. 136

<sup>58</sup>ابن إياس، بدائع الزهور في وقائع الدهور، ج1، ق1، ص. 531

Social activities were affected with the epidemic outbreaks, as songs and weddings were cancelled, *Athans* were cancelled except in some specific locations, *Tablkhanahs* of the *amirs* were suspended their works, and many *zawias* and mosques were closed<sup>59</sup>. Also the *moled* occasion was canceled<sup>60</sup>. Stealing was increased in the time of epidemics due to death of properties owners, that a lot of money and properties were taken because of the death of their owners<sup>61</sup>.

While during epidemics industries and normal careers were stopped, and people turned to funeral jobs. That in 748 A.H. some people worked as *modra*, who are responsible for providing graves with dry mud, reciters, who are reciting Quran through the funerals, coffin bearers, or *moghaseleen* who are responsible for washing the corpses. While the wages of these jobs were varied from 6 Dirham for the bearers, 10 Dirham for the reciting men, to 50 Dirhams for the grave diggers. The bad thing about this jobs is that its workers get infected and died<sup>62</sup>.

The prices of some goods were decreased, such as fabrics, and books. While most of industries and crafts were lacked, including Saqa, baba, and Gholam. It had been called in El Qahera that every worker should back to his work, and some of which were even punished to go back work. The price of other goods were increased, such as the water due to the lack of camels which would carry the water containers, and the lack of worker of this job. The price for water reached 8 Dirhams at this time.<sup>63</sup>

The doctors were demanded for patients, and people offered doctors with a lot of money to heal them. The doctors earnings increased<sup>64</sup> to be 100 Dirham per day<sup>65</sup>. Medicine prices were raised<sup>66</sup>, and largely demanded for patients. A spice dealer (*'attar*) of Ras El Deelm in Cairo gained about 32 thousands dirham in one month in 695 A.H.. also another one called El Shareef 'Atouf in the siofieen market gained the same amount, and so did a *hanout* in El Weziria, and one outside the gate of Zwella<sup>67</sup>.

## Funerals and Death supplies

Everything was in chaos. There was a shortage of shrouds<sup>68</sup>. The prices of shrouds were increased, and all of what the patients need too. Most of patients did not need cure, as they get a rapid death, in less than an hour in the plague of 833A.H. sometimes due to the large numbers of patients and dead, the markets were disrupted from buying and selling, and people became overcrowded in ordering shrouds and coffins<sup>69</sup>. By the increasing of the death rates in the plague of 897A.H. it was rare to

<sup>59</sup> المقريري؛ تحقيق محمد عبد القادر، السلوك لمعرفة دول الملوك، الجزء الرابع، الطبعة الاولى، دار الكتب العلمية، بيروت لبنان، 1997، ص. 88

<sup>60</sup> ابن ابياس، بدائع الزهور في وقائع الدهور، ج4، ص. 309

<sup>61</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج 10، ص. 208

<sup>62</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج10، ص. 208

<sup>63</sup> المقريري؛ تحقيق محمد عبد القادر، السلوك، ج4، ط1، ص. 90

<sup>64</sup> علي مبارك، الخطط التوفيقية، ج20، ط1، ص. 138

<sup>65</sup> المقريري؛ تحقيق كرم حلمي، إغاثة الأمة بكشف الغمة، ط1، ص. 109

<sup>66</sup> السيوطي؛ تحقيق محمد ابو الفضل، حسن المحاضرة، ج2، ط1، ص. 301

<sup>67</sup> علي مبارك، الخطط التوفيقية، ج20، ط1، ص. 138

<sup>68</sup> Robert S. Gottfried, *The Black Death Natural and Human Disaster in Medieval Europe*, The Free Press, New York, 1985, P.39

<sup>69</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، الجزء الرابع عشر، ص. 340-343

find ba'lbky, and people suffered because of that and wrapped their dead in *El kham wel Malham*<sup>70</sup>

There was a lack and shortage of coffins, so wooden planks were used for carrying the dead<sup>71</sup>. In the plague of 748-9 Coffins weren't enough for the deceased numbers, only about 1400 coffin were available , so deceased were carried on the *aqfas* and *darareeb* or shops doors<sup>72</sup>. In the same year the death rates reached about 10 to 20 thousands per day. The large number of deceased led to that some of which were carried on wooden slabs, wooden ladders, and wooden doors<sup>73</sup>. And sometimes the dead were carried by bare hands as a result of coffin shortages<sup>74</sup>.

Gravediggers were also in short supply, leading to mass burials in one large grave or trench<sup>75</sup>. These large graves each one could contain about 30 to 40 corpses<sup>76</sup>.

In the plague of 833 A.H. people were unable to bury their dead, so they spent the night with them in the cemeteries, meanwhile people were waiting for the diggers dogs attacked and ate some limbs of the dead<sup>77</sup>. Sometimes people died in the streets and there was no one to bury them and dogs ate them, as the dead' porters, and the dead washers, and the grave diggers were rare to find<sup>78</sup>.

in Jumādā al-Thānī 864 A.H. funerals were passed in the streets forming a train of coffins. while in the prayer the coffins were heaped above each other<sup>79</sup>. According to the large number during the Janza prayer or the funeral sometime the corpses could be changed, or people could take wrong corpse of theirs<sup>80</sup>.

