

The Pharmacist Clemente Mifsud Bonnici and his views of the Plague of 1813

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Plague has been no stranger to the Maltese Islands since at least the 13th century. In fact it visited us no less than sixteen times from 1270 to 1945 — the last epidemic on record.

The most severe outbreak — in terms of mortality — was that of 1675-6 with 8569 to 11,300 deaths. The second largest was that of 1813 with 4,676 fatalities⁽¹⁾.

An unpublished account of the 1813 plague comes from the pen of the pharmacist Clemente Mifsud Bonnici who lived through it.

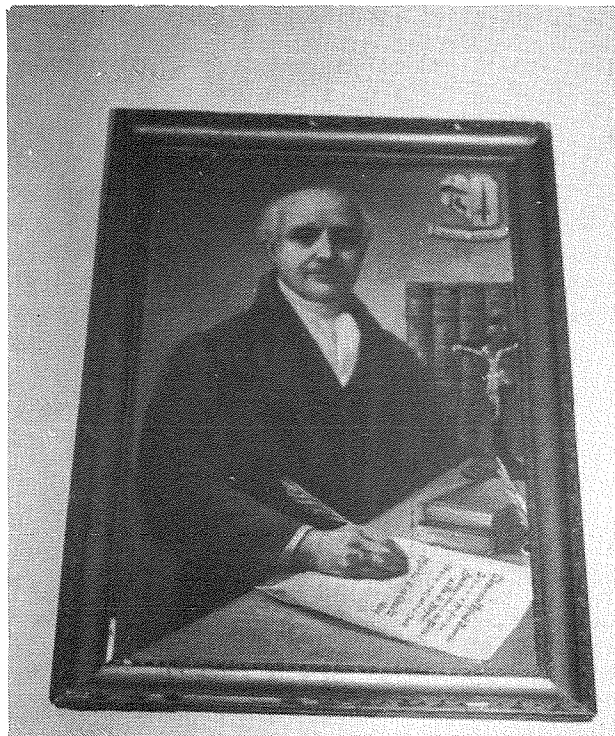
Biographical Outline

We know very little about Clemente Mifsud Bonnici. He appears in public life during the rising of the Maltese in the countryside against the French forces that occupied the Maltese Islands between 1798 and 1800. He was one of the three delegates sent by the provisional Maltese government of Mdina with a letter to the King of Naples asking him to send to Malta "a superior official to hold in check the inhabitants of the countryside".

Having completed this mission he was active at Zejtun where he was attached to the provisional hospital in that area, probably the so called "General Hospital", set up in the "Old Church of St. Gregory". He contributed four hundred scudi to this venture and undertook the treatment of the sick in this hospital. He claimed to have "cured them all" after discovering the cause of the "pestiferous illness" that prevailed in those days. He has, however, left us completely in the dark as to the nature of his aetiological discovery and as to the kind of treatment which he employed. His contemporaries referred to the illness as "tertian fever" (malaria?), "influenza" and "typhus" but as no description of the clinical picture has come down to us, it is not possible to identify the disease⁽²⁾.

Apart from engaging in these medical activities, he also joined the National Battalion as a combatant and took part in the fighting "on various occasions advancing towards the enemy lines and exposing himself to the cannonades and fusilades of the enemy while leading his men".

On the cessation of hostilities he asked government, on July 1801, to be granted some form of employment. His request was only partially met when he was assigned "provisional work" with the Master Mason Antonio Cachia; but we do not know what kind of occupation it was⁽³⁾.



Clemente Mifsud Bonnici

We then lose trace of him.

He styled himself *aromatar'o e dilettante di medicina* (a pharmacist and an amateur of medicine)⁽⁴⁾ but an inscription in a portrait of him⁽⁵⁾ describes him as *Dottore in Medicina*. There are divergencies also between this inscription and the documentary evidence regarding the dates of his birth and death. The portrait bears the words *nato nell'anno 1740* and *morto il 18 Ottobre 1830*; but the *Liber mortuorum* of the Parish Church of St. George of Qormi records his death as occurring on the 28th February 1836 in his ninety-ninth year of age which would indicate that he was born sometime during 1737.

