## **Medical History**

## Native Medical Institution: The first footprint of British Medical Education in India

Rudrajit Paul1

8<sup>th</sup> January is celebrated as the foundation day of Medical College, Kolkata. This was the first medical college for the western system of medical education in Asia. It was founded in 1835. This college has been the pioneer in medical education and research in India (with a lot of firsts like the first human cadaver dissection and the first female student) for the first few decadesafter its inception, before other similar colleges came up in other parts of India. Thus, this institution is considered a symbol of not only medical education but also, modern education as a whole in Asia. However, Medical College Kolkata was not the first medical institution set up by the British East India government. Before this legendary college, there was another short-lived institution, the Native Medical **Institution (NMI).** This article will be a brief description of that institution primarily, with some tidbits about Medical College Calcutta towards the end.

The NMI was a short lived college, existing between 1822 and 1835 in Kolkata. During this period, the British government pursued the policy of combining eastern and western systems of medical education. So, at the NMI, the western scientific medicine was taught along with the traditional Indian systems like Ayurveda (further elaboration later). This institution received some help from the government although most of its funding came from local feudal lords (called Zamindars). But what was the need of this new school?

After the East India Company gained its foothold in India, they started setting up a health system (mainly for the benefit of their troops and European colonists). Before British rule, the very concept of "hospital" was almost absent from the Indian subcontinent. The only hospitals could be found in isolated European establishments like Goa. People were treated by indigenous healers, who used a mixture of herbal or metal powder based remedies along with a strong dose of religious chants and amulets. People almost entirely were born and died in their own homes. Certain diseases like leprosy or

syphilis would make the people social outcasts and they would be forced to live in the forests or bushes and die a slow painful death. After the East India Company established its rule, they felt that modern scientific treatment centers were urgently needed both for themselves and also the natives. But one major problem was the dearth of physicians trained in the scientific medical system. At first, British doctors were brought to this colony; but that started to prove too cumbersome and costly. Thus, soon the British colonists realized the need to train local students in medicine. Even if these students would not be allowed to directly treat the Europeans, at least they could act as assistants/dressers to the European doctors. On 9th May, 1822, at the official meeting of the Bengal Presidency, a plan to train local students to create doctors and fill up the vacancies of the government hospital posts was discussed. The secretary of the Calcutta Medical Board proposed setting up an institution urgently.

On June 21, 1822, the NMI was established in Calcutta with 20 students vide Governor General's order no. 41. A European doctor (civil assistant surgeon) was placed in charge with two native assistants. The first students were taught treatises on Anatomy, Medicine and Surgery, which had been translated into local language from European texts directly. Teaching was done in local languages. Before arrival of the British rulers, Persian was the official language in India (since the Mughals had come from the Middle East). Thus, Persian and Urdu were included as teaching media. (Bengali was probably not included as a teaching medium because in those days, before Iswarchandra Vidyasagar, Bengali was probably not developed enough to be considered an academic language) Local Sanskrit scholars were paid handsomely to translate English texts. After establishment of this medical institution, the Sanskrit college was established in 1824. From 1826 onwards, classes on Unani and Ayurveda were added. These classes were held at the Calcutta Madrasa and Sanskrit College respectively and were taught by teachers associated with those colleges. At Sanskrit college, the Charaka and sushrutaSanhitas were taught while the Madrassa discussed Arabic medical texts of Avicenna. Dr John Tytler was the most famous superintendent of NMI (1830) (although not the first) and was a passionate teacher. He was a surgeon in Indian Medical Service and a passionate orientalist. He was one of the proposers of the NMI and it would have been natural for him to become its first superintendent. But he decided not to contest for the post as he was posted in Mungher at that time and only at the end of 1830, when Peter Breton died, he was given the post at NMI.

This institution was not associated with any hospital. The main reason being that hospitals were very scarce in India at that time, let alone a hospital for teaching purposes. Thus, the students were required to visit other hospitals and dispensaries to gain clinical experience. However, there were no handson classes in anatomy. The NMI days saw the first introduction of European instruments like Stethoscope and Thermometer to Indian students. Also, another important feature of the NMI education was the maintaining of case records of patients. Before this British system of education, the traditional Indian medical system did not have any system of scientific recording of patients' signs and symptoms. At the NMI, the first doctors were taught how to keep history of patients and later, deduce the diagnosis by analyzing the history.

