

Reflection on my elective at Christian Medical College (CMC), Vellore

Objectives

1. Describe the pattern of diabetes in the population that is served by CMC and discuss this in the context of global health.
2. Describe how diabetes is managed within India.
3. I would like to see the different stages and presentations of diabetic retinopathy and nephropathy.
4. Develop my clinical skills, teaching skills and reflect on this practice.

Christian Medical College was founded by Ida Sudder in the 1900s. CMC started as a one bed hospital in the city of Vellore (in the southern state Tamil Nadu). Since then, the hospital has grown to service more than 5500 outpatients and 2500 inpatients and is a well known centre of excellence around the World. CMC is a hospital that strives to advance and improve education, research and its service to the community. This is driven by its passion to show the World the healing ministry of Christ. CMC has a creed "Not to be ministered unto, but to minister." During my time at Vellore, together with the other international students we have often wondered what this really meant. However, after spending some weeks here it is clear that this hospital wants to lead the way in helping people whilst spreading the message of Christ through all that it does.

CMC is a tertiary referral centre and receives patients from all around India as well as from neighboring countries such as Bangladesh. From the outpatient department alone the endocrinology unit has around 60,000 patient consultations per year. A large number of these patients suffer from diabetes. Globally the prevalence of diabetes is rising and by 2030 it is expected that there will be around 370 million people suffering from diabetes around the World. Currently, India has the highest prevalence of diabetes in the World, estimated at 41 million and this is expected to double by 2030. With this in mind CMC has been determined to address this issue and provide high quality compassionate healthcare to populations that may not be able to access medical advice and services. This initiative stemmed from a national project called "the prevention and control of diabetes mellitus in rural and semi urban India through an established network of hospitals." This project has now been running for 6 years utilizing more than 120 hospitals and community centers to implement and deliver good quality diabetic care to all service users. As diabetes is a progressive disease with subtle symptoms this often delays patients from initiating a consultation with a doctor. With this in mind the aims of the project was to improve

1. Medical management, dietary counseling, exercise and lifestyle modification: This is so patients have better compliance with their medication and understand the need to continually take their medicines despite the absence of any obvious symptoms as well as appreciating the importance of a healthy lifestyle.
2. Patient education and guidance: To ensure patients are aware of the consequences of poor glycaemic control and the need to have good foot hygiene as well as recognizing the signs or micro/macro vascular complications.
3. Foot care: To ensure patients have adequate footwear and attend regular check-up with a podiatrist.
4. Setting up integrated diabetic clinics with diabetes nurse educators and doctor: This is so patients can have easier access to good medical advice.

These principles and aims are facilitated by a training program organized by the endocrinology department at CMC, Vellore. This ensures that all information is standardized, up to date, cost effective and of a high quality.

In the United Kingdom, diabetes has similar issues with regards to patient education and prevention of micro vascular and macro vascular complications through poor patient education and compliance. The prevalence in the UK is around 4 % currently, but is expected to rise unless drastic measures take place. Recently, there have been a many pilot studies undertaken by the department of health together with diabetes UK. The aim of this project (called "The Year of Care") is for people to take control of their health and be involved in the decision making thus making the management of the condition more collaborative. The results from the pilot study revealed that less than 50% of patients (suffering from diabetes) discussed realistic targets and aims for the proceeding 12 months with a health care practitioner. This often made the patient feel removed from the consultation and management of their condition. The aim of the "Year of Care" is to bring together specialists (doctors, nurses, pharmacists) who are experts in their field and patients who provide a personal account on how diabetes affects their life, to develop an agreed action plan on how to best manage the patient condition. This also allows the patient to be referred on appropriately depending on the main concerns the patient raises. For example if the patient would really like to give up smoking an appropriately referral to the smoking cessation service can be made so the patient has the best chance on obtaining their goal.

Practically the year of care has a number of appointments with different specialties which provide information to the patient to help them understand the results of various investigations and their consequences. There is a structure which is coordinated by the general practitioner would ensures that all the potential complications of diabetes are continually monitored by the various specialists. For example, a patient will have a regular review within the general practice (via a healthcare assistant or general practitioner) every 3 months who would monitor the patients HbA1C, dipstick the urine, measure the patients body mass index (BMI) and measure the patient blood pressure. Following these, appropriate referrals would be made at a yearly interval to an optometrist and podiatrist.

In comparison to the United Kingdom, when a patient is followed up in India at CMC Vellore, the consultation consists of a combination of carrying out an extensive history, measuring the patient BMI, providing healthcare advice, examining the fundi, inspecting and examining the feet for sign of neuropathy and urine dipstick results. Following this intensive examination the patient may be referred to a more specialized clinic for further review if needed. For example a diabetic foot clinic, dietician or optometrist. Hence all the monitoring for the patient takes place in one consultation.

During my time at CMC I have spent rotations in acute medicine, cardiology, endocrinology, surgery as well as the community health and development (CHAD). This has provided me with a broad exposure to a variety of medical conditions and the service provisions to manage these cases. A point that I have observed is that there is very little difference in the way diabetes is medically managed in India compare to the UK. However, the patient's that present in India often delay seeing the doctor so they present with a more progressive form of diabetes (for example with diabetic eye disease or renal failure). Due to this fact together with the sheer volume of patient that CMC receives there a variety of learning points that can be obtained from each case. This information is normally disseminated through grand round meeting, case based discussions and publications.

Another learning point I have obtained from this placement is to be a diagnostician and not to be so reliant on investigation to formulate a diagnosis. This is particularly an important point to observe while working in CMC as the patient has to bear the cost of each investigation. Often, these patients have tough financial circumstances which mean ordering unnecessary tests can cause them needless financial stress. To ensure that all staff members are aware of this, there are many intra departmental case discussions which explore both the direct and indirect cost of healthcare which the patient faces. This helps educate healthcare professionals to be more aware of these restraints and be more prudent in their management plan whilst still providing good quality healthcare.

I have gained a lot from working with the doctors and allied healthcare professionals at CMC and have been exposed to various clinical signs and classical presentations of a variety of diseases. I would definitely recommend this placement to fellow students in the future and appreciate all the time and effort the healthcare staff have made while I have been placed here.



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