He was the son of Joseph Mifsud and Olympia Bonnici and, at the time of his demise, was the

widower of Maria Teresa Falzon⁽⁶⁾. He died at Qormi and was buried in the Parish Church of St. George⁽⁷⁾.

Criticism of the medical profession

Clemente begins his manuscript with a bitter criticism of the medical practitioners of his days who, in his words, "either did not want — or else neglected — to treat an illness which is easy to cure because we know what causes it; but which, if neglected especially if it is contagious, extends its roots, spreads and augments the poison which is derived from a daily and extensive mortality. In such a case doctors deserve the title of murderers".

Further on he states that though "the doctor is not responsible (for the origin of the illness) nor is he expected to work miracles, he is still blameworthy on account of crass negligence. In fact had the doctors recognised that the cause of the malady was putrefaction many patients would have been cured and saved from the very beginning (of the outbreak) without so much commotion, without the great expenses incurred and without so many sad and dismal consequences".

He accuses the medical establishment "for failing to adopt the measures provided by medical art and, worse still, for abandoning the sick or treating them from a distance of fifteen paces from where (the practitioner) could not see and observe the signs of the patient's illness. Thus forsaking the sick to perish like animals without any succour was certainly a most cruel deed".

"How much trouble," he asks, "anxiety, expense, suffering, destruction by burning of clothes and furniture would have been spared if Maltese doctors were more adept and humane in diagnosing the illness, in seeking the best way of treating it, in not mistaking one malady for another and in refraining from labelling all ailments as plague? How can they be acquitted of their responsibility in their lack of care for the sick and from paying the debt that they owe to Divine Justice for their guilt?"

He condemned the conditions that prevailed at the *baracche* (wooden huts) to which the sick and their contacts were conveyed "under the escort of so many guards armed with swords, pistols and every kind of weapon... and then exposed to the heat of the sun and the bad air polluted with the transpiration from dead bodies: and making them lie on a thin layer of straw on the bare ground... To describe in detail

all that occurred in these *baracche* will fill a large volume".

He rebukes the sanitary authorities for isolating the sick and for restricting the freedom of movement of healthy people. He draws a comparison with the actions taken by the countries of the Levant to deal with the control of plague. "No doctors are required", he states "no precautions are taken, no expense is incurred, no separation (of the sick from the healthy) is resorted to... and yet experience has shown that in a very short time the plague, or to be more exact, the concentration of the contagion, comes to an end". And he further comments: "It is surprising that in the Levant not only no (sanitary) precautions are taken but the healthy continue to communicate and trade openly with the plague stricken and to make use of their clothes and linens".

Speculations regarding the cause of the malady

From the very beginning of the malady, Clemente was convinced that its cause was the "bad and putrid grain consumed by low class people and the poor". He argues that "putrid" food produces a "putrid" illness which if not treated, or which is inadequately managed, causes not only the death of the patient but also affects those exposed to the "heat" that exhales from the patient; in this manner the illness spreads resulting in a great disaster. He supports his thesis regarding the cause of the malady by calling to his aid the "evidence of authoritative physicians from Hippocrates onwards who affirm that bad bread always produces epidemics of putrid illnesses and, sometimes, even the plague".

He condemned the importation of grain from Alexandria (Egypt) where the grain could be spoiled by exposure to the "pestiferous lakes of the Nile". The consumption of bread made of putrid grain underwent fermentation, decomposition and putridity once it reached the stomach; this process produced such symptoms as headache, vertigo, delirium, bleedings in the skin and tumours and even worms which, feeding on the putrid material, sicken inside the intestines and kill their hosts". According to Clemente the highest mortality occurred among the low classes who, because of their poverty, had no choice and were constrained to eat bad bread that "was only fit for dogs and that, owing to its offensive smell would upset the stomach of an ostrich".