Two British doctors struggled hard to establish the NMI. They were Peter Breton and John Tytler. Peter prepared a vocabulary of medical terms in local languages. He also prepared short notes on diseases like Cholera, vegetable poison and Rheumatism for native students. John Tytler tried to bring a structure to the curriculum. He stressed on chemistry lessons for a good grasp over medicines. He himself gave lectures on chemistry. The main texts used to teach students included Hooper's books and Fyfes' Manual of Chemistry. During the three year course, he taught the students "names, doses and properties of medicine they employed.....the habits of attention and observation". One memorable work of Tytler was the series of lectures on the human skeleton. This led to immense popularity among the students. He also reprinted anatomical drawings from British medical texts and reproduced them in Bengali for the students

The training period was three years. The first year was Physiology, Pharmacy, materiamedica and anatomy. The next two years were medicine and surgery. Students visited the Native Hospital, General Hospital, Company's Dispensary and department of



Fig 1 — An illustrated anatomical drawing in Bengali. Images like these were used at the NMI [taken from an article byJayanta Bhattacharya in the Indian journal of history of Science, 2015]

the Superintendent of Vaccination. They dissected animals like Sheep or Dog. Also they observed post mortem examination at the General Hospital (being conducted by European doctors). Later, in 1831, a small hospital was opened with 30 beds for the students. The concept of a period of apprenticeship at the end of academic classes was also introduced. So, in all, the NMI acted as the "gestation period" for the future Western Medical education. But soon, the decision to form a new Western Medical college was taken and the government did not patronize this hospital further.

According to historical records, a total of 136 doctors passed out of the NMI before it was closed. Many of the students were family members of Indian members of the British troops. They were sometimes called "black doctors" in the army. Breton, the superintendent of NMI from 1825 to 1830, noted that the Indian students accepted the teaching of anatomy with surprising enthusiasm.

Following the NMI, another similar institution called the **Indian Medical School**, was started in Bombay in 1826. But it lasted only 6 years and did not leave much impact.

However, this institution (NMI) did not last long. In 1833, the then governor of Bengal, Lord William Bentinck set up a committee consisting of Dr John Grant as President and J C C Sutherland, C E

Trevelyan, Thomas Spens, Ram Comul Sen and M J Bramley as members. [Just a word about Ram Comulsen: He was the Grandfather of Keshab Ch. Sen. He was one of the ardent opponents of Raja Rammohan Roy regarding abolition of the infamous Sati.]This committee was entrusted with the task to appraise the current status of medical education in Bengal and make its recommendations. At that time, within the British administration, a tussle had started between two groups of thinkers: Anglicists and *Orientalists.* The former group wanted to change the medieval education system of India fully and rebuild the system after European model. The latter group wanted a synthesis of western and Eastern education systems. But the Anglicists prevailed. Thus, the committee recommended abolishing the NMI and setting up a new college to teach western scientific medicine to the natives. The main medium of education would be English and all Indian indigenous medical texts would be banned. The reason for stressing on English as a medium of learning was explained thus:

"A knowledge of language we regarded as a 'sin qua non'...We wish them to be able to drink out of thefountain head instead of depending to allaytheir mental thirst with driblets oftranslation"

No traditional medical practitioners would be allowed entry into this new institution. The whole system of education would be fully European. Macaulay, an influential thinker of that era, wrote a verbose minute supporting this point of view and this finally influenced Lord Bentinck to take the final decision. On 2<sup>nd</sup> February, 1835, Mr T.B. Macaulay wrote a lengthy document fully laying out his plan for the future of the education of India under British rule. In it, he says,

"What we spend on the Arabic and Sanscrit Colleges is not merely a dead loss to the cause of truth. It is bounty-money paid to raise up champions of error. It goes to form a nest not merely of helpless placehunters but of bigots prompted alike by passion and by interest to raise a cry against every useful scheme of education."

Also, he writes:

"The languages of western Europe civilised Russia. I cannot doubt that they will do for the Hindoo what they have done for the Tartar."

