

a brief history of medical record - keeping salvu vella

The records of Medical observation, facts and developments, form the basic structure upon which the History of Medicine has been written. Some form of such records date back to early antiquity. Polythroned Murals have been found in Stone Age caverns, and silhouettes depicting trephining of the skull and the amputation of fingers appear on the walls of Paleolithic caverns in Spain. These date back about 2500 B.C.

These early records were primitive in form and essentially descriptive, but they have put on record the Medical and Surgical achievements for generations to follow. Though not strictly records in the modern sense of the word, they are mute evidence that the authors of those days kept some form of records of the treatment that their patients used to receive.

EGYPTIAN PERIOD

According to Castiglioni and the noted Egyptologist James Henry Breasted, the first real physician on record in Egypt was Imhotep, who lived in the Pyramid Age (about 3000-2500 B.C.). He was Grand Viceroy, Chief Architect and Royal Medical Advisor to a Pharaoh of the twenty-ninth century before Christ. He was worshiped as a medical demigod (as was Aesculapius at a later period in Greece) and regarded as a patron god of medicine as his fame spread abroad.

The authorship of the famous Edwin Smith Papyrus is sometimes attributed to Imhotep. This papyrus is one of the most valuable ancient medical documents that dates back to 1600 B.C. and is believed to be a copy of an earlier original, but unfortunately neither the author nor the copyist is definitely known. Edwin Smith (one of the earliest students of the Egyptian Script) recognised it as a medical treatise. It deals with forty eight cases of Clinical Surgery, in a roll over fifteen feet long by about fourteen inches wide, and made up of twelve sheets written on both sides. It is at present the property of the New York Academy of Medicine. Another earlier medical treatise written somewhat later (about 1550 B.C.) is also inscribed on a sheet of papyrus sixty

five feet long and about twelve inches wide. It records careful observations on a number of diseases and describes several remedies.

The papyrus known as the Ebers papyrus belongs to a period antedating the exodus of the Israelites from Egypt. It was discovered near the legs of a mummy in a necropolis near Thebes in 1872 and up to the Second World War was the valued possession of the University of Leipzig. Both this and the Edwin Smith papyrus are considered to be original writings but in fact form a compilation of medical material belonging to a much earlier period.

GREEK PERIOD

Greek medicine has been primarily influenced by contributors from older civilisations such as those from Egypt, Babylon and Assyria. Apart from the influence which Greece had on Surgical thought the major credit to Greece lies in the introduction of a scientific approach to the healing art.

Medicine was cultivated by the Asclapiadae, an order of Greek physicians that traced its origin to the Greek god of medicine, Aesculapius. They built temples for the care of the sick (known as Aesculapia), and these were in existence as early as 1134 B.C., at Epidaurus, a seaport west of Athens. The names of patients together with their Medical Histories and short comments were found inscribed on the columns in the ruins of these temples. This type of record approaches very closely in form and character, the medical records as kept today. Such documentation both in Greece and Egypt was accessible only to persons authorised to examine and study them.

The year 460 B.C. marks the birth of Hippocrates, the father of medicine. Hippocrates was thought by his countrymen to be lineally descended from Aesculapius. It is said he drew the elements of his medical knowledge from the collection of reports and cases collected in the Aesculapium at Cos his birth place. It is interesting to note that these reports (although now over 2000 years old) are described in such detail by Hippocrates. Whether or not they were intended to be records for posterity

is not definitely established, but many of the observations and data that are set out are as valid today as they were then.

GRECO-NORMAN PERIOD

During the time of Marcus Aurelius, about 600 years after the Hippocratic era, Galen of Pergamon appeared in Rome. He acquired fame by curing the Emperor. Galen was born in A.D. 130 probably not in the city itself but on a estate in the suburbs. He belonged to distinguished family; not only his father but also his grandfather were educated people. His father Nicon though an architect, was also a mathematician and artisan, besides a wealthy land owner. Galen had the advantage of receiving his education in the great city.

Galen wrote innumerable manuscripts, being the first to show that the arteries contain blood not air. His description of biliary colic is as precise as one would expect today.

During this period, the Romans issued the "Romana Acta Diurna" to be posted in prominent places for reading. In this publication the important events of the time were given it included also items of medical character.

BYZANTINE PERIOD

The Byzantine period lasted over one thousand years. With the decline of the Greek and Roman civilisations very little progress was made in the recording and preserving of medical records. At that time work of this kind was carried out by conscientious monks who copied by hand the writings of Hippocrates, Celsus, Galen and many of the earlier physicians, thus also preserving the art of medicine.

MOHAMMEDIAN PERIOD

With the rise of Islam the whole Near East was dominated by the Arab conqueror. It was during this period that Rhazes practiced in a hospital in Persia and Bagdad. He wrote large volumes dealing with medical subjects. Another noted physician by the name of Avicenna was well known during this century. He lived in the Tenth Century when Arabic Culture was at its height. Avicenna based his writings on the work of Hippocrates and these were combined with the information gathered in his journeys as an itinerant doctor. His greatest document, "The Canon of Medicine", is an original arabic manuscript written in Isfahan in 1632. Later, in the 16th century, translated into latin, it became a favourite textbook in all Medical Schools in Europe. It is now the possession of the Welcome Library.

