## The Impact of the DM Surgical Training Programme on the Practice of Surgery in the English-speaking Caribbean

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Specialist training in surgery has been a reality in the English-speaking Caribbean for about 30 years. Since the first graduate in 1977, there have been a further 74 graduates in the combined specialties of General Surgery, Orthopaedics, Urology, Paediatric Surgery, Neurosurgery, Otorhinolaryngology and Cardiothoracic Surgery. Through its contribution to Caribbean life, the DM surgery training programme has been and remains a major determinant of the standard of surgical care offered to Caribbean people.

To define a problem is to begin to solve it. The latter half of the twentieth century was a period in which Caribbean people sought to empower themselves politically and academically. It was this movement which fostered the creation of The University of the West Indies (UWI) and led to the development of basic and specialist medical training. Since its inception, the surgical training programme represented the enhancement of an already auspicious concept and heralded a new era in Caribbean life.

The advent of the UWI in 1948 with its pioneering medical faculty had afforded qualified West Indian youth the opportunity to remain within the region while pursuing their dreams of becoming a 'doctor'. Previously, upon completion of secondary education, all suitably talented individuals would seek medical training overseas most commonly in the United Kingdom or North America. However, this route to medical education would often times see several brilliant Caribbean minds remaining in the first world upon completion of their training. With medical doctors being trained locally, the brain drain of Caribbean genius was decreased and this was taken one step further with the commencement of local specialist training in Surgery.

The DM programme has had a significant impact on the life of citizens across the Caribbean. The DM surgery programme has trained surgeons from Jamaica, Trinidad and Tobago, Barbados, Antigua and Barbuda, Belize, Bahamas, Grenada, Guyana, St Lucia, and the Turks and Caicos Islands. The majority of international graduates have returned to their homeland to offer specialist care to their fellow citizens. As for local graduates, they have distributed themselves to the length and breadth of Jamaica. Indeed, almost all hospitals in the island have a locally trained surgeon on staff with the surgeon frequently acting in the capacity of

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Senior Medical Officer. This has brought specialized surgical techniques home to the average citizen with DM surgical graduates as the coordinators of this social development.

The existence of a local training programme in surgery has allowed for the establishment of highly specialized (Type A) hospitals which serve as centres of training and excellence while offering highly advanced procedures to the general population. This allows patients to avail themselves of first world techniques in the third world. The increasing number of laparoscopic techniques being offered in General Surgery, stereotactic brain biopsy using the Cosman-Roberts-Wells (CRW) frame being performed by the subsection of Neurosurgery, as well as the development of a training tool to allow Cardiothoracic surgeons to improve their proficiency at beating heart procedures are only a few examples of first world techniques currently being offered in the Caribbean. Besides being centres of surgical excellence, there is an improved surgeon to patient ratio allowing for greater contact between patient and surgeon. This should facilitate an increased patient understanding of their particular disease process and ultimately hasten rehabilitation.

The surgery programme has also impacted on the economics of the operation of major hospitals in the region. The training programme provides a resident pool which is indispensable to the daily operation of hospitals in Jamaica, Trinidad and Tobago and Barbados. At the training hospitals throughout the region, the residents assist in the conducting of surgical clinics and perform the lion's share of emergency surgical procedures. The majority of these services are possible because of the difference in remuneration between residents-in-training and consultants. Without an adequately sized resident complement several of the services offered at the major hospitals would have to be down-sized or discontinued. This would result in decreased access to basic surgical techniques as well as a generally increased waiting time for patients to undergo elective surgery increasing patient morbidity and mortality. Therefore, the DM training programme has allowed training hospitals to offer a vast array of surgical procedures to the public at a fraction of the 'real' cost.

The hospitals have not been the only ones benefitting economically from the existence of the DM training programme. The Surgery programme has served to contain the cost to the patient of specialist surgical care in the region. Simpson 61

Additionally, with residents able to complete their training locally, the cost of postgraduate education is significantly reduced as residents no longer need to relocate to a foreign country to become fully qualified. This allows for young consultants to provide specialist services at a lower final cost to the patient as the post-qualification economic debt is reduced. The turnover of specialists maintains an adequate number of surgical providers ensuring that the cost of care to the population remains within reasonable limits.

