History of leprosy in Malta

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Abstract

Leprosy was always viewed with aborrhence requiring segregation of the unfortunate sufferers. The policy of segregation in dedicated leprosaria, initially introduced during the Medieval Period, was re-adopted during the late 19th century and persisted well into the 20th century. The management of lepers in Malta followed similar principles as elsewhere.

Key words

Leprosy, Malta, history

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Introduction

Leprosy also known as Hansen's disease, is a chronic granulomatous disease caused by the bacterium Mycobacterium leprae and affecting the peripheral nerves and mucosa of the upper respiratory tract; skin lesions are the primary external symptom. Left untreated, leprosy can be progressive, causing permanent damage to the skin, nerves, limbs and eyes. The disease has a long history in the Mediterranean Basin with the first clinical description being possibly that of the 16th century BC Ebers Papyrus. Archaeological evidence confirms the presence of the disease in Egypt during the 2nd century BC. The disease was subsequently spread throughout the Mediterranean. The first accurate description of the disease was written by the Greek physician Galen of Pergamun in 150 AD.

There is no evidence to date of the presence of the disease in the archaeological record of the Maltese Islands. Similarly the few scanty Classical texts make no reference to the infection. Based on linguistics, the disease in Malta probably has very ancient origins. The Maltese vernacular term for leprosy is *Ġdiem* (leper = *mġiddem*); a word that originates from the Arabic جُذَام = *jozam* (leper = مجذوم = *majzoon*). The Maltese Islamic influence is known to have lasted from 870-1249 AD. In 1240, Muslims accounted for about 40% of the Maltese population. There is no doubt that leprosy was present in the Mediterranean during the Medieval Period. The Crusades, initiated in 1099 in an effort to recapture the Holy Land from the Seljuk Turks, established links with the Eastern Mediterranean lands helping to further spread the infection to Southern and Central Europe. This link persisted until the expulsion of the Christian forces from Acre in 1291.

In nearby Southern Italy, Emperor Frederick II of Sicily in 1226 accepted the establishment of a *magister infirmorum Ecclesaiae S. Lazari* in Capua by the nobleman Lazaro di Raimo. By 1273, five lepers were being tended by at this hospital managed by the Order of St. Lazarus – a hospitaller and military Order that saw its origins in the Holy Land whose main brief was to care for lepers. In 1265, Charles I adopted Pope Clement IV's Bull of August 1265 and ordered that all lepers in his domain were to be placed under government of Order of St Lazarus.[1] There is no definitive evidence that the Maltese Islands were directly influenced by these Royal edicts; however the Islands were bound by the same laws and regulations appertaining to nearby Sicily. It has been suggested that the Medieval *hospitalis Sanctj Franciscj*, situated outside the Medieval walls of Mdina, had been initially established as a leprosarium.[2] No documentary

proof has however been found to substantiate this assertion. The hospital is known to have been definitely in existence by 1372 and probably by 1299. The hospital was managed by members of the Franciscan Order who included the care of lepers in their vocation. By 1494, the hospital documentation makes no mention of lepers but refers only to "*poveri abitanti*".[3] However leprosy had become less of a problem in Europe after the Plague epidemic of the 14th century and the lack of specific mention in the 15th century documentation does not preclude the use of the hospital facilities for lepers in earlier centuries. The first documented case of leprosy termed *erga corpore morbo lepre* is said to have affected a Gozitan woman Garita Xejbais who bequeathed land to the Church in 1492. In contrast to what had occurred in earlier centuries in Europe, where lepers were considered "the living dead" and stripped of all legal rights, the 1492 document suggests that lepers in the Maltese Islands during the 15th century retained their legal and inheritance rights.[4]

Hospitaller period

The 16th century was to see the arrival of the hospitaller Order of St. John to the Maltese Islands. The Order was familiar with leprosy having seen and suffered from its ravages in the Holy Land. During the reign of Grandmaster Hugues de Revel (1258-1277), the Order had established the rule that "if in any country there be a Brother who is a leper, he may not wear the Habit from that time forward, and may not come among the Brethren, but he should be provided with food and clothing".[5] The Order of St. John, in addition to hospices and charity houses, also ran leprosaria in a large number of places in Europe, albeit mostly catering for the pilgrims or travelers and the poor.[6]

In Rhodes, the Order had regulated stringent public health laws to limit the spread of the disease in the *Domini Sanatatis*, promulgated during the reign of Grandmaster Emery D'Amboise (1530-1512). The "sick of Saint Lazarus" were beneficiaries of special charities from the Order and cared for in their homes. These regulations debarred infected individuals from having any social intercourse with healthy ones who in turn were prohibited under penalty of a hefty fine from receiving any goods from lepers. Furthermore lepers were precluded from practicing certain occupations unless licensed by the sanitary authorities who ensured that material goods belonging to lepers was not physically passed on to healthy people.[7] These regulations suggest that while lepers were still considered a threat to the community, they were not considered sufficiently infective to require seclusion in designated leprosaria. When admitted to the *Sacra Infermeria*, leprous individuals were nursed in cubicles.[8] These sanitary regulations were adopted in the Maltese Islands after the arrival of the Order in 1530.

