

# 1 HISTORICAL PREAMBLE

## 1.1 Historical Background

When looking at the area covered by this study, the way in which it was studied, and the history of the people, it is wholly appropriate to speak also of the heritage of medicine in the Arab world.

The formal study of medicine as a science was developed by the Sumerians and Babylonians five thousand years ago<sup>1,5</sup>. Medicine flourished in the Middle East and continued to evolve until well into the Middle Ages. Islam also encouraged scientific and medical endeavours, and was practised by physicians who were outside the immediate control of the mosque, in contrast to the view prevailing in Europe for several centuries where medicine was in the hands of the priests. Despite that, the practice of medicine during the early part of Islam was influenced by the sayings (Hadith)<sup>1</sup> of the Prophet Mohammed and of these, the most relevant to this study must be: - *“Science is the remedy for the infirmities of ignorance, a comforting beacon in the height of injustice. The study of the sciences has the value of a fast; the teaching of them has the value of prayer; in a noble heart they inspire the highest feelings and they correct and humanise the perverted”*<sup>206</sup>

In Iraq, the Baghdad school of medicine was based on a truly scientific spirit. To go from the known to the unknown, then from effects to causes, and only to admit as true what had been demonstrated by experimental work, were the principles taught by the masters<sup>1</sup>.

Medical education and practice were initiated in hospitals. These were built, endowed and administered by the state. There were regular inspections and certification. In the city of Baghdad a census of all practising physicians was made in AD949 on the order of the caliph. There were 860 physicians, excluding those working directly for the government service. They were re-certified and licensed, and licenses were only given after an examination<sup>1</sup>.

There were also out-patients departments where treatment and prescriptions were dispensed, usually free, for the poor<sup>68</sup>.

The concept of hospitals spread throughout the Arab and Muslim world<sup>6</sup>. Indeed, Tamerlane the conqueror was so impressed by what he considered to be the basics of Arab civilization that he ordered every town in his dominions to be provided with 'a mosque, a school, a serai (ie an Eastern quadrangular inn), a bath and a hospital'.

Another particularly good example of this deeply civilised approach, and one which is especially relevant to the current study, was that taken by Sinan ibn Thabit who spent much of his life as a travelling physician, working with and organizing the mobile hospitals that were so important both to Arab military and village life. During epidemics they were particularly valuable; fully equipped teams of doctors and orderlies would be rushed to stricken areas to give advice on preventing the spread of the disease as well as providing actual treatment.

A personal letter written to Sinan ibn Thabit by a minister in Baghdad is very enlightening<sup>6</sup>.

*"I have been thinking of the lot of the prisoners who, on account of the greatness of their numbers and poorness of their lodging, are exposed to innumerable diseases. .... There is thus an opportunity for you... to set aside for them certain physicians who may visit them every day and provide for them remedies, medicine and all medical requirements".*

On another occasion the same minister writes of outlying villages that could not support a doctor:

*"I have considered the case of the inhabitants of the villages of al-Sawad and others which are without a doctor and may have need of one if the inhabitants are ill. Take steps therefore.... to delegate certain physicians, equipped with a supply of medicines to go to al-Sawad and bid them stay there as long as may be necessary for the treatment of the sick of each village".*

Both the concept of hospitals and attitudes had great influence<sup>6</sup>, they deeply impressed those Westerners taking part in the Crusades and one of the orders of Knights, the Knights Hospitallers, also known as the Knights of

Rhodes and Knights of Malta, established their hospitals on the model of that founded by Saladin and even copied the Arab mobile hospitals with their hospital ships. They set new standards for medical care in the West and their clean, airy hospitals, isolation wards, knowledge of medicines and system of using metal utensils and cleaning them with boiling water aroused admiration for many centuries.

It was the availability and use of such a facility at the St John's Ophthalmic Hospital that allowed this current work to be undertaken. It was, thus, a case of history repeating itself in that very part of the world from which it originated.

## **1.2 Care for the Blind**

Although national and international programmes for the prevention of blindness are relatively new, interest in, and care of the blind has a much longer history<sup>2</sup>. Egypt, with its huge and ever growing population, is one of the principle countries in the region under study and in this respect it has a long history of eye care. The Emperor Hadrian of Rome, known for his reforms, praised the welfare system introduced by the Egyptians whereby a large number of their blind were gainfully employed and independent. In the 10<sup>th</sup> century AD the University of Al-Azhar in Egypt established the first educational programme for the blind. This was a 12-years course which required memorization of all material.

In respect of medical care for the blind, the Kalaun Eye Hospital was opened in the 14<sup>th</sup> century by Sultan El Mansur Kalaun making it the second oldest eye hospital in the world<sup>3</sup>.

