The value of group insulin starts in people with type 2 diabetes

Maureen Wallymahmed, Ian MacFarlane

Introduction

Education is an essential element of diabetes care to enable people to self-manage on a day-to-day basis. It is recommended that structured education is made available to everyone with diabetes at initial diagnosis and on an ongoing basis and that this education is generally delivered in groups (National Institute for Clinical Excellence, 2003). People with type 2 diabetes starting on insulin require a lot of education and support. Traditionally, these people have started insulin on an individual basis. However, in recent years there has been a move towards starting patients with type 2 diabetes on insulin in groups. This article presents the findings from a survey to determine how patients in North West England are started on insulin and the advantages and disadvantages of group insulin starts.

Diabetes is a common, life-long condition affecting approximately 3% of the UK population (Diabetes UK, 2004). The prevalence is predicted to rise to more than 3 million by 2010 (Amos et al, 1997) and the majority of these people will have type 2 diabetes (Zimmet et al, 2001). Poorly controlled diabetes causes distressing symptoms and in the long term is responsible for considerable morbidity and mortality.

The United Kingdom Prospective Diabetes Study (UKPDS) confirmed the importance of good glycaemic control in reducing the microvascular complications of type 2 diabetes (UKPDS Group, 1998). For most people with type 2 diabetes, glycaemic control deteriorates with time, and it is estimated that up to 50% of people will require insulin to achieve target HbA_{1c} levels (Winocour, 2002). This has considerable resource implications, particularly for nurses and dietitians. To cope with this increased demand, many centres have now adopted group insulin starts.

Aims of the study

The aims of the study were:

- to determine how people with type 2 diabetes, in North West England, are started on insulin
- to investigate the perceived advantages and disadvantages of group insulin starts.

Methods

North West England stretches from the Wirral Peninsula in the South up as far as Cumbria in the North. It has a wide variety of urban and rural populations, including Liverpool and Manchester. There has been an active Diabetes Specialist Nurse Forum in the region for many years. Data provided by the forum identified 42 centres (community or hospital based) offering a diabetes specialist nurse (DSN) service.

A questionnaire was sent to two diabetes specialist nurses (DSNs) working in each centre. Questions related to how people were started on insulin, why that method was chosen and the perceived advantages and disadvantages (see *Table 1*).

Results

Questionnaires were returned from 38 (90%) centres. Of these, three were paediatric services and were therefore excluded from the final results. Of the remaining 35 centres (nine community based and 26 based within secondary care), 14 (40%) offered group insulin starts and 21 (60%) offered only individual insulin starts.

All 14 centres offering group starts

ARTICLE POINTS

1 The number of people with type 2 diabetes requiring insulin is escalating; group insulin starts may be a way of coping with this increased workload.

2 A survey of practices in North West England revealed that 40% of centres are currently involved in group insulin starts.

3 Advantages include more face-to-face contact time and increased support.

4 Disadvantages include difficulty meeting individual needs within the group and managing dominant individuals.

5 Staff considering introducing group education sessions should be adequately trained in adult education techniques.

KEY WORDS

- **Insulin**
- **Group starts**
- **Individual starts**
- **Education**

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Table 1. Questions asked in the questionnaire sent to diabetes specialist nurses.

How are your patients with type 2 diabetes started on insulin?
Group starts *or* **Individual starts** *or* **Both**

For centres offering group insulin starts

1 How long have you been offering group starts?
2 Why did you initially introduce group starts?
3 Are people offered a choice between group and individual starts?
4 What percentage (approximately) of people start insulin as a group?
5 Do you have criteria for people suitable for group starts? If so, briefly outline your criteria.
6 How long does the group start programme last?
7 How many times do people attend the centre?
8 How many people are in each group?
9 Who is involved in the groups (e.g. specialist nurses, nurse educators and dietitians)?
10 In your opinion, what are the benefits of group starts over individual starts?
11 Do you think that there are any disadvantages of group starts?

For centres not offering group insulin starts

1 Have you tried groups starts in the past? If so, what was your experience with them?
2 What are your reasons for opting for individual starts?
3 How do you ensure standardisation of education and support for people with type 2 diabetes (e.g. checklists)?
4 Would you consider group starts as an option in the future?

stated that individual starts were also an option if appropriate. Of the 21 centres who started people on insulin by individual appointment, six had tried group starts in the past.

Centres offering group insulin starts

Why group insulin starts?

Reasons for opting for group starts fell into the following four main areas:

- escalating numbers of people starting on insulin and a lack of additional resources to meet the increased demand
- the potential to increase support using available resources
- an increase in waiting times to start on insulin
- National Institute for Health and Clinical Excellence guidelines advocating group education sessions.

The structure of the programmes was variable: they consisted of two to four sessions, lasted 30 minutes to 2 hours and involved between three and ten people (as well as accompanying relatives). In several centres, people were offered a combination of individual and group sessions. In these cases, the initial assessment (lifestyle and compliance assessment and agreeing on the most appropriate insulin regimen) was done on an individual basis and people were then referred to group sessions for education on common aspects of insulin therapy, such as injection technique and hypoglycaemia. Some centres encouraged people to give the first injection in the group setting while respecting the need for privacy of individuals.

Advantages and disadvantages of group insulin starts

The advantages and disadvantages of group starts, as perceived by DSNs involved in group starts, are shown in *Table 2*.

Centres offering individual insulin starts

Reasons for starting people on insulin on an individual basis included:

- responding to individual needs (starting on insulin is an individual experience)
- the inappropriateness of using group starts in older or house-bound people
- a lack of space or accommodation to run group sessions
- a lack of clerical support
- not enough people starting insulin.