The first recorded case of leprosy in Malta during the Hospitaller Period involved a Dominican friar who died in the Rabat convent at Malta in 1630. The documents relate the purchase of a slave by the Dominican Priory during the previous year to care for the sick friar.[9] The second half of the seventeenth century saw an increasing preoccupation with the disease. The infectivity of the disease was well recognised and concerns about the fate of the sufferers were voiced by the *Gran Consiglio* of the Order in 1659.[10] In 1679, the *Commissione* set up to regulate the management of the hospital services proposed that lepers should be given financial aid and treated in their homes. Foreign sufferers with leprosy were to be admitted to the *Falanga* of the *Sacra Infermeria* and isolated from the other regular patients. Before admission the patient was to be carefully examined by the hospitaller, the infirmarian and the *prud hommes* to confirm the diagnosis.[11,12] The *Status Animarum* of 1687 records only one 30-year old female living at Qormi suffering from leprosy in a population of about 45288 (prevalence 2.21 per 100,000 population) with *maritus non cohabitat*. This registration confirms that lepers were managed in isolation in the community rather than designated leprosaria.[13] This sole record in the *Status Animarum* does not preclude the presence of other afflicted individuals, particularly since Dr. Giuseppe Zammit is reported to have in 1687 described five cases to the *Academia Medica*.[14] Barbers in 1702 were warned of the personal danger when attending sufferers from the disease.[15] The 1725 *Sacra Infermeria* regulations provided a daily allowance to sufferers.[16] Giuseppe Demarco further discussed this skin infection in a chapter of the treatise *Tractatus affectuum cutaneorum*.[17] Further reported cases included a nun of the Monastery of St. Catherine, Valletta who in 1770 "developed ulcers and fever and also became leprous" and subsequently succumbed to the disease; and the leprous son of Turkish official who in 1771 arrived in Malta from Turkey on his way to Marseille in search of a cure.[18]

Nineteenth century

A number of solitary cases of leprosy were described by the medical community in the early decades of the nineteenth century. In 1808, 3 cases (1 Maltese) were described by Dr. Saydon among the crew on a Turkish ship. Cases of leprosy were also discussed during the meetings of the *Accademia Medica Maltese* that functioned until 1837.[13] These probably refer to the cases described in later reports attributable to Prof. F.G. Schinas dated 1835 and to Dr. Gravagna dated 1837. During the period 1839-1858, seven cases – four males and three females – were reported to have succumbed to this infection.[19,20] In spite of these case reports, in 1862 in replying to a questionnaire sent by the Special Committee of the Royal College of Physicians, leprosy was stated to be non-existent on the Islands, though the possibility of the disease being present but unidentified was accepted.[21] By 1874, Malta included among the seats of leprosy, though noted to be "not commonly encountered".[22] Further cases were reported by Dr. G. Gulia and Dr. I. Sammut.[19,20] The latter half of the nineteenth century saw a marked increase in the number of affected cases probably resulting from increasing contact with North Africa through returning migrants, refugees and increased shipping. The stationing of a large detachment of Indian Troops at Imriehel in 1878 may also have been contributory since the earliest statistics of origin of leprosy cases showed that the majority of local lepers came from villages in

the vicinity.[14]

The gradual and steady increase in the number of leprosy cases stimulated the authorities to appoint in 1883 a committee composed of seven doctors to investigate the epidemiology of the disease and suggest methods of control. The main result of the Committee's work after examining 30 cases was the decision to introduce compulsory segregation, even though they believed that the disease was hereditary rather than contagious.[23] A population survey was conducted in 1890 to assess the size of the problem. Only 69 known cases of leprosy were identified suggesting a prevalence rate of 42 per 100,000 population; eight of which lived in Gozo – four from Nadur. Only eleven cases were in an advanced stage of the disease and had admitted themselves to the Asylum for the Aged and Incurables, commonly known as the Poor House. The greater number of cases in Malta came from rural areas, mainly Qormi and Mosta. Only one came from Valletta.[24]

Twentieth century

As a result of the 1883 committee's report, the Council of Government in 1893 issued the Lepers Ordinance No. VII entitled *An Ordinance for checking the spread of the disease commonly known as Leprosy*. The ordinance provided for the compulsory notification under pain of legal penalties of every case of leprosy immediately it was recognised. Cases confirmed by the newly established Leprosy Board, composed of five doctors, were to be immediately segregated in a Leprosarium for as long as they were deemed a public danger. An ad hoc Leprosarium was constructed near the Poor House, the male section being occupied in 1890, while females were admitted after 1912.[14] The female wing of the Leper Hospital was completed in April 1911 and the new chapel of the hospital was blessed by the Vicar-General on the 1st October 1911.

