Sharing best practice on the management of south Asian people with diabetes

This is a report from the 12th Annual Conference of the South Asian Health Foundation (SAHF), held on 7–8 October 2011 at the Hilton Metropole NEC, Birmingham. This report was generated by the journal's editorial team and the conference speakers.

Around 25% of the world's population with diabetes is of south Asian origin, which presents a growing challenge to healthcare providers across the globe. This conference, on behalf of the South Asian Health Foundation, aimed to facilitate collaboration between individuals and groups involved in the prevention and management of south Asian people with, or at risk of, diabetes. This meeting report summarises the event.

"The environment and technology have allowed us to live longer for the past 1000 years, but that is now turning around – especially for the south Asian community," began conference Chair Wasim Hanif (Consultant Physician and Honorary Senior Lecturer in Diabetes and Endocrinology, Birmingham). Dr Hanif welcomed the delegates and looked forward to the 2-day programme that would share best practice on the management of south Asian people with diabetes.

Day 1

Diagnosing diabetes in south Asian people

In the first session, Professor Kamlesh Khunti (Professor of Primary Care Diabetes and Vascular Medicine, Leicester) presented data on screening for, and diagnosis of, diabetes in south Asian people. He said that the diabetes screening gold standard – the oral glucose tolerance test – is inconvenient for patients and a poor mass-screening tool, yet screening using HbA_{1c} level also has flaws, but is a more pragmatic and simple test. Professor Khunti suggested that screening should be undertaken in south Asian populations at a younger age, perhaps added to the non-fasting lipid test, although the cost-effectiveness of this would have to be investigated.

The topic of gestational diabetes (GD) in south Asian women was discussed by Dr Aresh Anwar (Medical Director and Consultant Diabetologist, Birmingham). Dr Anwar said that the metabolic scene is set from birth for higher risk of diabetes in south Asian people (Yajnik et al, 2002), and the metabolic stressors of pregnancy leads often to GD and the associated poor outcomes (HAPO Study Cooperative Research Group et al, 2008). The evidence suggests that the type of treatment used to address GD appears to be less critical, with good outcomes achieved for diet (Moses et al, 2009), as well as oral therapies having as much success as injectable therapies (Dhulkotia et al, 2010). Finally, Dr Anwar said that the increased risk of diabetes in this group make them an important population in which to undertake preventative interventions.

Debate: Diet versus exercise

The first speaker in the debate was Professor Naveed Sattar (Professor in Metabolic Medicine and Honorary Consultant, University of Glasgow), who argued that diet is the best target in the prevention or treatment of diabetes. Professor Sattar said that high BMI is the major driver of the diabetes epidemic and that, in turn, increased consumption of food is the major driver of this phenomenon (Jeffery and Harnack, 2007). Professor Sattar pointed to Umpierre et al's (2011) meta-analysis, which shows that physical activity and dietary advice combined achieved a –0.58% reduction in mean HbA_{1c} level, while physical activity advice alone was not associated with HbA_{1c} change. Professor Sattar said that it is time to get serious about improving our patients' diets and about regulating the food industry.

Next, Dr Jason Gill (Senior Lecturer, Glasgow) made the case for exercise. He highlighted that we cannot look at weight loss simply as a number; reductions in diabetes risk are achieved specifically with a reduction in central adiposity, and that it is exercise – not caloric restrictions – that achieve this kind of weight loss (Lee et al, 2005). Dr Gill reported improvements in postprandial metabolism following exercise, which was between 15 and 20% greater than that achieved by energy intake restriction. Dr Gill concluded by saying that if you have to choose one – diet or physical activity – it has to be physical activity for reducing the risk of diabetes.

The delegates voted in the majority for a combination of diet and exercise.

Masterclasses

Details of the five masterclasses are given in *Box 1.*

Keynote lecture

The 2011 keynote lecture was Chaired by Professors Kamlesh Khunti and Naveed Sattar, and presented by Professor Ambady Ramachandran (Chairman and Managing Director, A Ramachandran's Diabetes Hospitals and President, India Diabetes Research Foundation, Chennai, India). Professor Ramachandran said that India is currently the "diabetes capital of the world", according to International Diabetes Federation (IDF, 2009) data. The size of this problem, Professor

Box 1. Parallel masterclass workshops were held on the first day. The details of these sessions are given here.

Workshop 1: Commissioning south Asian diabetes care
Professor Azhar Farooqui OBE (GP, Leicester) discussed the changing world of the NHS and how best we can use available resources to optimise care of south Asian people with diabetes.

Workshop 2: Examples of good practice for managing CVD in south Asian people
Drs Justin Zaman (Academic Clinical Lecturer in Cardiology, London) and Sandy Gupta (Consultant Cardiologist, London) reviewed examples of best practice across the country.

