Women of the right personality: development of diabetes nursing

Robert Tattersall

Introduction

Diabetes nurses did not exist in the UK until the early 1950s, when the first diabetes health visitor was appointed. In addition to having a specialist knowledge of diabetes, she was expected to fulfil a number of other nursing roles. In the USA, the role of physician's assistant was developed in 1964, and by 1975 a number of public health nurses were managing patients with diabetes, cardiac disease or hypertension. This article relates the author's experience of working with diabetes nurse specialists and examines the development of the specialism.

The concept of a visiting nurse for a specific disease dates back to 1899 when the famous physician William Osler (1849–1919), then working in Baltimore, sent four female medical students to follow up patients with tuberculosis. (Osler's extraordinary influence on medicine in the early part of the 20th century is well captured by Bliss [1999].) The students found that the patients had neither the knowledge nor the means to carry out the treatment, and Osler argued that an outreach service was needed. His first visiting nurse was appointed in 1903. By 1906 more than 30 tuberculosis nurses were working around the USA, and by 1915 there were thousands. Robbins (1997) summarises their role as one that:

> ***'Combined an unusual independence of physical control with significant authority over the lives of patients and their families. While they delivered medical knowledge about the disease to their patients, they were also an important source of information for the medical community and other reformers about the conditions in which tubercular patients lived.'***

The decline in numbers of tuberculosis nurses was precipitated by the First World War, and by 1934 they had disappeared. Robbins suggests that this was because many of the bright, ambitious young women who had pioneered the role volunteered for war service. Also many of the programmes were paid for by charities, who gradually lost interest as the incidence of tuberculosis declined.

In the 1930s, the Boston diabetes specialist Elliott Joslin (1869–1962) suggested that there was a need for 'wandering diabetic nurses' to help GPs. He claimed that they would not only save the doctors' time, but would also teach patients to use insulin and diet and 'combat coma and gangrene'. Another advantage was that nurses were cheap, costing less than the endowment of one diabetic bed in hospital. In a comment that reminds us how different life was 70 years ago, Joslin suggested that well-to-do and altruistic diabetic patients might lend their private nurse to a physician for an hour or two a day to teach the other diabetic patients (*Lancet*, 1931).

Dr Joan Walker

Diabetes nurses did not materialise in England until the early 1950s when the Leicester physician Joan Walker (1902–1955) suggested that all diabetes clinics needed:

> ***'Field work which might be undertaken by a suitable health visitor.' (Walker, 1953)***

Reading between the lines of her article, the main problem in implementing this was that the matron insisted on nurses being generalists, not specialists. Since health visitors had 'done' diabetes as part of their training, they were considered ideally suited to supervise any, or all, newly diagnosed diabetic patients. After all, what did it involve except teaching injection technique

ARTICLE POINTS

1. Diabetes specialist nurses have been key to improving the standard of diabetes care in the UK in the last 20 years.
2. The first specialist visiting nurse dealt with tuberculosis and was appointed in the USA in 1903.
3. The first diabetes specialist nurses were introduced in the USA in the 1930s and in the UK in the 1950s.
4. Joan Walker, a physician practising in Leicester, appointed the first diabetes health visitor in England in 1950.
5. Diabetes health visitors were well established by 1976, when the author appointed a diabetes specialist nurse.

KEY WORDS

- **Diabetes specialist nurse**
- **Teamwork**
- **Interdependent not independent**
- **Patient-centred health service**

Robert Tattersall is Retired Professor of Clinical Diabetes at the University of Nottingham.

PAGE POINTS

1 Dr Joan Walker appointed her first diabetes health visitor in 1950, and a second in 1952.

2 She understood the need for this to be a specialist rather than a generalist role, so that the nurses had adequate time and knowledge to care for patients with diabetes.

3 She suggested caring for children with diabetes in their own homes, but this did not become common practice for some time.

4 A pilot study in the USA in 1964 that involved public health nurses managing patients with diabetes, cardiac disease or hypertension proved popular with nurses and patients.

and urine testing? For a time, Dr Walker accepted the matron's scheme and waited for it to fail. When it did, she noted:

'Despite lectures, food demonstrations and visits to the clinic, other duties dilute the health visitor's interest... the time they can spend on diabetic problems is limited, so that their knowledge is inadequate and it is not fair to make use of them.'

The way was now open for her to implement her own ideas. She appointed her first diabetes health visitor in 1950 and a second in 1952. The job description makes it clear that in addition to a specialist knowledge of diabetes, the health visitor was expected to be mistress of many other trades – nurse, dietitian, chiropodist, social worker, psychologist and detective.