The building consisted of a central block with a main entrance hall leading to the administration's offices, a chapel, the residential quarters of the three nursing Sisters of Charity and the chaplain, the dispensary, stores, kitchen and laundry. On either side of the entrance hall were two wings – one for males and one for women. The wards accommodated a total of 90 male and 70 female patients. The total hospital male and female population in 1911 however amounted to 73 inmates.[25] The hospital population reached its high-water mark in 1917 with 114 inmates (71 males; 43 females); suggesting a prevalence rate of 49 per 100,000 population. The disease thereafter showed a progressive decline (Figure 1).[26]

Concurrently with the opening of the Leper Asylum, special regulations were issued to ensure and maintain complete segregation from the outside community. The severe restrictions imposed by these regulations were greatly resented by the lepers so that the first five or six years were marked by incessant complaints, frequent disturbances, escapes from the Asylum, and attacks on the personnel. The first disturbance occurred in May 1900 - only five months after the first patients were received. Fifty-four male lepers overpowered their attendants and found their way out of the Asylum. Another disturbance occurred in September 1900. Order was restored on both occasions after intervention by the police. In view of these repeat disturbances, a detachment of police were retained in the Asylum to maintain order. This detachment was removed in 1903 when the hospital attendants were given executive police powers. The lepers settled to a normal life in the hospital by 1907, though complaints continued to crop up. While the 1893 Ordinance did not allow the lepers to leave the Asylum except to visit sick family members or to emigrate abroad, individuals were granted special leave of absence for a few hours for domestic, legal or financial transaction which required their presence. By 1901 inmates were being allowed to go out accompanied two at a time for walks in the country. This was extended in 1902 to a drive in a cart, cab (after 1910) or bus (after 1930). By 1907, the inmates appeared to have accepted the restrictions.[14]

In 1916 as a result of complaints regarding the food and clothing supplies, the Governor appointed a Board "to inquire into the discipline of the Leper Asylum, and to recommend efficient measures for its proper maintenance, and to ascertain whether the inmates had any substantial grounds of complaint, and to suggest the means of removing any grievances that were well founded". The board reported that the grievances were generally unfounded and were the result of the restrictive circumstances. It also opinionated the low degree of communicability of leprosy. A second Committee was appointed in 1918 "to study de novo the question of the seclusion of lepers enforced by the law". This Committee maintained that compulsory segregation was still necessary, but emphasised that patients should have the right to all the necessary comforts and the best therapeutic treatment. As a result of this report, an amended *Lepers Ordinance* was published in 1919, while the hospital regulations were revised. The new regulations required internment of the leper only seven days after confirmation, and allowed for the eventual discharge of the patient when the disease process was considered arrested and there remained no further risk to the public. The Report also gave an estimated prevalence of leprosy as 47.2 per 100,000 population.[27]

As a result also of the 1919 Committee's recommendations, a number of innovations were instituted to alleviate the lepers' situation in the Asylum. The patients were given the facility to be usefully employed for domestic work and general maintenance in the Institution, while the surrounding grounds were given over for poultry farming and cultivation by the inmates. The increasing useful activity was well received by the inmates. Furthermore a common-room with indoor games and reading material was made available, while entertainment was regularly provided. The realisation and acceptance that leprosy had a very low infectivity rate allowed the introduction after 1929 of family visits by the inmates accompanied by an attendant.[13] During the 1930s, inmates of the leprosarium whose families resided in Gozo, generally averaging 11 males and 4 females, were transported to the Hospital for Infectious Disease in Gozo for a few days once every quarter for an aggregate period of about 29 days. During their stay, they were housed in the ground floor of the hospital.[28]

Further amendments to the Lepers Ordinance were made

in 1929 to enable the examination of contacts of diagnosed cases, while a new leprosarium was opened in the old Married Quarters at Fort Chambray in Gozo in 1937. In the same period the Lepers Hospital, previously managed in conjunction with the Poor House, was given an autonomous management; while the hospitals name were eventually changed to Saint Bartholomew Hospital (Malta) and Sacred Heart Hospital (Gozo) to remove the stigmata associated with the disease. The low infectivity of the disease was eventually accepted and the segregation policy was removed in 1953 when compulsory internment was abolished except under special circumstances.