To ensure standardisation of care, education checklists and care pathways were used. Some centres offered follow-up for a finite period of time only (such as 3 months) while others offered follow-up according to individual need.

Of the 21 centres offering individual starts, ten (48%) stated that they would consider group starts in the future if the needs of the population changed or if there was more evidence to support the effectiveness of group starts.

Centres previously offering group starts

Six (17%) centres had offered group starts in the past but had returned to individual starts. Reasons for this included:

- people failing to attend or being late and disrupting the session
- wide-ranging abilities and different insulin regimens, making it difficult to meet individual needs
- poor use of resources
- loss of accommodation and a lack of clerical support, as well as other practical reasons.

Two of these centres stated that they would consider re-introducing group starts in the future but would combine group sessions with some individual education.

Discussion

In North West England, surprisingly only 40% of centres offered group education for people with type 2 diabetes starting on insulin. All of those that did felt that this was an efficient and resource-effective way of managing the escalating numbers of people with type 2 diabetes requiring insulin.

A previous study of starting people on insulin in groups estimated time savings of up to 25% (Almond et al, 2001). Others have not noted a time-saving effect but report an increase in face-to-face contact time (Hill and Gilroy, 2002; Erskine et al, 2003).

Patient satisfaction has also been assessed, and feedback suggests that group insulin starts are both informative and acceptable to most people (Sumner et al, 2001; Hill and Gilroy, 2002). One retrospective study compared metabolic control and satisfaction in a group of people who started insulin individually with those starting insulin in a group setting (Erskine et al, 2003). Improvements in metabolic control were comparable in both groups; however, satisfaction with treatment was significantly greater in those receiving group sessions.

Retention of knowledge was also assessed in two studies and was found to be good (Sumner et al, 2001; Hill and Gilroy, 2002). Interestingly, though, in both studies information about recognition and treatment of hypoglycaemia was not as well retained as that in other areas. It could be argued that increases in knowledge would occur in anyone starting on insulin regardless of whether this takes place in an individual or group setting. But in addition to increasing knowledge, group starts can offer a supportive environment which has a focus on getting people together and sharing experience.

Intriguingly, as is the case in several published studies (e.g. Sumner et al, 2001; Hill and Gilroy, 2002), many centres in the North West offering group starts also offered some individual follow-up, either by telephone or through face-to-face contact. This individual contact is appreciated by people (Hill and Gilroy, 2002).

In this survey, DSNs involved in group insulin starts in North West England did identify some disadvantages. These disadvantages were mainly related to meeting the needs of individuals, different learning styles and learning pace. This may be somewhat overcome by developing assessment criteria to try to identify those people who may benefit from group education sessions.

Individual choice is important and it should not be assumed that all people

Table 2. Advantages and disadvantages of group insulin starts, as perceived by DSNs in 14 centres currently involved in group starts.

Advantages	Disadvantages
● Time effectiveness	● Inflexibility regarding individual needs, learning style or pace
● Reduced waiting times to start insulin	● Difficulty managing quiet and dominant people
● Increased interaction	● Lack of necessary training in facilitation skills
● Increased learning and support	
● Consistent messages	

PAGE POINTS

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3 Patient satisfaction has also been assessed, and feedback suggests that group insulin starts are both informative and acceptable to most people.

4 In addition to increasing knowledge, group starts can offer a supportive environment which has a focus on getting people together and sharing experience.

PAGE POINTS

1 Staff involved in group insulin starts should not only have a firm diabetes knowledge base but also be trained in adult education methods.

2 Such training has implications for both finances and manpower resources.

3 A combination of both group and individual sessions should meet the needs of the majority of people.

would want to be involved in group sessions. However, available resources often prevent individual choice. In this study, several centres stated that although individual starts were an option in reality, because of resources most people were directed towards group starts.

A major issue highlighted by this survey is the education of trainers. Several respondents identified difficulties in facilitating small groups, particularly in relation to dominant group members. Many felt that they were poorly prepared for this role. Education is an important aspect of diabetes care and staff involved should not only have a firm diabetes knowledge base but also be trained in adult education methods, including facilitating small groups (Walker and Rodgers, 2004). This is an area where many of us fall short.

The National Institute for Health and Clinical Excellence (NICE; 2003) supports a nationally recognised accreditation programme, and adult education training programmes are available in some higher education institutions. Such training, although essential, has implications for both finances and manpower resources and is something that all centres need to be working towards.

Some centres in rural areas or with a large number of older people felt that group starts were simply not practical. Several centres did express an interest in group starts if accommodation and clerical support were available. Lack of space is a major problem for many people working in the National Health Service and accommodation for educating people with diabetes, if available, is often a shared resource. Overcoming such barriers is a challenge to us all.

Conclusion

The need for insulin treatment in people with type 2 diabetes is likely to increase; resources may not. To provide a high-quality service, we need to use resources effectively.

In this survey, 40% of centres in the North West currently start people with type 2 diabetes on insulin in groups and all felt that this was beneficial to people and a good use of resources. In addition, 48% of centres who currently start people on insulin on an individual basis stated that they would consider group starts in the future. Group insulin starts may not necessarily be time-saving, but they appear to be more efficient, increasing patient support and face-to-face contact time. However, individual patient choice must be considered.

A combination of both group and individual sessions should meet the needs of the majority of people. The skills of the educator are paramount and should be carefully thought through before introducing group education sessions. ■

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