Walker's article (1953) concludes:

'The need for field work in the care, and aftercare of the diabetic patient becomes more apparent the longer one works in a central clinic. It is doubtful whether the family doctor can find the time to undertake all this work. Teaching the diabetic has to be slow, painstaking and above all consistent... this work can be done by a woman of the right personality who must have considerable tact as well as expert knowledge.'

The paper was too revolutionary for the times and fell on deaf ears. I suspect that prejudice against women physicians played a part, as did the fact that Joan Walker was trespassing into the territory of paediatricians. One of her innovations, which many would have considered outrageous, was that:

'It is now our practice to undertake the entire management of [newly diagnosed] children in their own homes unless they show severe ketosis or suffer from some complication which needs admission to hospital.'

The justification was that:

'There is much less disturbance in the child's life when everything seems to be against him.'

It did, of course, cause disturbance in the life of hospital-based paediatricians, and did not become common practice in England for over 30 years!

Physicians' assistants and nurse practitioners: the US experience

In 1964, Dr Eugene Stead from Duke University developed the first formal training programme for what he called the physician's assistant. His interest had begun fortuitously in 1957 when the supervisor of nursing, Thelma Ingles, told him she was going to have a sabbatical year. She wanted to enhance her capabilities as a nurse, and since there were no real opportunities she spent the year operating as a medical student in a clinical clerkship supervised by Stead. He later said he had chosen her because:

'I finally discovered a nurse who didn't know all the answers... '

This was in contrast to the rest of the nursing body who were passive and operated in a traditional cookbook style (Holt, 1998). Owing to the implacable hostility of the nursing administration, Stead's programme recruited almost exclusively men, most of whom were ex-soldiers.

Elsewhere in the USA, the impetus for decentralisation of care and the use of nurses in the treatment of chronic diseases was the lack of primary care and over-crowding of hospital clinics.

In the pilot study of the Memphis chronic disease programme in Tennessee, stable patients with diabetes, cardiac disease or hypertension were referred to a so-called 'clinical nursing conference' where experienced public health nurses (who had been doing unsupervised well child and prenatal care) could see 12–15 patients in a 2-hour session (Guthrie et al, 1964). It was received enthusiastically by nurses and patients, and by 1975 more than 140 000 patient visits had been made to the decentralised facilities and 9000 patients were receiving regular care (Runyan, 1975). One reason for the success of the system was that:

'Professional care and advice are easier for the patients to obtain when the barrier to care of a rigid appointment system, characteristic of the hospital clinic, is removed. Patients are given the opportunity to call, if in need of medical assistance.'

The concept of the physician's assistant was endorsed by the American Medical

Association in 1970 and bitterly contested by the American Nursing Association who saw it as an attempt to sabotage their efforts to turn nurses from physicians' handmaidens into independent practitioners.

When Sox reviewed the quality of care provided by nurse practitioners and physicians' assistants in 1979, he found it to be equivalent to that of physicians and greatly appreciated by patients (Sox, 1979). Only 2 of the 21 schemes reviewed by Sox concerned diabetes. In both schemes the nurse practitioner worked in the clinic and her performance was compared with that of a physician (whose judgments were, rather unreasonably, regarded as the gold standard). In both cases, the nurse practitioner was as good as the doctor at making appropriate decisions, and in one she scored higher than the doctor, in that her patients had better glycaemic control and fewer cases of non-compliance.

My experience

When I became a consultant at Nottingham General Hospital in October 1975, diabetes health visitors were well established in Leicester and Mansfield. Those in Leicester had been starting newly diagnosed patients on insulin as outpatients for a quarter of a century, whereas in Nottingham patients were admitted to a general medical ward for a week of 'stabilisation and education'. The wards were so busy that some education was given by the most junior nurse and most of it by the elderly diabetic in the next bed.

This was clearly unsatisfactory and I began a system whereby my registrar, Edwin Gale, and I started patients on insulin at the end of our Friday afternoon clinic. It was one of the most rewarding things I have done in medicine, but it became apparent that we would wear ourselves out if we continued.

I therefore wrote to our matron on 2 August 1976 proposing the appointment of a specialist nurse to supplement our current 1.5 days of health visitor time, which was mainly taken up with sorting out elderly patients' financial problems. I suggested that what we needed was someone who was likely to remain in Nottingham for several years, who would have good general medical nursing experience and be either a sister or staff nurse, who was above average intelligence and able to take a considerable amount of responsibility. Her duties were to include:

- Starting insulin for outpatients.
- Educating patients and their families in the management of diabetes.
- Assisting GPs in preventing ketoacidosis or managing patients who were bedridden or confined to their homes.
- Educating other nurses. I suggested that student nurses might be attached to our specialist diabetes nurse for 2 weeks, during which they would learn far more about diabetes than they could ever do from lectures.
- Providing community health education by giving talks in local factories and schools.