St. Bartholomew Hospital in 1956 was described as an old but fine and spacious building with a bed complement of 118 beds. However during 1953-54, it only housed an average of 74 patients. The hospital had better amenities than many of the other hospitals in Malta. The wards, corridors and gardens were noted to be spacious and pleasing. There was an entertainment hall and efforts were being made to organize shows and outings for the inmates. The hospital was managed by one medical officer, the Medical Superintendent, who was relieved by one of the doctors at contiguous St Vincent de Paule Hospital on his off-days.[28] The Sacred Heart Hospital in Gozo, situated in the old Married Quarters at Fort Chambray, had a bed complement of 27 beds. Thirteen men and two women, originally from Gozo, were transferred to this hospital from Malta in 1937.[30] The Gozo hospital closed down in December 1956 due to lack of patients.[29] The number of known lepers in the Maltese Islands in 1957 was 151 (a rate of 64 per 100,000 population).[31]

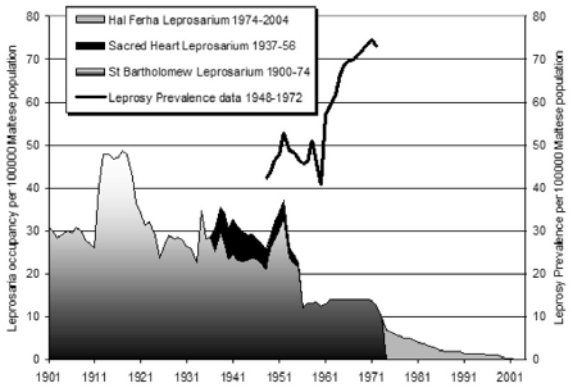
The decrease in the number of patients allowed for the eventual transfer of St Bartholomew Hospital to Hal Ferha Estate in Gharghur (an abandoned gun battery) in 1974. St Bartholomew Hospital was renamed Sptar Ruzar Briffa in 1973 to commemorate the physician who had been a torch-bearer in the control of leprosy.[32] After its closure as a leprosarium, it was taken over to augment the geriatric services at St Vincent de Paule Residence.[33]

Twenty-two residual cases were transferred to Hal Ferha Estate in December 1974. Each resident was provided with a self-contained flatlet having a sitting-bedroom, a kitchenette, and bathroom. They were further allotted land wherein to grow crops and carry out husbandry to generate income. Their medical needs were cared for by a nurse-on-duty and a doctor-on-call. They received six-monthly reviews by the leprologists. By 1987, only six residents (average age 67 years) remained. Some of these had been for almost fifty years in residential care. By 1994 only five residents – two females and three males – remained in the leprosarium. In 2001, the only remaining inmate was transferred to St. Vincent de Paule's geriatric hospital and Hal Ferha Estate was closed down.[34]

The medical authorities in Malta have always been on the forefront in the treatment of leprosy. At the time of the Asylum's opening in 1900 until 1915, the crude Chaulmoogra oil constituted the only anti-leprosy treatment. This was poorly tolerated by the patients and treatment was often refused and ineffective. After 1918, a number of preparations were made available with varying success.[15] The development of antibiotics led to experiments with the use of these substances in the management of leprosy. By 1962, it was observed that multiple drug therapy could be efficacious. By 1962, it had become evident that the combined antibiotic therapy protocol was the most efficacious.

In June 1972 a Leprosy eradication project was initiated in Malta estimated to include about 300 patients. This project was jointly funded by the Sovereign Military Order of Malta (SMOM) in collaboration with the German Leprosy Association and the Malta Government. The project was eventually approved by the World Health Organization. The project was led by Professor

Figure 1: *Hospital Leper Population*
(Source: Annual Reports of the Department of Health)



Enno Freerksen, Director of the Borstel Research Institute of Hamburg. Two Maltese physicians – Dr. George Depasquale and Dr Edgar Bonnici – were enrolled in the project, aided by Dr Anton Agius Ferrante.[6] The new treatment regimen chosen was based on the Freerksen's trial which combined treatment with rifampicin, isoniazid (INH), prothionamide, and diaminodiphenylsulfone (DDS). The Malta Project was concluded formally in December 1999, and there have been no case of endemic leprosy reported since.[35] The Multiple Drug Therapy regimen as pioneered in Malta, however using instead a combination of dapsone, rifampicin, and clofazimine, is still the best treatment for preventing nerve damage, deformity, disability and further transmission. Leprosy is now considered "extinct" on the Maltese Islands with no cases being reported in the Maltese native population. However, vigilance is still required in the light of the present problem of irregular immigration from the African coast from regions where the disease is still prevalent.

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