### Sultans efforts in the times of epidemics

In case of epidemics or famines or any other crisis, Sultans were trying to help and solve these problems according to their ability and knowledge. For example in case of diseases and famines; in the time of El 'Adel Katbghua in 695A.H. hunger increased in Egypt , the Sultan El 'Adel Katbugha, ordered and the *Amirs* to present food to the needy people and every *amir* became responsible for a group of people's food.<sup>81</sup> and thus the poor people were relieved<sup>82</sup>. Or donating money to the poor such as in Zū al-Hijjah 881 A.H., when sultan Seif El Deen Qaitbāy dedicated one thousands dinar for the poor<sup>83</sup>. While due to the increasing of deaths in the time of El 'Adel Katbghua in 695A.H, that people were fall down dead in the streets, till about one third of the people of Egypt died and streets were full of decomposing corpses. So the sultan El Malek El 'Adel donated money to shroud from his own money about two hundred and seventy thousands dead person<sup>84</sup>.

Sultans could also help by opening *maghsalas* for helping to prepare the large number of plague victims to be buried. For example in the time of El Naṣer Moḥammed bn

ابن اياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج 3، ص. 287

<sup>71</sup> Robert S. Gottfried, *The Black Death*, P.39

<sup>72</sup> بن تغري، 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. 208

<sup>73</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج 10، ص. 195

<sup>74</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج 14، ص. 343

<sup>75</sup> Robert S. Gottfried, *The Black Death*, P.39

<sup>76</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج 10، ص. 195

<sup>77</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج 14، ص. 343

<sup>78</sup> ابن اياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج 2، ص. 129

<sup>79</sup> ابن اياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج 2، ط 1، ص. 359

<sup>80</sup> بن تغري، النجوم الزاهرة في ملوك مصر والقاهرة، ج 14، ص. 341

<sup>81</sup> المقرئ؛ تحقيق كرم حلمي، إغاثة الأمة بكشف الغمة، ط 1، ص. 109

<sup>82</sup> علي مبارك، الخطط التوفيقية، ج 20، ط 1، ص. 138

<sup>83</sup> ابن اياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج 3، ص. 124

<sup>84</sup> ابن اياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج 1، ق 1، ص. 390-389



Qalawoūn, during his third ruling time in 736 A.H. high prices and plague were spread in Egypt, causing large number of deaths which lasted for four months, so the Sultan decided to open a *Maghsala* (place for washing dead and shrouding them) for the stranger/ foreigner deceased<sup>85</sup>. The opening of maghsalas was not only exclusive in this previous example, there many maghsalas were opened by other sultans.

Sometimes when death increased sultans asked people to fast and to pray as a way to end the epidemic. In Rabī' al-Thānī 822 A.H. the high prices and the plague increased and wide spread. And about the half of people of Cairo and farmers were died<sup>86</sup>. The Sultan Al-Mu'ayyad sheikh asked people to fast three followed days and to go to pray in the mosques and to supplicate for ending the epidemic and the high prices. And they answered the sultan<sup>87</sup>.

Sultans and officials also tried to end epidemics through preventing bad behaviors, or releasing prisoners for example. Different official orders had been made such as Closing prisons and releasing all of the prisoners hoping to end the plague of 841A.H.<sup>88</sup>, while in Safar of 822 A.H., the *mohtaseb* followed all the places of *fasad*(corruption). He poured and broke thousands of wine jars, he also prevented women from mourning over the dead. he prevented drugs such as hashish, and prevented prostitutes<sup>89</sup>.

<sup>85</sup> ابن إياس، تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج1، ق1، ص. 471

<sup>86</sup> ابن إياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج2، ط1، ص. 45

<sup>87</sup> ابن إياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج2، ط1، ص. 46

<sup>88</sup> ابن إياس؛ تحقيق محمد مصطفى، بدائع الزهور في وقائع الدهور، ج2، ط1، ص. 182

<sup>89</sup> المقرئبي؛ تحقيق محمد عبد القادر عطا، السلوك لمعرفة دول الملوك، الجزء السادس، دار الكتب العلمية، بيروت-لبنان، 1997 ص. 495

### Conclusion

- People suffered in the times of epidemics, they have panicked and conquered by fear, nothing concerned people except death and its causes.
- The social responses and people reactions to epidemics included; Escaping, doing good such as donating, paying *sadqahas* and volunteering. also ignoring normal careers and turning to funeral ones (as *modra'*, and other worked as reciters, coffin bearers, or *moghaseleen*) was one of the reactions.
- Social activities were suspended or cancelled such as wedding or *moled* celebrations. Sometimes even *athans* and prayers were suspended in some mosques.
- Sultans efforts in the time of epidemics included, providing food, opening *maghsalas*, presenting money to shroud and bury poor deceased, closing prisons, releasing prisoners and sometimes sultans were performing prayers with people hoping to end the epidemics
- While official efforts included preventing bad behaviors such as pouring and breaking wine jars, preventing of hashish drug and preventing of prostitutes

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