Many of the diabetes-related queries the RCN receives concern diabetes in the workplace, which led to a presentation at the Occupational Health Nurses’ Forum annual conference. Here’s a summary of the main points from GAYLE RICHARDS.

DIABETES AND EMPLOYMENT: Or, as Bob the Builder might say, ‘Yes you can!’

The Disability Discrimination Act (DDA, 1995) has many implications for people with diabetes. Although many people with diabetes would not consider this to be so, diabetes is considered a disability in terms of the act and discrimination can occur when:

- a disabled person is treated less favourably than someone else
- the treatment is for a reason relating to the person's disability
- this treatment cannot be justified.

Discrimination also occurs where:

- there is a failure to make a reasonable adjustment for a disabled person
- that failure cannot be justified.

Diabetes UK suggests that an employer who fails to provide the necessary environment for management of diabetes is acting in a discriminatory way. In fact two tribunals have found employers acted in a way which discriminated against employees with diabetes:

- In 2001 a call centre worker was discouraged from testing his blood sugar at work. Unfortunately this lack of testing led to a severe hypo and head injury. The employer was found to be at fault for not allowing blood sugar testing.
- In 2006 it was decided that a bakery worker had been unfairly dismissed for treating a hypo at work.

Diabetes UK has produced a useful Discrimination Self-help Pack (available at [www.diabetes.org.uk](http://www.diabetes.org.uk)/Guide-to-diabetes/Living_with_diabetes/Everyday_life/Work_and_diabetes). A survey of individuals with insulin-treated diabetes (Ogundipe et al., 2006) found that the difficulties they experienced were:

- administration of insulin at work
- monitoring glucose at work
- clinic appointments
- hypoglycaemia.

The hope is that the DDA will provide a mechanism for addressing these problems. For example, Diabetes UK argues that an employer has a duty to provide a safe place to store insulin if a worker's desk is too near a radiator.

Rights and obligations

In 2004 the DDA was expanded to include all employers except the armed forces. Employers (including the fire service and police) cannot impose a blanket ban on any individual with diabetes, including those on insulin and those with type 1 diabetes. This applies to individuals wishing to join or already working in these areas.

People with diabetes will need to demonstrate that they are as healthy and fit as those without diabetes. In many cases this will require determination, but many have already succeeded! Proof inevitably will include careful monitoring and management to avoid hypoglycaemia and the absence of any diabetes-related complications which could affect the ability to do the job safely, such as neuropathy or retinopathy. Each case should be assessed on an individual basis annually.

For more information see Diabetes UK guidelines published last year at: [www.diabetes.org.uk/Documents/News/Fire_service_guidance.pdf](http://www.diabetes.org.uk/Documents/News/Fire_service_guidance.pdf)

And next time you hear someone say “You can’t join the fire brigade if you’ve got type 1 diabetes”, you will be able to set them straight about the DDA.
Important news on the RCN Forum Transition project

RCN forums are groups of RCN members working in a similar nursing specialty or with like interests.

RCN forums:
- provide networking opportunities
- help members enhance their practice knowledge and skills
- provide an expert resource
- support RCN Council
- shape, drive and develop nursing practice
- identify and support nurse leaders in their field
- influence current and future health and social policy in the UK and beyond.

In 2008 RCN Council decided that RCN forums should be streamlined to create 41 stronger, more fit for purpose forums. They will have a revised governance structure and will be supported with new online systems to help them meet the challenges of the 21st century.

The RCN Diabetes Nursing Forum remains the same during the transition, but there will be changes to how your forum works and how it communicates with you, the members. You can find more detail at: www.rcn.org.uk/forums

Thousands of RCN members throughout the UK already work together in forums to develop and improve nursing care in a range of settings and they remain an essential part of RCN membership. By joining an RCN forum you will be kept up to date by email with the latest developments in your key field of interest. There are also online communities in different specialisms and interests – see www.rcn.org.uk/communities for further information.

Don’t forget to update your details at www.rcn.org.uk/myrcn and give us your email address to ensure you continue to receive information and updates from your new forum.

Letter from the Chair

The evolving world of diabetes care presents us all with a constant challenge and often, just as we feel comfortable in our knowledge, something new comes along. The Diabetes Forum Committee continues to identify the key issues that need to be highlighted to nurses working in diabetes care and to use the forum’s website and DiaBites to alert you to them.