Workshop 3: Cultural competencies
Dr Wasim Hanif (Consultant Physician and Honorary Senior Lecturer in Diabetes and Endocrinology, Birmingham) and Naina Patel (Research Associate, Leicester) explored the role of culture and religion in diabetes and the cultural sensitivities of people with diabetes.

Workshop 4: Organ donation in south Asian people
Mr Majid Mukadam (Heart and Lung Transplant Surgeon, Birmingham) and Dr Adnan Sharif (Specialist Registrar in Nephrology, Birmingham) looked at the issues around availability of organs and explored some solutions.

Workshop 5: Barriers to insulin
Shanaz Mughal (Diabetes Specialist Nurse Coordinator, Birmingham) explored solutions and best practice in encouraging insulin initiation in south Asian people.

Ramachandran said, is well known, and what is now needed are data on the prevention and management of the condition in south Asians.

Professor Ramachandran established the Indian Diabetes Prevention Programme (IDPP), a series of prospective, randomised, controlled trials investigating the primary prevention of diabetes in Indian people with impaired glucose tolerance. The IDPP programme now has five incarnations: IDPP-1 (Ramachandran et al, 2006), IDPP-2 (Ramachandran et al, 2009), IDPP-3 (ongoing), and the IDPP-4 and 5, both of which have funding.

The results of IDPP-1 and 2 demonstrated the feasibility and effectiveness of primary prevention of type 2 diabetes in Indian people, finding that lifestyle modification without substantial weight reduction prevented diabetes in non-obese people with pre-diabetes, and that the addition of either metformin or pioglitazone failed to add further benefit to lifestyle modification alone. IDPP-3 will provide data on lifestyle motivation and continuous support using mobile phone interaction in people with pre-diabetes, while IDPP-4 will examine the ability of a dipeptidyl peptidase-4 inhibitor to prevent diabetes in people with pre-diabetes.

Following Professor Ramachandran's presentation, Lord Patel presented the SAHF Keynote Lecture Award, and praised the Professor's life work to address the burden of diabetes and save lives.

Day 2

Behavioural reasons for lifestyle choices in south Asian people

In the first presentation of the second day, Dr Gurprit Pannu (Consultant Psychiatrist, Brighton) considered how our biological, psychological and cultural processes place limitations on our ability to change our behaviours. He described approaches whereby these same limitations can be used to our advantage and presented a conceptual framework for creating population-level campaigns to alter health behaviours.

Structured education

Professor Melanie Davies (Professor of Diabetes and Honorary Consultant, Leicester) spoke about developing structured education programmes and the specific issues of delivering education in minority ethnic groups. Structured education clearly has benefits for people with type 2 diabetes (NICE, 2008), but Professor Davies stressed the specific differences in pathophysiology, risk of complications, language, health beliefs and cultures of ethnic groups should be considered when developing such programmes. An example of one such programme is the DESMOND (Diabetes Education and Self-Management for Ongoing and Newly Diagnosed) national collaborative, which has been tested in people with newly diagnosed type 2 diabetes (Davies et al, 2008), and subsequent work has led to the development of DESMOND BME (black and minority ethnic) modules designed specifically for the south Asian community (visit http://bit.ly/vCRrvl), which are being delivered in 16 PCTs in around the UK.

Microvascular complications

Looking at the impact of diabetes on the eye, Dr Sailesh Sankar (Consultant Diabetologist, University Hospitals Coventry and Warwickshire) reported data suggesting that the prevalence of diabetic retinopathy is higher in south Asian people with diabetes than other ethnic groups (Raymond et al, 2009). Dr Sankar said that there is a need for promoting knowledge and awareness, particularly in the high-risk south Asian population, by engaging them in preventative and screening programmes in a culturally sensitive manner.

Next, Dr Vinod Patel (Associate Professor of Diabetes, Warwick University) discussed the diabetic foot and how the new clinical guideline from NICE (2011) on inpatient care of these conditions was designed to reduce the high morbidity and mortality associated with diabetic foot disease (Moulik et al, 2003). Dr Patel described how to undertake screening of the diabetic foot, and what advice to give people on the care of their feet. The role of the multidisciplinary team in managing active diabetic foot ulceration was also discussed.

The final presentation in this session was given by Dr Indranil Dasgupta (Consultant Nephrologist and Honorary Senior Lecturer, Birmingham) on renal complications, who opened by showing data from the UK Renal Registry Annual Report (Tomson, 2010) that revealed diabetes to be the most common cause of dialysis initiation in the UK in 2009. Dr Dasgupta described the gradual nature of nephropathy, and how progression to end-stage renal disease can be significantly slowed with intensive, multiple risk-factor interventions (Gaede et al, 2008).