In opposition to the "contagious" theory of the malady upheld by the medical establishment he advanced the following two arguments. First, he claimed that during the French blockade of Malta (1798-1800), while he was with the Maltese insurgents in the countryside, he had treated a malady which carried off thousands of persons with manifestations similar to those of the 1813 epidemic. He decried the fact that no doctor would perform post mortems in an attempt to unravel the aetiology of the disease that ravaged the countryside during the blockade; and, therefore, not knowing the cause of the illness no remedial measures could be taken to fight it. "The heat", he states, "emanating from the patients infected others and the epidemic spread to such an extent that in one village alone there was a mortality of 15 to 20 persons a day. I mustered all my courage, asked and obtained permission to treat the sick and also to carry out necropsies which in fact I did. By the grace of God I thus succeeded in discovering the cause of the malady which was none other than one of "putridity caused by the consumption of bad bread". He, thereupon, applied the remedies suggested by his experience and by the help of the Almighty succeeded not only in curing the remaining patients without the loss of any of them but also in preventing attacks (in others)".

His second argument refers to the 1813 outbreak. "That the current illness", he observes, "is of an epidemic nature and not plague is proved by the fact that the military personnel remained exempt from the illness except for a few soldiers who had sold their wholesome bread and bought and consumed the (cheaper bad) bread of the poor. Apart from all this none of the thousands of seamen in our harbours who eat biscuits (and not bad bread), suffered the minimal ailment".

The end of the malady

Clemente ends his manuscript on a note of hope and almost euphoria for in the midst of so much suffering he discerns not only the intervention of the punishing hand of the Almighty for man's depravity but also His Divine Clemency through the appointment of a new Governor of Malta by His Britannic Majesty. The manuscript does not name him but the reference is to Sir Thomas Maitland who arrived in Malta in October 1813 and under whose administration Malta began, "step by

step to experience such relief that in the very brief period of two months, if not less, Valtta, Floriana, The Three Cities and seventeen villages became free of contagion". Such an improvement was attributed by Clemente to Maitland's "paternal care, under the guidance of our Divine Mother, for the relief of the indigent, for his stern instructions to the doctors as to how to deal with the malady... and to his personal surveillance over the moral and material conduct of all classes of the Maltese population".

In his final paragraph he erupts in a flourish of praise for the new Governor: "This man will be our comfort and our peace; under his aegis we shall be happy and contented. He shall be our guide, our leader and our father; and after God and our Sacred Christian Religion he shall be the culmination of our consolations. Let us praise God, therefore, for sending us this man. Long live His Britannic Majesty who appointed him! Long live our Governor. May God preserve him for ever to the shame of the malefactors who OPPRESS US!"

Clemente penned these last words in the ninth month of the outbreak i.e. January 1814. Plague, however, although on the decline had not yet ceased. In February it invaded Xaghra, Gozo, and until the beginning of March it still raged at Qormi. Free pratique for Malta and Gozo was ultimately proclaimed on the 8th September 1814.

Discussion

Clemente Mifsud Bonnici raised a number of questions which he leaves unanswered. What provoked his hostile attack on the Maltese medical and sanitary establishment? Did it stem purely from a divergence of medical views about the aetiology and pathogenesis of the epidemic as held by Clemente in contrast to the orthodox one sustained by his medical contemporaries? Was it motivated by humane sentiments of sympathy for the sufferings of the sick, or was the spirit of dissent the outcome of some personal issue?

Was his manuscript ever published? I have found no evidence that it was. So why was it written at all? Or if he meant to publish it, what kept him from doing so? Did hand-written copies of it come to the knowledge of the medical profession or of the government? Did it provoke the wagging finger of official disapproval? Or some form of penalty as envisaged by government for those who spread misled-

pestis). The microbe passes from one rat to another by the rat flea *Xenopsylla cheopis*. When feeding on an infected rat, the flea ingests the bacillus and then, feeding on a healthy rat, injects the bacillus in the blood stream of the latter. An epizootic among rats thus occurs. When the plague-stricken rats die, the flea harbouring the *Yersinia pestis* in its stomach, turns on human beings as its new hosts and injects them with the bacillus.