We continue to work hard on our key project areas – nursing and residential homes, education and support, and diabetes care in the prison service. We have already started to plan educational events for 2010 that focus on the prescribing challenges of diabetes care and intend to run two events, the first in June and the second in October.

Treatment decisions in the management of diabetes (particularly type 2) are becoming increasingly more complex and rapidly evolving as is reflected by the publication of a NICE treatment update on 27 May 2009 to supplement their guidance published only 12 months ago.

The committee hopes to continue meeting your expectations of support so you can deliver high quality diabetes care and we welcome any suggestions that will enhance this role.

Mags Bannister
margaret.bannister@bradford.nhs.uk

Letter from the Editor

Welcome to the summer edition of DiaBites! As always, we have some great examples of nurses delivering innovative, effective ways of diabetes care:
- Yvonne Coughlan tells us about her award-winning HeartArt project on pages four-seven.
- my colleague Lynn Walker describes the community OGTT service for GP practices in Birmingham on page three.
- Mags Bannister explains the changes to the way HbA1c is being recorded on page eight.

Luckily for us, both the familiar measurement in percentage and the new measurement in mmol per mol will be given together until June 2011 while we get used to the idea. Just remember though, some patients may get just two HbA1c results by 2011 so they will need a simple, clear explanation. Leaflets are available to help with this.

We are always interested in hearing about your diabetes-related activities so do drop me a few lines about any new ideas you have implemented, awards you have won or great stories you want to tell. And don’t be shy – if you’re worried about writing for publication, I can help you shape up a short piece of work. Let’s hear from you!

Jill Hill
jill.hill@benpct.nhs.uk

Don’t miss out!

From October all RCN forum newsletters will be emailed to members rather than posted. The content of your newsletter from the world of diabetes nursing will be just as good if not better as we will be able to include additional information and link directly to useful resources.

Many of you have already opted into the electronic versions of the forum newsletters and we aim to continue to enhance our communications with you.

To receive your e-newsletter simply go to www.rcn.org.uk/myrcn and check we have a current email address for you.
Diabetes Nurse Prescriber Network Meeting*

Thursday, 8 October 2009
Crowne Plaza Hotel, NEC Birmingham

Come along for a case-based, practical, problem-solving programme with discussion of common diabetes problems:

- **Options for managing erectile dysfunction**
  Jane McAlleese, Diabetes Specialist Nurse, Heartlands Hospital

- **“What is it and what do you prescribe?” – common diabetic foot problems**
  Louise Mitchell, Lead Diabetes Podiatrist, Birmingham East and North PCT

- **Glycaemic control – applying NICE to different scenarios**
  Jill Hill, Network Chair, Nurse Consultant, Birmingham East and North PCT

- **Research in the area of diabetes nurse prescribing**
  Professor Molly Courtenay/Nicola Carey

- **“What is it and what do you prescribe?” – common skin problems in diabetes**
  Paula Oliver, Dermatology Nurse Consultant

Contact Nicola Carey for booking at: n.j.carey@reading.ac.uk or telephone 0118 378 5983 for more details

* As we went to press the network was preparing to hold its June meeting at Reading University – full report next time!

---

Diabetes UK Annual Meeting

11–13 March 2009 • Glasgow

Those of us who were lucky enough to attend this year’s Diabetes UK conference had a very interesting three days. Some 2,764 delegates and exhibitors attended the conference – a 10 per cent increase from 2008.

The 74 sessions included Brian Frier talking about hypoglycaemia in the Banting Memorial Lecture, William Jeffcote describing the changing fate of feet in the Arnold Bloom Lecture, and Vivien Coates explaining the “beautiful technique” of randomised controlled trials.

As usual, there were lots of short presentations covering a variety of specific areas of diabetes issues, from driving to the changes in HbA1c recording. If you had a spare minute, there were also 248 posters to look at and 68 exhibitor stands to visit!

Next year’s conference is in Liverpool on 3–5 March.

Community
OGTT clinic wins Diabetes UK award

Congratulations to Lynn Walker and the NHS Birmingham East and North community diabetes team for winning the Diabetes UK primary care poster award this year.

