

Diabetes nursing practice and research



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This edition of JDN includes the first in a series of articles on research. When asked to write this editorial 'as someone who knows something about this', I then reflected on what it was I knew about research and what might be worth sharing with my peers! I have chosen not to discuss the pros and cons of nurses getting involved with research as I presume readers will already be aware of this and Viv Coates' series of articles will develop this theme. My journey of reflection led me to the following questions: how have I used research in my practice, how have I influenced research carried out within my domain of practice, how I have carried out research and what are the lessons that I have learnt about research? So I have chosen to share with you some insights along the way.

Using research in practice

How have I used research in my practice? It would be wonderful to say that all my practice is underpinned by good evidence, but of course that is not true. For example, the use of insulin in type 1 diabetes has never been subjected to a randomised controlled trial (RCT) and therefore also not to a review of RCTs to provide gold standard evidence. But of course this does not mean that we would consider not using insulin in this group of patients, however, it is an example of a 'lower' standard of evidence, i.e. professional consensus. This example highlights the vital role of different categories of research evidence. When there is a lack of evidence and professional rhetoric rules such as regarding 'what is the best insulin regimen', whilst many will argue strongly that there is evidence, there is not. What is becoming clearer is the fact that it is not the insulin regimen but the way that the insulin is used/adjusted (along with other lifestyle factors) that makes the difference.

Influencing research

This leads me to my next question: how have I influenced research in my practice domain? The evidence supporting the effects of DAFNE (DAFNE study group, 2002) is good but it does not go far enough. The intervention (the DAFNE education programme) is subject to many variables that may be influencing the effect of the programme: the timing of the days, the number of days, the style of teaching/learning, the attitudes and beliefs of the educator e.t.c... This has led myself (and others) to consider developing programmes to achieve similar outcomes but using different processes. In an ideal world, these programmes would all be set up as RCTs so that a review of the results would allow us to find out what really works best. But the reality is that many people are demanding such courses and healthcare professionals are keen to deliver them, so different groups have been set up (Cradock, 2003). These professionals are keen to answer the research questions raised earlier and a type 1 education network has been developed to learn from each other and consider ways of generating the research.

The other question that needs to be researched is why do some participants do well and other do not – the originators of the Dusseldorf model have tried to consider this (Bott et al, 2002).

The other main area where I have influenced the development of research is in the development of the DESMOND collaborative in type 2 diabetes. Here I questioned the validity of our own programme and others as not being subjected to objective assessment – this led to a meeting of interested people and the rest is history (Cavan and Cradock, 2004).

I have not been the expert researcher but more the expert questioner! This reflection led me to another point about the limitations of implementing the

findings of RCTs. I have to personally thank Charles Fox and Simon Heller for their insights about this many years ago. A RCT provides information about the effect of an intervention on a large proportion of the research population. There are, however, limitations to this – it is rare that the intervention had the same effect on all of the population and therefore when these interventions (usually drugs) are provided widely we see different effects to those published. Also, the population studied is usually different to the general population served in our communities. Most drug-related RCTs do not include qualitative research approaches that may give answers to questions such as: what are the characteristics/self-beliefs of people and their lives that may influence self-medication.

What is ‘good’ research?

Good studies are being published when quantitative and qualitative research methods are used to get a broad view of what is happening (Cooper et al, 2003). Whereas the two main domains of research were seen as incompatible there is now an increasing recognition that both research paradigms answer different research questions and therefore may be as important as each other.

My interests in the concept of research has also led me to realise that what may be marketed as ‘good’ is not necessarily so. Readers of the BMJ will be aware of letters of criticisms regarding the UKPDS (Cruickshank JK, 2001): comments such as “the UKPDS prospective diabetes study shows no benefit on macrovascular endpoints in patients with type 2 diabetes treated with sulphonylureas or insulin over 10 years” and “nevertheless, many authors, journal editors, and the wider scientific community interpreted the study as providing evidence of the benefit of intensive glucose control” (McCormack and Greenhalgh, 2000). Most of our guidelines are based on this research nowadays. Who or what is correct? I suspect neither and both! The care of people with type 2 diabetes

needed to be raised as a political issue and the UKPDS has helped that become a reality, but I am aware that the research experts have a point! The lesson for me here is to be aware of the limitations of research but also how marketing forces will be used to make best use of data. The other interesting point is that UKPDS was one RCT and not the results of a review of RCTs so was still not gold standard evidence – but yet it has had such an influence.

Finally, my personal journey into research practice is waxing and waning. I have started the PhD journey to answer a question that has been with me for most of my diabetes nursing career. What are the influences that enable some people to self-adjust insulin very well and others not? But trying to incorporate being an active researcher into a busy political and clinical role is not easy and I have just taken a year out to do the nurse prescribing course! If anyone out there can give me tips of how to be disciplined about my research when I restart then I would be grateful – perhaps that is what Viv’s series of articles will help me do! ■

See Page 8 for Vivien Coates’ first article in the new series on research

DAFNE Study Group (2002) Training in flexible, intensive insulin management to enable dietary freedom in people with type 1 diabetes: dose adjustment for normal eating (DAFNE) randomised controlled trial. *British Medical Journal* **325**: 746

Cradock S (2003) DAFNE, BERTIE, Insight and Jigsaw: turning of the tide or breaking of the waves? *Practical Diabetes International* **20**(2): 43

Bott U, Hemmann, Berger M (2000) Evaluation of a holistic treatment and teaching programme for patients with type 1 diabetes who failed to achieve their therapeutic goals under intensified insulin therapy. *Diabetic Medicine* **17**(9): 635–43

Cavan D and Cradock S (2004) Education and type 2 diabetes. *Diabetic Medicine* Supplement, January 2004.

Cooper H, Booth K, Gill G (2003) Using combined research methods for exploring diabetes patient education. *Patient Education and Counselling* **51**(1): 45–52

Cruickshank JK (2001) UKPDS is not a cohort study and analysis is misleading. *British Medical Journal* **322**: 1246

McCormack J and Greenhalgh T (2000) Seeing what you want to see in randomised controlled trials: versions and perversions of UKPDS data. *British Medical Journal* **320**: 1720–23