During the Byzantine, Jewish, Mohammedan and early Mediaeval periods, the quality of medicine declined together with the deteriora-

tion in the moral and ethical status of the people and as far as it is known only a few medical records were kept at that time.

MEDIAEVAL PERIOD

The only hospital still in existence whose records and manuscripts have been preserved since 1137 is St Bartholomew's Hospital in London, founded by Rahere.

With the renaissance and the reign of Henry VIII (1509-1547), conditions in St Bartholomew's were improved, and rules were drawn concerning the management and running of the hospital. Even then the importance of keeping medical records was fully appreciated. St Bartholomew's possessed the first Medical Records Department; in 1667 (one century later) it also set the lead by creating a medical library.

Besides St Bartholomew's there were about 500 hospitals and charitable institutions founded in England, though little or nothing is known about their record keeping.

During the period 1500-1640 Andreas Vesalius (1514-1564) a Belgian appears, who besides his tremendous contributions to anatomy is remembered for the records he kept of his findings. Later, Dr Nicholas Tulip (1622) of Amsterdam recorded hundreds of medical cases which were of great scientific interest. In those days it became the practise to keep an "Anatomy Book" in which dissections were carefully recorded for later reference.

SEVENTEENTH CENTURY

At about this time virtually all hospitals in England were now keeping and recording medical histories. It was also realised that vital statistics played an important role in medical records, and in 1622 Captain John Grant published the first study of vital statistics. This publication was based on the "Bills of Mortality", i.e. burials, marriages and baptisms. In it Grant observed certain facts that are still true today; he showed that urban mortality rates were higher than rural mortality, and that although the male birth rate exceeded the female rate, the sex population was approximately equal because of an higher mortality rate among boys.

EIGHTEENTH CENTURY

One of the leaders in the move to establish the first 'incorporated' hospital in the United States was Benjamin Franklin, and the first such hospital is today known as the Pennsylvania Hospital, founded in 1752. Records of their very first admissions are still preserved which show the name, address, diagnosis, date of admission and discharge of all their patients in the first fifty years. Later on, more detailed

records some even with pen-and-ink sketches were kept; until in 1803 the hospital began to keep proper and fully detailed case histories, and has a file unbroken to the present day. In 1873 the first Patients' index was introduced and suitable index cards introduced in 1906.

In 1771 the New York Hospital opened and started its first register of patients in 1793. The majority of the histories date from 1808 and are of the same pattern as the ones used nowadays. Attempts at indexing were fruitless until 1914, when an official nomenclature was adopted.

NINETEENTH CENTURY

On the 3rd September 1821, one of the famous general hospitals in the United States was founded. The hospital, known as the "Massachusetts General Hospital of Boston", has the distinction of having a complete file of clinical records, with all cases appropriately catalogued and dated from the day it was opened. In 1893 a card catalogue was compiled for the patients admitted to the hospital from the year 1871. During the year 1897, a Medical Record Officer was employed with the responsibility of cataloguing clinical records. This seems to be the first hospital in the United States to have had a Medical Record Officer. She later became the first President of the Association of Medical Records Officers of North America. During the early years their histories were written in ink on folio (about eighteen inches long by twelve inches wide). They were bound in volumes two and half inches thick, and binding boards were covered in leather with the titles set in gold lettering, each volume weighing about ten pounds.

TWENTIETH CENTURY

It was not until the beginning of this century, that medical records were given serious consideration by nearly all hospitals in the World.

In 1902, a convention of the American Hospitals Association was held, and Medical records were discussed for the first time. Some problems that were raised at that Convention were: the lack of uniformity in methods; no particular person in charge of the records, as well as the indifference on the part of the older doctors which was the main cause of the failure to obtain good records. Since the convention of the American Hospital association in 1902,

three other International Congress on Medical Record-Keeping and allied subjects were held.

The ever increasing number of participants attending subsequent Congresses are a testimony to the great importance that is attached to the standardization and proper preservation of medical records. Nowadays, the value of recording clinical data is more generally accepted by doctors.

THE MEDICAL RECORD OFFICE

To-day cooperation between the Medical library and the Medical Records Office is essential because the Medical library can help materially in the proper organisation and cataloguing of medical records. Research into medical records necessitate a subject study and a review of medical literature. A Medical Records Officer working in collaboration with the Medical librarian having free access to a good Medical library, provides encouraging support to medical students, medical staff and research workers in a teaching hospital. The Medical Records Officer, also helps in extracting data and information from case records, and in furnishing details regarding the literature on the relevant topics. Looking back from a Diagnosis or Operation index, the Medical Records Officer would be able to supply an amount of detail in proportion to the completeness or otherwise of the case histories.

The medical records department constitutes an important section in the functioning of the modern hospital. Good and properly kept medical records are the concrete sign of attainment of a teaching hospital over the years, and reflect the constant efforts of its medical staff in striving for continuous improvement in furthering the science of Medicine.

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