The service delivers oral glucose tolerance testing and cardiovascular screening for groups of eight people in community settings. In the two hour period between the first and second blood samples being taken, patients are invited to a discussion (available in English and Urdu) about the implications of the OGTT, the possible diagnoses, ways they can make a difference to their future health and barriers to adopting a healthy lifestyle.

Before the second blood sample is taken, the team record their blood pressure, waist circumference, BMI, smoking status, symptoms and family history. Total and HDL cholesterol is taken with the first blood.

Then, within a week patients receive a letter with all their results, an explanation about their significance and advice about how to improve specific parameters. They are signposted to relevant health programmes available in the PCT area, such as smoking cessation and health trainer support.

Initially, these clinics were held once a week, but owing to demand from GP practices five clinics per week are now available in a variety of venues across the patch.

More from Lynn Walker at lynn.walker@benpct.nhs.uk or Jill Hill at: jill.hill@benpct.nhs.uk
YVONNE COUGHLAN won the 2007 RCN Diabetes and Cardiovascular Disease Award for developing a series of art-based educational workshops about the risks of heart disease, designed for people with type 2 diabetes. Here she describes the rationale for “HeartArt”, discusses the workshops in detail and looks at the response of participants to art in the delivery and promotion of health.

HeartArt: Creating a culture of health for people with diabetes

First, some background ...
The Bromley by Bow Centre is an exemplar social enterprise organisation in East London, working for over 20 years in one of the most deprived wards in the UK. The general practice based there is a forward-thinking primary care facility with a list of approximately 6,000 patients.

Health and wellbeing are at the core of our activities. Tackling chronic ill-health is a central objective and many of the centre’s wider aspirations are underpinned by the need to build a healthier community. Our approach to health and wellbeing is holistic and we continually seek to innovate and support people toward a healthier life.

The centre has used the arts in its delivery of services over many years. We have a long history of embedding creativity in a range of services and an understanding that art can be used effectively to deliver health promotion messages and work with different groups.

The health needs of our community are varied and challenging, with type 2 diabetes being one of the largest problems facing the primary care team: the rate has nearly doubled in the last 10 years. Data available in 2007 showed a national prevalence of diabetes of 4.7 per cent and a prevalence in Tower Hamlets of 6.9 per cent. Many people with type 2 diabetes are undiagnosed and the true prevalence may be much higher, possibly even double the figure of those already diagnosed.

Serving vulnerable ethnic minority groups
At the last census, 48 per cent of the Tower Hamlets population defined themselves as coming from a non-white ethnic group. By far the largest of the non-white ethnic groups is the Bangladeshi population, comprising 34 per cent of the borough population in 2001 and one of the largest single ethnic minority communities in London. The Sylheti community of East London, most of whom reside in Tower Hamlets, is the largest in the world outside Bangladesh.

There is an increased risk of type 2 diabetes in the Asian, African and Caribbean community, and those people who live in the UK are at least five times more likely to have diabetes than the white population. The ethnic profile of the Bromley by Bow general practice reflects this picture.

However, diagnosing and caring for people with type 2 diabetes and raising their awareness is not the only health challenge we face in the locality.

Other health and social issues
Smoking and coronary events are generally higher in Tower Hamlets and the levels of smoking by Bangladeshi males are the highest rates in the country. Statistical evidence shows that the life expectancy here is 10 years less than that of more affluent areas of London, such as Richmond in Surrey.

Poor awareness of the risks of CHD, lack of exercise and the levels of social deprivation are some of the other factors.

Meanwhile the levels of spoken and written English in the Bangladeshi community often compound the problems of accessing health information. There is less use of traditional means such as leaflets and website access to directed sites such as Diabetes UK. Diabetes information and education classes are offered across Tower Hamlets in accordance with NICE recommendations that structured education for diabetes be recommended for all patients with type 2 diabetes.

Why HeartArt?
HeartArt was developed as a response to the objectives of the RCN Diabetes and Cardiovascular Disease Award, developed in collaboration with the College of Pharmacy Practice and Servier Laboratories – that is, to implement innovative educational and clinical initiatives that address the diabetes and cardiovascular needs of patients in addition to the education programmes already being run in the community.