The DM programme has helped maintain the quality of surgical care offered the Caribbean people. This is a vital issue as patients currently have access to a plethora of resources related to their medical problems. Healthcare providers must be versed on the services they provide as well as the alternatives. With the existence of a recognized training programme as well as practising graduates, all foreign trained surgeons must achieve at least equivalent proficiency to compete with their locally-trained counterparts. This provides quality control for the practice of surgery in the Caribbean.

The programme has also encouraged the contribution of academic papers to the scientific literature database. These have served to educate the rest of the world about the surgical illnesses common in and sometimes unique to the region while facilitating regional epidemiological analysis. This has improved the care of some endemic illnesses notably the surgical management of abdominal pain in sicklers.

The organization of the surgical services in Jamaica and to a lesser extent the wider Caribbean is predicated on the tenets of surgeons affiliated with the DM programme. DM surgeons form the backbone of the Association of Surgeons in Jamaica and have been crucial to the recent establishment of a Caribbean College of Surgeons. Through these societies, graduates of the DM programme are able to set standards for practising surgeons as well as to monitor its members. These societies also serve as a forum for continued academic growth by the hosting of conferences which provide an update on surgical issues. Other social organizations like the Jamaica Cancer Society directly benefit from the charitable work of graduates of the DM programme in their health promotion drives.

However, there has been some fallout from the establishment of the DM programme. One of the criticisms of a teaching hospital lies in the fact that it must allow for adequate student exposure and education. Therefore patients who access healthcare in these institutions must be prepared to have their history taken and examination performed several times before a group of eager medical students and residents. They usually tend to have longer stays in the emergency room with increased time to final diagnosis and disposal including surgery. Patients may incur additional ex-

pense during hospitalization from superfluous investigations ordered to disprove obscure diagnoses. In the outpatient clinics, patients are usually seen by different residents for each visit so some patients complain of difficulty establishing a rapport. Additionally, the potential economic advantage to the hospital from the employment of resident staff may actually be overwhelmed by the need to maintain vital training services even when these may not be profitable.

At the training hospital, surgery is quite often performed by a surgeon-in-training with the consultant surgeon assuming a supervisory role. For an individual patient undergoing a single procedure, the operating time is increased. This may be due to inexperience of the resident performing the procedure as he/she attempts to surmount his/her learning curve or may be due to illustration of key points to junior members of staff. This will increase the exposure of the patient to anaesthetic medications which may be associated with morbidity in the odd patient. There is also a statistically increased risk of surgical complications which is minimized with adequate supervision.

Another critique of the DM programme is that despite its many strides, a lot more remains to be done. Roads which remain to be travelled include the establishment of a regional periodical of surgery to highlight the nuances of surgical practice in the region and consolidate regional academic papers by surgeons. There needs to be greater inter-regional collaboration to facilitate production of statistically significant academic literature. Also long overdue is an efficient referral and transfer policy between island states for specialized elective and emergency procedures.

The training programme as it currently stands needs to be expanded to provide more training hospitals in the region and also to increase the services offered at the existing hospitals. The goal must be to create a world-class training experience so that the DM surgical training programme can recruit not only the best in the region but the world. In this regard, work remains to increase the international recognition of the DM qualification as certification of specialist training. There also remains the unexploited development of the Caribbean as a world leader in the surgical care of certain diseases which are endemic to the region, an approach which could yield both academic and financial benefit.

Since the inception of local surgical training, the Caribbean has undergone a quantum leap with regards to standards for the practice of Surgery. The majority of these accomplishments have been due to or with the assistance of the DM programme and its graduates. Notwithstanding, the necessary inconveniences experienced by patients at times, the English-speaking Caribbean has profitted tremendously from the DM surgical training programme.