Hot topics

In the final session of the conference, three hot topics in diabetes were discussed. The first was bariatric surgery, with Dr Shahrad Taheri (Consultant Physician and Senior Lecturer in Diabetes, Birmingham). Dr Taheri said that the medical options for extremely obese people are limited, but bariatric surgery has been shown to be effective in the treatment of not only obesity but also the associated comorbidities (Fried et al, 2007). Dr Taheri said that it is of concern that, given debate over lower BMI cut-off points for obesity in the south Asian population (WHO Expert Consultation, 2004), this group may be disenfranchised of bariatric surgery by PCT criteria. Also, south Asian patients may not be sufficiently aware of benefits of bariatric surgery. It is hoped that studies such as the PODOSA (Prevention of Diabetes and Obesity in South Asians) trial (Gill et al, 2011) will shed light on better approaches to dissemination of weight management options among the south Asian population.

Next, Dr Dev Banerjee (Consultant Physician, Birmingham) spoke about sleep, and its known relationship with metabolic dysregulation. Obstructive sleep apnoea is linked to diabetes and overweight, and impacts on physical wellbeing, mental health, quality of life and road safety (Rajagopalan, 2011), and some research suggests that south Asian people are at an increased risk of obstructive sleep apnoea (Sharma and Ahluwalia, 2010). Dr Banerjee hoped that increasing awareness of sleep disorders among healthcare professionals and the community will improve access to appropriate therapies that will reduce the disease burden.

In the final session of the day, Dr Ateeq Syed (Consultant Diabetologist and Clinical Lead – Patient Engagement, Birmingham) discussed how trusts can better engage in the delivery of health care in UK south Asian populations. Dr Syed gave examples from the Heart of England NHS Foundation Trust, which is running an apprenticeship programme, undertaking health promotion in local schools and making visits to local community centres (e.g. mosques). Health care is changing and we need to change with it, said Dr Syed.

Dr Kiran Patel (SAHF Chair, Consultant Physician and Honorary Senior Lecturer, Birmingham) closed the day's proceedings by thanking the esteemed speakers and delegates for their contribution to another successful SAHF annual conference. ■

Davies MJ, Heller S, Skinner TC et al (2008) *BMJ* **336**: 491–5
Dhulkotia JS, Ola B, Fraser R, Farrell T (2010) *Am J Obstet Gynecol* **203**: 457
Fried M, Hainer V, Basdevant A et al (2007) *Int J Obes (Lond)* **31**: 569–77
Gaede P, Lund-Andersen H, Parving HH, Pedersen O (2008) *N Engl J Med* **358**: 580–91
Gill JM, Bhopal R, Douglas A et al (2011) *Diabetes Care* **34**: 1214–8
HAPO Study Cooperative Research Group, Metzger BE, Lowe LP et al (2008) *N Engl J Med* **358**: 1991–2002
International Diabetes Federation (2009) *IDF Diabetes Atlas*. 5th Edn. IDF, Brussels
Jeffery RW, Harnack LJ (2007) *Diabetes* **56**: 2673–6
Lee S, Kuk JL, Davidson LE et al (2005) *J Appl Physiol* **99**: 1220–5
Moses RG, Barker M, Winter M et al (2009) *Diabetes Care* **32**: 996–1000
Moulik PK, Mtonga R, Gill GV (2003) *Diabetes Care* **26**: 491–4
NICE (2008) *Type 2 Diabetes: National Clinical Guideline for Management in Primary and Secondary Care (update).* National Collaborating Centre for Chronic Conditions, London
NICE (2011) *Inpatient Management of People With Diabetic Foot Ulcers and Infection*. NICE, London
Rajagopalan N (2011) *J Postgrad Med* **57**: 168–75
Ramachandran A, Snehalatha C, Mary S et al (2006) *Diabetologia* **49**: 289–97
Ramachandran A, Snehalatha C, Mary S et al (2009) *Diabetologia* **52**: 1019–26
Raymond NT, Varadhan L, Reynold DR et al (2009) *Diabetes Care* **32**: 410–5
Sharma SK, Ahluwalia G (2010) *Indian J Med Res* **131**: 171–5
Tomson CR (2010) *Nephron Clin Pract* **115**(Suppl 1): c1–2
Umpierre D, Ribeiro PA, Kramer CK et al (2011) *JAMA* **305**: 1790–9
WHO Expert Consultation (2004) *Lancet* **363**: 157–63
Yajnik CS, Lubree HG, Rege SS (2002) *J Clin Endocrinol Metab* **87**: 5575–80