“You can change things over if you try making it look different – you can learn to feel different.”

As more arts and health projects are held across the country, there is growing awareness and recognition of their value. Increasingly we realise that arts can be used in facilitation and in practice not only as the means to run groups and workshops, but also as the message itself. HeartArt was developed with this knowledge and understanding.

Attending the workshops
All people with type 2 diabetes on the practice register (around 300 people) were invited to the workshop series. Colourful invitations were sent out,
asking them along to a series of four art workshops that would look at a specific area of coronary heart disease each week – no experience necessary. We enclosed an acceptance slip to encourage their response.

Two series of workshops were planned for December 2007 and January/February 2008, both arranged for Thursday afternoons in a large project room.

The format of the workshops was to deliver structured information alongside the art activities. Participants watched PowerPoint displays that explored the theme of the workshop by presenting factual information and pictures to inform them about their bodies – for example, a diagram of the heart or a cross-section of blood vessels.

These images were interspersed with more abstract slides of textures, colours and shapes. The group would then spend time making art that had its conception or imagery rooted in the workshop information.

The art from the workshops was displayed in the reception area of the centre alongside information about the aims and objectives of the classes and participants were invited to attend a private show and unveiling of their work.

The four weekly workshops used:
- **printmaking** (mono print and drypoint) to look at the heart and its function
- **collage and feltmaking** to investigate the effects of smoking and high blood pressure on the circulation and blood vessels
- **paper marbling**, mixing oils and...
Inks to consider fats and oils
- **still life and drawing**, taking a traditional approach to think about a composition of fruit and vegetables as the catalyst for discussion that focused on healthy lifestyles.

**Week one**
We commenced with an overview of the heart, the role of the heart in the body, how it works and ways it has been portrayed in art and literature. A 3D model of the heart was passed around the group to allow them to see the heart size and note its structure.

Group members were asked to make a colour print of the heart, using a technique called *mono printing*, in response to the slides they had seen. We encouraged them to think about the structure of the heart and its chambers, and how it is a pump.

**Week two**
This session looked at circulation and how blood vessels connect to the heart. The group saw diagrams of arterial and venous blood flow, and discussed oxygenation and the differences of arteries and veins by looking at cross-section diagrams. They examined the smooth, uninterrupted surface of blood vessels in healthy circulation and compared this with the scaled and pitted surface of arteries and veins damaged by smoking and hypertension.

As in the format of the previous week, we asked them to make a small piece of collage that reflected this changing surface. They used collage materials such as polystyrene rectangles that could be cut into or scooped out and a variety of soft material and textured fragments that could be applied to the surface. The end result was a series of textured panels suitable for display as relief.

A subsequent workshop experimented with collaged feltmaking as an alternative to the polystyrene blocks.

**Week three**
Then came an investigation of cholesterol and the changes that occur to the cholesterol levels of people with type 2 diabetes. The group looked at a selection of cooking oils (sunflower, rapeseed, olive) and discussed fish oils and the benefits to the heart of mono unsaturated fats in the diet. Our presentation explored the difference between HDL and LDL cholesterol, and also covered triglycerides. Participants then used these cooking oils mixed with oils and inks for the subsequent art activity of paper marbling.

**Week four**
The final workshop commenced with a presentation of food slides and a discussion about healthy eating and exercise. We set out a table with a colourful display of fruit and vegetables for a still life art activity of drawing and ink painting. Group discussion continued while they were painting and drawing.

**Pre-course evaluation**
All participants completed a pre-course evaluation to gauge their knowledge of coronary heart disease as a complication of type 2 diabetes, using a score rating from “poor” to “very good” (1-10). These evaluations were anonymised.

- Half of the first group rated their overall knowledge of diabetes as “good” and all but one had discussed diabetes complications with the nurse or doctor.
- Two-thirds of the second group rated their knowledge of diabetes as “poor” or “moderate” and two had never discussed diabetes complications with anyone.
- Two-thirds of the participants rated their knowledge of cardiovascular disease as “poor” or “moderate”.
- They rated their knowledge of the effects of high blood pressure in the body as “high” overall, but generally “low” for smoking and cholesterol.
- About half felt they knew the benefits and effects of exercise.