In terms of reading and writing facilities for the blind, there is evidence that Didymus the Blind, born in 309 CE, became a teacher, theologian and author at Alexandria and developed his own tactile reading system<sup>4</sup>.

The first recorded inventor of a method of reading and writing for the blind, preceding Braille by 800 years, was the Andalucian Scientist Ahmed bin Mohammed bin Abdul Warith at the end of the 9<sup>th</sup> century (cited by Imam ibn Hazm in his work entitled 'Al Takrib li Had Al Montaq' (roughly translated as 'Bringing Closer the Limits of Logic - reproduced from Arabic). This relied on raised letters produced by the use of bitumen<sup>5</sup>.

The modern adaptation of Braille being adapted to Arabic is credited to Dr Onsy in 1874 who had opened a school for the blind in Egypt <sup>4</sup>.

In Europe <sup>2</sup> the history of the care of the blind dates from the Hospice des Quinze Vingts in Paris founded by Louis IX in 1260 who, we are told, collected '300 (15x20) blind persons – Crusaders and others'. The inmates of this institution were encouraged to beg for their living.

In succeeding centuries numerous other smaller hospices were established in other European countries and brotherhoods for the welfare of the blind were founded in many cities. These formed the earliest voluntary agencies for the welfare of the blind.

They were followed by schools for the blind dating back to Vienna (1784) and subsequently Liverpool (1791), Berlin (1806), Milan (1807) and Amsterdam (1808).

In the Middle East <sup>4</sup>, a school for the blind was opened in Beirut (then Syria) in 1868 and from 1893 various schools for the blind were opened in Palestine, very often by religious organisations.

### **1.3 St John's Ophthalmic Hospital, Jerusalem**

The centre from which this work was undertaken is the St John's Ophthalmic Hospital (SJOH) in Jerusalem (Plates 2 and 3), and the area covered by the research is the occupied West Bank and Gaza Strip.

The hospital has a long and illustrious history <sup>62</sup> from its establishment in 600AD (Plate 1) when it was founded as a hospice for pilgrims in Jerusalem and known as the Order of the Hospital of St John of Jerusalem. It was not until 1882 however that the Ophthalmic Hospital came into existence under the aegis of the Order of St John and at that time one of its essential functions was research on trachoma. A study of the Literature Search on Causes of Blindness will give an idea of how important this was.

This hospital, which was damaged and partially blown up in the 1914-18 war, grew and gained the confidence and respect of all the inhabitants of the Middle East. Unfortunately, again in 1948 the hospital was badly damaged and lay desolate and isolated from the Arabs who formed the majority of its patients. The following year, the Order opened up a temporary ophthalmic hospital in the Old City in Strathearn and Watson House.

In 1956, a site was purchased on the Nablus Road outside the Old City and the old building on the site was demolished. The research institute was built and a team of scientists from London commenced work (Plates 2 and 3).

In the late summer and early autumn of 1956, further political problems led to the withdrawal of the scientific staff and the British medical nursing staff who were unable to return until December of that year (Underhill 1957). The Outreach Programme was launched in January 1982. Two vans were provided and equipped by the Eyesight Universal of Canada and the Arab British Chamber of Commerce in London. Visiting staff consisted of a surgeon, two nurses, a technician and a driver. A complete survey by Sir Stephen Miller, then the Hospittaler, in 1982 <sup>45</sup> concluded that *'one fourth of the patients who seek care at your Hospital in Jerusalem have a blind eye. One patient in every six who walks through the doors of your Hospital in Jerusalem is blind in both eyes'*. This report also shed light on fascinating historical insights; one of these includes the reason behind the deep resistance on the part of many Arab villagers to the wearing of spectacles. The writer reported being told by an elderly village elder that *'The Turks would interrogate anyone with glasses since they feared the educated classes'* <sup>45</sup>.

When speaking of the mobile outreach unit, it is of interest to note that Sorsby <sup>64</sup> proposed the use of mobile medical units run by the medical officers for the Colonies; he spoke of the only ophthalmic one being in Cyprus. He noted, however, the provision of an Albion lorry and Eccles trailer supplied to the Palestine Government in 1933 and the list of drugs and equipment which would be used for an Army mobile ophthalmic section of a general hospital. Whether this was ever put into action we have not been able to ascertain, but it is interesting to note, as we have done earlier, that a simple idea to deal with far-flung communities, and proposed centuries earlier, was brought back into use.

This study is indebted to the Order of St John for the provision of funding and facilities, including the mobile outreach unit that allowed this study to be completed.