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### SSC 5c: Elective Assessment

#### Describe a major general medicine condition managed in Barbados

Diabetes is a condition resulting from the inability of the body to adequately control the amount of sugar in the blood. This abnormal, yet highly common occurrence is due to aetiologies that split diabetes into two types. Type 1 diabetes arises from the body's inability to produce the endogenous, endocrine hormone insulin due to immunological damage or eradication of the pancreatic cells that produce it. Type 2 diabetes occurs when the somatic cells of the human body cannot respond to insulin secreted by the fully functioning pancreas.<sup>1,2</sup>

Both types are highly prevalent in Afro-Caribbean communities globally. Barbados is no exception. According to the Diabetes Association of Barbados an estimated 27,000 of the 290,000 population of Barbados are affected with this disease<sup>3</sup>. A markedly high prevalence of diabetes exists in the adult black population, affecting almost one in five people and increasing morbidity and mortality. Prevention strategies are urgently needed to reduce the adverse implications of diabetes in these populations.<sup>4</sup>

There are various measures of combating this rife disease mirrored in both the Barbadian and British systems. These methods of lifestyle advice and therapeutic intervention can be efficacious in controlling this chronic disease, however poor compliance remains a barrier between diabetes being a well controlled chronic disease in Barbados. My time in Barbados saw two below the knee amputations due to poorly controlled diabetes, occurrences which have deeply disturbed my being because they could have been avoided with proper compliance to medical advice. Diabetes is a strong risk factor for cardiovascular and cerebrovascular disease. It is also a cause of retinopathy, peripheral neuropathy, infections and many more ailments that result from the hyperglycaemic state of affected individuals.

In the Caribbean and Barbados, diabetes produces significant premature deaths and disabilities, and the further reality is that the risk factors of unhealthy diets, physical inactivity, and tobacco exposure lead to this chronic disease.<sup>5</sup>

There are systemic factors in Barbados that prevent adequate treatment of diabetic individuals including lack of polyclinic resources including workers, medication, clinical equipment and blood investigations. Cultural factors such as eating, body size, footwear and difficulty getting time of work to attend clinic appointments have all been cited in the exacerbation of diabetes in Barbados. Patient factors like denial, fear of



stigma, lack of financial resources and belief in alternative medicines are also common in this country.<sup>6</sup>

In summary, mortality from diabetes has quadrupled since the independence of Barbados, with a high prevalence in the overweight persons in the community and those with a strong family background in the middle aged. Consequences affecting those of an affluent society like an increasingly ageing population, overeating, lack of exercise and obesity are significant predisposing factor for diabetes in Barbados. It is these factors, as well as a failure in the Barbadian health system to adequately educate people in the necessary lifestyle changes (diet, footcare, clinic engagement), that over-ride interventions instigated from the research and implementation of institutions like the Commonwealth Caribbean Medical Research Council, the Faculty of Medical Sciences at QEH and the Chronic Diseases Research Centre. These include making diabetic and hypertensive medications free at the point of delivery and involvement in local support for those with diabetes.<sup>7</sup>

These organisations suggest educating both the public and persons with the condition, screening programs, providing free home monitors and adequate staffing could help decrease the easily preventable complications described above.

Potential improvements that could be made by the wider society to help providers improve the health of those with diabetes and hypertension involved *“educational outreach to promote family support in managing the condition (cooking, encouraging exercise, giving insulin); a greater role for volunteer groups and retired persons in providing education, support, exercise groups and screening programs; starting associations for hypertension, hyperlipidemia and diabetes; the provision by the government of sidewalks and bicycle lanes for safe exercise; healthy food choices at schools and work places; a tax on unhealthy fast food and an attempt to bring down the cost of healthy food by the government; a requirement that fast food outlets provide healthy alternatives; labeling of all food to include fat, salt and calorie content; encouraging a kitchen garden program; time off by employers to attend appointments; and prominent persons with the disease should speak out to reduce stigma, and give hope that a good life can be had while living with chronic disease”*.<sup>5,6,7</sup>

**Are there aspects of care replicated in the Barbadian system that are too important to cut or downregulated**

The Barbadian system also has a National Health service paid for by public taxation. It is currently stretched by the aging population of people affected by long term chronic diseases. This is similar to Britain, however, Britain has better funding for tertiary centres in which to discharge recovered patients. These include old peoples' homes (public/private), hospices, nursing/residential homes. This creates more potential space for more acute emergency admissions.



This system is not perfectly replicated in Barbados, and while there are some community based services they are mostly privately run or volunteer based due to a lack of funds. These volunteer-run services include church groups, the Red Cross Society and Salvation army. St Michael's Geriatric hospital has significantly decreased in capacity, and even occupational health services that provide domestic upgrades and equipment to allow for safe discharge to home have difficulty because of the vast range of houses people in Barbados inhabit<sup>7</sup>. This can be example for the government shaping the NHS of the importance of investing in tertiary care in order to relieve the work load for those in the secondary care sector and to ensure that the aging population of Britain is being adequately catered for.

The much maligned, yet vital public health sector is prominent in both the British and Barbadian healthcare services. Public health has boomed in the UK with education of health needs taking a high priority for those in certain risk groups, at impressionable ages and at those who engage in healthcare or media services. Indeed, public health has also spread to those within school, the workplace and in community based organisations. Barbados has a similar system driven mainly by the media sector (television/radio/newspapers etc). In a bid to alleviate the pressure on the health service the onus has been put on the individual by educating people to maintain good health through healthy eating, sexual awareness, exercise, smoking prevention etc. However, as I have already touched upon, in certain areas like diabetes, heart disease, AIDS and cerebrovascular disease public health requires vast improvement.

The clinics in both countries both require more than just a doctor to run properly and efficiently. Admin staff to process referrals and notes, nurses to triage and provide initial assessments and tertiary services like pharmacists are integral to the smooth running and efficacy of clinics. However, when the resources to fund workers to run these clinics wane, it leads to highly inefficient (e.g. waiting times, information transit to other professions) or non existent clinics. In Barbados and Britain this can occur, however, with the downsizing of allied health professional numbers since the implementation of the White Paper this effect occurs willingly with the effect of this action mirrored in countries like Barbados whose problems arise from lack of funds and manpower.

#### **Describe short/long term effects on health caused by a natural disaster<sup>8,9</sup>**

In October 2010, Eastern Caribbean was devastated by Hurricane Tomas. Countries were affected to different extents and therefore suffered varying consequences. Barbados was least affected in terms of mortality with no deaths recorded. In Barbados the long term effects was the subsequent drain on funds on the rebuilding of damaged buildings as supposed to any influx of injured people into hospital or public health risks. These consequences were unfortunately seen in neighbouring islands like St Lucia, St Vincent and Haiti taking up to 69 lives, ruining vast crops and inundating already stretched services by exacerbating a cholera outbreak that had been caused by the previously occurring earthquake.

## **References**

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