Individuals listed their aims in attending the HeartArt course as getting a better understanding, more knowledge and learning; preventing illness and meeting people.

**Results**
Out of 100 invitations sent out in the first round, nine participants came forward. We recruited 12 participants from 200 invitations in the second.

The gender and race mix was quite varied. Afro Caribbean women were the most consistent participants in the first group and Bengali men were the biggest user group in the second.

Some of those attending had a poor understanding that they had come to a class that would involve an art activity. Despite this, no one refused to participate. We found a measure of goodwill in both groups and a sense of amusement that everyone was being invited to make art alongside an educative component.

There was an anticipated response at the start of the activities – an incredulous “I can't do that” and “I can't draw”, but as we gave a step-by-step demonstration of what was being asked for each activity, this was very transitory.

Each of the session activities expanded on the information that was presented in the PowerPoint demonstrations and the art was successful in expanding conversation and teasing out queries.

**Achievements**
- Attendance was consistent. An initial dropout rate stemmed in part to a limited understanding of what the course entailed.
- All who attended expressed their surprise and enjoyment from their engagement with art activities. Printmaking and paper marbling were the most popular.
- The mood was light-hearted with plenty of discussion around the table that focused on the topics of the day.
- The groups were generous in their praise of each other’s artwork.
- Medical students and a GP trainee assisted the workshops as part of their own training needs.
- The second group worked in conjunction with the local health trainers in the discussion of staying well and healthy lifestyles.
- Language barriers were overcome by using an advocate for all of the sessions.
- For some individuals this was the first time in their lives that they had made art.
- All of the art that was made in the workshops was displayed as a HeartArt exhibition throughout the centre. Participants were invited to attend a private viewing along with their families.
Course outcomes

- All participants said they learned more about their bodies and had been given more information to stay well.
- All said they enjoyed the classes, some saying they enjoyed the classes a lot.
- Both groups took away information on heart health from the British Heart Foundation and Diabetes UK.
- Two men enrolled with the centre’s smoking cessation programme.
- Four joined the men’s walking group.
- One man took up evening art classes at the centre.
- One lady enrolled in the locally-run diabetes education programme.

General feedback from the group was that the information was put in a way they understood: “good class injoin very well” “enjoyed the class a lot” “learn how to use different types of art working” “amazing what you can do” “you can change things over if you try making it look different – you can learn to feel different.”

Which way now?
The national agenda is for all patients with type 2 diabetes to be offered and enabled to attend structured diabetes education. HeartArt was developed in this knowledge and should be viewed as an adjunct to and not a substitute for structured diabetes education.

Art and health offers an approach that is different, interesting, enjoyable and engaging. Art and health has value in the armoury of education tools and has tangible outcomes of social inclusion and engagement.

See more art from this innovation programme – in full colour – at our online community: www.rcn.org.uk/diabetescommunity

References on request.

Yvonne Coughlan is senior practice nurse at the Bromley by Bow Centre, London E3, where she has worked for the past nine years. In addition to her RGN and certificate in diabetes care, she has a BA Hons Fine Art. Recent art and health achievements have included publication of the Planet asthma art and activity book, and the collaborative projects Your blood and One blood. For more about HeartArt, email: yvonne.coughlan@nhs.net

Not one but two RCN diabetes websites put free information at your fingertips!

The Diabetes Nurses Forum online community ...

WWW.RCN.ORG.UK/DIABETESCOMMUNITY

The forum’s very own website is now live and fully accessible for our members. Your online community has all the latest news and information to use in diabetic care.

We also encourage you to get involved by contributing relevant information from your local area – examples of good practice, say, or notices of upcoming events or courses. And it’s fully interactive with a discussion board where you can partake in ongoing discussions as well as set new themes that reflect your own specific interests in the diabetic care arena.

We as a committee look forward to sharing and working with you through the site. And if you would like to contribute news, features or comments, as Website Editor I look forward to hearing from you at: k.d.booles@staffs.ac.uk

Keith Booles

... and the RCN Diabetes Resource

WWW.RCN.ORG.UK/DIABETES

Looking for a diabetes website that doesn’t require a sign-on fee or registration of any kind? Then look no further than the RCN’s own diabetes website which has had an extensive makeover.