Thus, a clear argument was made in favour of introducing the western system of education in all spheres, including medicine. But probably this intention of introducing Western Medicine in India was present all along. Even before Macaulay's minute, in 1834, Dr Tytler said that the British just wanted to buy time to prepare the natives for European medicine (Fig 2). The

European science like the Christian religion has by far the best chance of succeeding among the nations of Hindoostan by our avoiding even the appearance of coercion and allowing and even encouraging them to study their own system and ours together and quietly make the comparison themselves. We thus prove that we have no jealousy of their knowledge, we incline all their national feeling in our favour and give their understanding full room to act. . . .

Fig 2 — Comment by Dr Tyler in 1834 (taken from the book "Colonizing the body" by David Arnold)

British administrators felt that by teaching Western and Indian medical systems side by side, the people of India would automatically realize the superiority of the former and accept it willingly.

Thus, the NMI was the harbinger of the Calcutta medical college. This institution gave Indians their first taste of Western Medicine and Medical education system. But it must be remembered that although the new medical college was set up, the government did not abolish the old medical education systems. The Sanskrit college continued to receive government patronage and continued to teach Ayurvedic medicine. It was just that this indigenous system was separated from the new western medical education.

## The end and a new beginning:

On 28th January, 1835, NMI was abolished by government order (No. 28, signed by Lord Bentinck) and a new college was proposed. However, the first students would be admitted later and the first buildings would come up after a few months. But since the resolution was passed on this date, the day is celebrated as the "birthday" of this Calcutta medical college. On 20th February, 1835 student admission started. The first batch had about 49 students, all aged less than 20. It was decided that the students who passed would be allowed to enter public service in the Bengal presidency. The first classes were held in an old house behind Hindu College. In May, 1835, the institution shifted to the present premises. The land was donated by a prosperous feudal lord of Bengal, Motilal Seal. The setting up of this institution signified a paradigm shift in the history of India. Before 1835, people had a tolerant attitude towards indigenous medical systems and there was academic support behind them. But after 1835, the Western system was focused as the sole valid medical system and all others were relegated to an inferior status.

**Madhusudan Gupta** was an Ayurvedic teacher at Sanskrit College from 1830 to 1835, who taught students of the NMI who went to Sanskrit college for some lecture classes. There, he became close to both

Tytler and Grant. When the medical college was set up, he became a teacher there. He was involved in the first ever entrance examination for the college. Also, in 1836, he was the first Indian to dissect a human body at the Medical College. David Hare greatly influenced him to perform this act. Prince Dwarakanath Tagore was also quite enthusiastic about anatomy dissection and helped the students a lot, including procuring nameless corpses from the streets.

The first fully constructed buildings were opened in 1836. On March 17, 1836, Dr Bramley, the first Principal, said,

"You may rely upon it, that, with whatever other faults our tenure of this country may be chargeable, that posterity will gratefully acknowledge the noblest of all our acts: The enfranchisement of native intellect from the darkness of ignorance, and the yoke of superstition which is ever its concomitant."

The *Bengal Harkara* was also quite enthusiastic about this new college. It wrote:

The opening of the new native Medical College, which took place yesterday, was very fully attended. Among the distinguished visitors were the Governorgeneral, the Commander-in-chief, the Members of Council, the Law Commissioners, the heads of several of the departments and several natives of rank...

The iconic MCH building (Medical College Hospital Building) was started in 1848 by Lord Dalhousie. The foundation stone was laid with great fanfare. The illustrated London News reported the ceremony and even printed an illustration of the event (Fig 3).

So, it must be remembered that the Native Medical Institution was set up even before Sanskrit College and other such institutions of India. But sadly, this institution is totally forgotten in the later Indian history texts. Historians of independent India, while extolling the virtues of Sanskrit College and Hindu College, often chose to delete the name of NMI from standard texts.

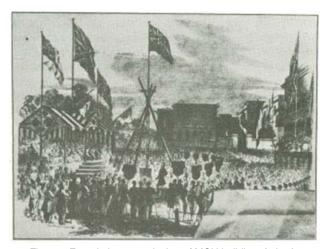


Fig 3 — Foundation stone laying of MCH building: Artists' impression, 1849, London

The author of this article (Rudrajit Paul) had to get the data for this article mostly from foreign texts as Indian authors have a culture of silence about this pioneering institution.

## Further reading:

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