The wheels of consultation ground slowly, but the only objection received was from the GP representative, who claimed that giving a nurse any authority would upset his colleagues in an unspecified way. My consultant colleagues were not antagonistic but found it difficult to understand the need for such a post – in my hospital, respiratory medicine did not appoint specialist nurses until the late 1980s and gastroenterology not until the late 1990s.

Pat Clarke became our first diabetes nurse in October 1978. She had been a medical ward sister and a district nurse and had a remarkable network of contacts which made dealing with GPs, social services and district nurses a doddle.

For the first 6 months, my colleagues and I taught her as we would have done a senior house officer, by having her sit in the clinic with us, then clerking patients and finally taking over their complete management. She also attended the Birmingham course run by Janet Kinson and did the first of many sessions at a BDA summer camp.

After her first year, it became apparent that Pat was grossly overworked! Among other things, she had started 72 people on insulin as outpatients, had supervised 24 diabetic pregnancies (including managing their blood glucose during labour), had sorted out intransigent teenagers and had checked up on clinic defaulters. There had not been, and never has been, time for the lectures at factories and schools!

PAGE POINTS

1 The quality of care provided by nurse practitioners and physicians' assistants compared favourably with that of physicians.

2 A nurse practitioner working in a diabetes clinic achieved better glycaemic control and had fewer cases of non-compliance in patients than the doctor.

3 The author's first appointed diabetes specialist nurse at Nottingham General Hospital was taught in the same way as a senior house officer.

PAGE POINTS

1 After one year, the role of the diabetes specialist nurse at Nottingham General Hospital had expanded and it became clear that another nurse was required.

2 The nurses appointed wanted to expand their nursing role, rather than become pseudo-doctors.

3 It is important that diabetes nurses and doctors work together to run an efficient diabetes service.

4 Diabetes specialist nurses have done more to improve the standard of diabetes care in the last 20 years than any other innovation or drug.

I wrote to the matron on 31 December 1979 detailing the fantastic work our nurse specialist had done, and listing numerous things we would be able to do if we had another nurse. Reading this letter more than 20 years later makes me cringe and realise what a brash, unrealistic young man I must have been. According to my scheme, these two superwomen were now going to do the following extra tasks:

- Produce and run a regular teaching programme for people with both types of diabetes, which would be available to all doctors in Nottingham.
- Organise outpatient care for foot ulcers.
- Set up mini-clinics in general practice.
- Organise a screening programme for retinopathy. According to my letter, my preliminary studies had shown that a nurse can screen fundi through dilated pupils with an ophthalmoscope 'at least as effectively as a medical or ophthalmological registrar'.

With the benefit of hindsight, one of my errors was to try to turn nurses into pseudo-doctors. It did not happen because the nurses subtly (or not so subtly on some occasions) made it clear that they were not interested in becoming doctors but wanted to expand the role of the nurse. At the time, there was no general agreement on the scope of a specialist diabetes nurse's role (*Lancet*, 1982).

The biggest sticking point, and one with which I had a battle royal with our matron, was how much clinical judgment the specialist nurses should be allowed and whether they could change the dose of drugs, particularly insulin. My argument was that any nurse who visited a patient at home had to make some sort of diagnosis and take responsibility for it. Where changing insulin doses was concerned, it seemed absurd that a patient or parent could do it, while the nurse with vastly more experience could not (Tattersall, 1986).

Eventually I got the matron, against the advice of the habitually timid and obstructive regional solicitor, to agree that this should be written into the job descriptions of our nurses and that the hospital would take responsibility. It turned out to be one of those issues, like reuse of plastic insulin syringes, that generated an enormous amount of friction but turned out to be a damp squib. Had the hospital been able to insure itself for lawsuits against the diabetes nurses, it would have been money down the drain since none materialised over the next 20 years!

Another momentous lesson I learned over the years was the importance of teamwork in running a diabetes service. The diabetes nurses and I kept in touch by means of a weekly one-hour case discussion session. This enabled all of us to get things off our chests and to make coherent plans for dealing with our most difficult patients. My advice would be that doctors and diabetes nurses should be interdependent not independent.

Final thoughts

Any unbiased observer would agree that diabetes specialist nurses have done more to improve the standard of diabetes care in the UK in the past 20 years than any other innovation or drug. The same unbiased observer would be surprised to learn that diabetes specialist nurses receive a fraction of the number of column inches devoted to oral insulin, human insulin, glitazones, anti-obesity drugs, etc. Fortunately, however, people with diabetes know that diabetes specialist nurses are far more important and that's what really matters in a patient-centred health service. ■

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