In human beings the bacillus may travel via the lymphatics to reach the lymph nodes in the armpits, neck and groins. The nodes become inflamed and swollen forming an abscess called bubo — hence the name of bubonic plague; or else it may invade the blood stream producing bleedings of small blood vessels on the skin manifested as black or blue blotches or patches. This is the septicaemic form of plague.

Patients with either bubonic or septicaemic plague may develop pulmonary lesions if the bacillus lodges in the lungs causing a rapidly fatal pneumonia (pneumonic plague). This is the most infectious type of plague as it spreads from man to man directly by means of droplets from the coughing and sneezing of the patient⁽¹⁰⁾.

Nothing of this was known to Clemente and to the medical profession in 1813. Interestingly enough, however, some medical observers, including Avicenna or Ibn Sina (980-1037 A.D.), had noted that a massive mortality among rats heralded an outbreak of plague among humans; while another commentator of the 15th century stated that plague was brought about by fleas and vermin⁽¹¹⁾. Centuries later, during the 1813 plague of Malta, some medical practitioners observed that people living in cellars and ground floors of houses were more often attacked than those who occupied the upper floors so that the plague became known as the disease that "seldom went upstairs". The real significance of this observation, however, eluded them i.e. that the plague-carrying rats with their fleas were more likely to inhabit cellars and ground floors than the higher parts of the house⁽¹²⁾. Thus from the 10th to the 19th centuries there was a failure to perceive the link between the rat and its flea and an outbreak of plague among humans.

At the time that Clemente was penning his manuscript there were two main theories concerning the aetiology and dissemination of plague: (a) the contagion theory which held

that the disease was spread by contact with plague-stricken persons or with their clothing or other personal effects; this was the general medical thinking in Malta; and (b) the miasma theory which attributed plague to pollution of the air by foul odours and decaying matter.

Clemente dissented from both these views and attributed the cause of the plague to "the bad and putrid grain consumed by low class people and the poor".

As we have seen, subsequent medical progress discredited not only the long-held theories of the orthodox medical establishment but also the over-confident claims of Clemente so that both exponents were proved wrong. We must not, however, judge their failures, in the first decade of the 19th century, by the hindsight of the achievements registered in the last decade of the same century when the role of the microbe, the rat and the flea in the causation and transmission of plague became known. Thus while Clemente's manuscript falls completely short from the scientific angle, it is not without merit. It is in fact a vivid evocation of the psychological impact and of the feelings of frustration and despair experienced by a helpless community threatened by a formidable but unseen enemy that lurked everywhere and relentlessly struck at life and disrupted the social and economic organization of the Maltese Islands. Another value of the manuscript is that while it shows that its author was mistaken scientifically, it gives him stature for his boldness in breaking away from the orthodox — and equally false — thinking and convictions of his medical and administrative contemporaries.

References:

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- (3) Mifsud, A. *Origine della sovranita' inglese su Malta*, Malta, 1907, pp. 204, 263 and 268.
- (4) Ms. 1318, no pagination, National Malta Library.
- (5) In the possession of the Hon. Dr. Ugo Mifsud Bonnici LL.D.
- (6) Death certificate, St. George's Parish Church, Qormi.
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- (8) I am indebted to Mgr. Annetto Depasquale, Vicar General, and to Canon Carm. Aquilina, Archpriest of St. George's Parish Church, Qormi, for a copy of the Death Certificate.
- (9) Cassar, P. *op. cit.*, p. 179.
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- (11) Gottfried, R.S. *The Black Death*, London, 1986, p. 6.
- (12) Leavesley, J.H. *Medical By-Ways*, Sydney, NSW, 1984, p. 121.
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- (13) Gottfried, R.S., *op. cit.*, p. 110.
- (14) Cassar, P. *op. cit.*, p. 186.