We think you will find the new structure clearer than ever before, with all manner of relevant information divided into sections on:
- diagnosis
- treatment and lifestyle
- complications
- good practice
- patient voices
- patient involvement
- skills development.

We know a substantial number of people visit the site, which comes up number two when you Google “diabetes nursing” – indeed the pages had over 12,000 “hits” in the first three months of 2009!

If you are a diabetes specialist looking for an educational resource to share with non-specialist colleagues this site could fit the bill. It aims to highlight key issues and topics, and provides information on policy, national guidelines and other evidence-based resources. We include examples of how evidence has been incorporated into care and we signpost key organisations and support services.

Perks with your RCN subscription

As an RCN member you can explore related issues in the Learning Zone and the eLibrary. You may even be interested in the offer from the Open University that is giving RCN members a 10 per cent discount on some of their courses, including one about diabetes.

We are growing the amount of content we have in the professional development area of the site and the diabetes site will be joined by similar resources about patient safety and clinical audit.

Feedback, please!

We want to improve the kind of online services we offer on the RCN website. There’s a feedback form on the site itself for your comments and views about how we can develop things for the future. For instance, you may want to highlight a key issue we have not addressed; correct or contribute to an item or propose some linked learning content for the Learning Zone.

We hope you will find the site as valuable a resource as DiaBites and the Diabetes Nursing Forum’s own virtual community.

Check it out at: www.rcn.org.uk/diabetes. Then tell us what you think of it at: diabetes.resource@rcn.org.uk
The aim is that every patient will receive a copy of the leaflet with their current IFCC- HbA\textsubscript{1c} result. My understanding is that they will send out up to 100 patient leaflets at a time.

Many patients still struggle to understand exactly what their HbA\textsubscript{1c} results means and how it differs from their blood glucose level. This is a great opportunity to provide them with clear information about their HbA\textsubscript{1c} and, we hope, help them understand the difference between their blood glucose readings and HbA\textsubscript{1c}.

**The challenge**

As both results will be available, there is likely to be a temptation to continue discussing the old results and a potential to ignore the new readings. Following discussions with patients groups, it is important that we avoid this temptation and use the period of dual reporting to make sure everyone becomes familiar with the new numbers.

Realistically many patients may only have two or three HbA\textsubscript{1c} readings performed during the period of dual reporting.

Patients have stressed that during this period they want to understand what the new numbers mean, not how the two sets of numbers compare. Table 1 shows the relationship between the two set of results.

**Targets**

The new target for HbA\textsubscript{1c} readings for patients with type 2 diabetes in line with NICE guidance will be a 48mmol/mol. A reading of 39 mmol /mol will be the trigger to consider triple therapy.

**DCA machines**

For those areas of clinical practice that use DCA machines to measure patients’ HbA\textsubscript{1c} levels, there will be a slight delay in the switch-over. DCA vantage machines will be upgraded by a software upgrade that is currently being developed and will be installed free by Siemens.

The DCA 2000 analysers, however, will need to be replaced, but Siemens is currently offering a significant discount (about 50 per cent) in the cost of replacing the analysers. If you currently use a DCA 2000 analyser, I suggest you contact your Siemens representative to discuss your replacement options.

In the meantime Siemens will be distributing conversion charts to be used until the new software and machines are in place.

The introduction of the new numbers will no doubt cause some problems for us all in the first few months, but by using the leaflets available to us and discussing results with patients we hope to adapt well to the new results and improve patient understanding of HbA\textsubscript{1c} results and how they reflect the quality of their glycaemic control.

---

**Table 1: Comparison of HbA\textsubscript{1c} results**

<table>
<thead>
<tr>
<th>IFCC- HbA\textsubscript{1c} mmol/mol</th>
<th>DCCT- HbA\textsubscript{1c} (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>6.0</td>
</tr>
<tr>
<td>48</td>
<td>6.5</td>
</tr>
<tr>
<td>53</td>
<td>7.0</td>
</tr>
<tr>
<td>59</td>
<td>7.5</td>
</tr>
<tr>
<td>64</td>
<td>8.0</td>
</tr>
<tr>
<td>75</td>
<td>9.0</td>
</tr>
</tbody>
</table>