Diabesity prevention: Go for the low-hanging fruit

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Prevention is the key to tackling the dual epidemic of obesity and type 2 diabetes, and no country currently has the infrastructure or resources to treat diabesity. The most recent UK statistics show that in 2013, the overall proportion of obesity in adults was 26.0% in men and 23.8% in women. The proportion of adults that were overweight including people that were obese in 2013 was 67.1% for men and 57.2% for women (Health and Social Care Information Centre, 2015).

The risk factors for developing type 2 diabetes are complex and multi-faceted, some of which are listed below:

- High BMI.
- Waist circumference of more than 80 cm (31.5 in) in women and more than 94 cm (37 in) in men of European origin, and a waist circumference of more than 80 cm in women and more than 90 cm (35 in) in men of South Asian origin (Alberti et al, 2007).
- Over the age of 25 and having either an African-Caribbean, Black African, Chinese or South Asian background.
- A first-degree relative with diabetes.
- A history of hypertension, myocardial infarction and stroke. In women, a history of polycystic ovaries, gestational diabetes or having previously given birth to a baby over 4.5 kg (10 pounds) in weight. Previously or currently experiencing schizophrenia, bipolar illness, depression or taking anti-psychotic medication.

So how do we set up a diabetes prevention programme for high-risk individuals, which includes people who are obese? People who are at risk of developing type 2 diabetes constitute more than half the population. How do we ensure we use our resources effectively? The solution is to go for the lowest hanging fruit – the course of action that can be undertaken quickly and easily as part of a wider range of changes. Aiming for the low-hanging fruit in terms of a diabetes prevention programme would involve the following:

- Working with schools.
- Partnering with services run in deprived areas.
- Engaging with people attending any weight management service.
- Identifying high-risk motivated people.

It is more cost effective to work with already existing services and programmes like Change4life, tier 3 weight managements services and other community projects dealing with lifestyle change than developing a programme from scratch. This ensures that we not only target high-risk individuals, but also improve client retention and engagement. Most tier 3 weight management services encounter people with diabetes and prediabetes, and a significant number of people triaged to tier 3 services are identified with prediabetes while having their baseline bloods checked. It would greatly improve clinical and health outcomes if people at high risk of diabetes were identified within the weight management service, and then a diabetes prevention programme was delivered.

The NHS Diabetes Prevention Programme is currently being set up and it is hoped it will be rolled out across the UK over the coming years (https://www.england.nhs.uk/ourwork/qual-clin-lead/diabetes-prevention [accessed 07.11.15]). The costs for set up, marketing, venue, staff and IT systems are significant. Also, it does take a considerable amount of time to start a programme. Rather than starting *de novo* with a diabetes prevention programme, it would be hugely beneficial to go for the lowest hanging fruit, and utilise the facilities and services we have now.

In my opinion, the high-hanging fruits for

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diabetes prevention include the following:

- Modifying an obesogenic environment.
- Incorporating tax on sugar and fat.
- Commissioning new services.
- Adopting NICE guidelines for bariatric surgery.

The above strategies are useful but will need extensive resources and take a considerable amount of time to measure the benefits. Changing the "obesogenicity" of an environment across neighbourhoods and countries is a long-drawn process. A social gradient in obesity-related behaviours and obesity prevalence has been recognised, with increased obesity rates in socioeconomically disadvantaged neighbourhoods (Lakerveld et al, 2005), but changing the social gradient is not within the jurisdiction of healthcare providers.

The NHS Diabetes Prevention Programme should in fact be a *Diabesity* Prevention Programme. A strategy should be in place to strike the low-hanging fruit swiftly and, later, an inclusive programme should be implemented involving not just healthcare professionals but also business leaders, politicians and economists to completely eradicate the pandemic of diabesity. ■

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