



MADHUSUDAN DALVI, MICHAEL FEHER, ESRA CAGLAR AND JOSE CATALAN

Liaison psychiatrist in a specialist diabetes centre

AIMS AND METHOD

To identify psychiatric conditions that may require psychiatric treatment in individuals referred from a diabetes centre to a liaison psychiatry diabetes clinic and to examine the referral pattern and reasons for referral. The study was a prospective case-note survey over a 12-month period.

RESULTS

The most common reason for referral was low mood (37.5%) and the most common psychiatric diagnosis was adjustment disorder (28.6%). Most individuals were referred by diabetes specialist nurses (53.1%). The majority (85.7%) were seen by a clinical psychologist after an initial assessment by a psychiatrist.

CLINICAL IMPLICATIONS

Common mental disorders occur frequently in individuals referred to a liaison diabetes clinic, hence the importance of early diagnosis. The involvement of psychiatrists in specialist diabetes clinics is very limited and better involvement is desirable.

Many individuals attending a diabetes clinic have comorbid mental health problems; therefore, treatment of diabetes needs an integrated approach, incorporating both physical and psychological perspectives. The *National Service Framework for Diabetes* emphasises the importance of psychological well-being for individuals diagnosed with diabetes (Department of Health, 2001). Psychiatrists and psychologists have not been routinely integrated into the multidisciplinary diabetes team as, for example, pain clinics have. There are very few specialist diabetes centres in which a psychiatrist is a part of the diabetes team. The Beta Cell Diabetes Centre at the Chelsea and Westminster Hospital Foundation Trust was one of the first in the UK to establish a liaison psychiatry placement within a diabetes centre.

Several psychological conditions may occur in individuals with diabetes. Depression is the most common, but it is often unrecognised and untreated (Anderson *et al*, 2001). Also common are schizophrenia and substance misuse which can impair the individual's ability to manage diabetes. Alcohol interferes with the capability of the liver to store and release glucose and can complicate diabetes (Saudek *et al*, 1997). A person with phobic disorders may be unable to do self-injections. The pressure of the need to eat the right food in the right amounts may lead to a feeling of food deprivation; anger and frustration may follow.

Methods

This prospective case-note survey covered the 12-month period from April 2006 to April 2007. At 12 months, case-note data were collected in a standardised manner. Information included the source and reason for referral, service user characteristics, type of diabetes, DSM-IV diagnosis at the end of assessment, treatment offered and outcome regarding attendance and discharge. The data were compared with the previous report from the clinic (Mitchell *et al*, 2000).

Clinic

The Beta Cell Diabetes Centre is a multidisciplinary clinic based at Chelsea and Westminster Hospital, London. It treats individuals with diabetes above the age of 16. The multidisciplinary team in the centre comprises three consultant diabetologists, one medical specialist registrar, six diabetes specialist nurses, two dieticians, one podiatrist and a liaison psychiatry specialist registrar who has a weekly session. This weekly psychiatry session is based on the consultation liaison model, involving consultations with service users, regular meetings with staff to discuss individual out-patients and general aspects of service user/in-patient care.

Service user characteristics

Thirty-two individuals were referred from April 2006 to April 2007 to the liaison psychiatry clinic. Seven failed to attend their appointment and three were still waiting to be assessed at the time of the study. One appointment was cancelled by the service user. Our results, therefore, show the outcome of 21 assessments. Out of the total number of individuals referred, 15 were male (46.8%) and 17 were female (53.1%), within the age range of 31–71 years. Out of the total 32 individuals referred (including those who did not attend their appointment, those who awaited appointments and those who cancelled their appointment), 14 individuals (43.7%) had type 1 diabetes mellitus and 18 (56.2%) had type 2 diabetes mellitus. Of the 21 individuals who were assessed in the clinic, 12 were married (57.1%) and 8 were single (38.09%; 2 were single parents and 1 was divorced (4.7%)). Other service user characteristics are given in Table 1.

Two individuals were seen on the day of the referral and the remaining 21 individuals received appointments within 2 weeks of the referral. Each of the seven individuals who failed to attend their appointments was sent two further appointments and every effort was made to establish contact with them personally (by telephone). Where this was not possible, letters were sent to them informing them of their next appointment. Out of these seven individuals, one had already established contact with her community psychiatric team, three had alcohol-



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Table 1. Baseline characteristics of individuals referred to a liaison psychiatry diabetes clinic – comparison with Mitchel et al's survey

| Baseline characteristics | 1997–1998 survey ¹ | 2006–2007 survey |
|---|-------------------------------|------------------|
| Age range, years | 26–72 | 31–71 |
| Marital status, <i>n</i> (%) | | |
| Married | 4 (17) | 12 (57.1) |
| Single | 16 (67) | 8 (38.2) |
| Divorced | 2 (8) | 1 (4.7) |
| Gender, <i>n</i> (%) | | |
| Male | 10 (42) | 15 (46.8) |
| Female | 14 (58.3) | 17 (53.1) |
| Individuals referred, <i>n</i> (%) | | |
| Patients seen | 24 (77.5) | 21 (65.7) |
| Did not attend | 7 (22.5) | 11 (34.3) |
| Individuals with type 1 diabetes referred, <i>n</i> (%) | 22 (70.9) | 14 (43.7) |
| Individuals with type 2 diabetes referred, <i>n</i> (%) | 9 (29.0) | 18 (56.2) |

1. Mitchel et al, 2000.

related problems which they minimised, one had a needle phobia and the remaining two had poor adherence with insulin.

Reasons for referral

A common reason for referral was low mood ($n=12$, 37.5%) which led to non-adherence with diabetes medication and poor glycaemic control. The next most common reason for referral was anxiety ($n=3$, 9.3%), followed by personality difficulties ($n=2$, 6.3%). Most individuals were referred to the liaison clinic by a diabetes specialist nurse ($n=17$; Table 2).

Psychiatric diagnosis

Out of the 21 individuals who attended their appointments at the clinic, the most common psychiatric diagnosis was adjustment disorder ($n=6$, 28.5%). Two of the individuals with adjustment disorder (9.5%) had a comorbid diagnosis of alcohol dependency and anxiety respectively. Five individuals had depression (23.8%) and two had personality difficulties (9.5%). One person (4.7%) each had a binge eating disorder, alcohol dependence, schizophrenia, needle phobia and anger problems. One individual did not have any kind of psychiatric problem and was referred to the clinic because of non-adherence of insulin which was thought to be caused by

Table 2. Referral by profession

| Referral by profession | Individuals referred 2006–2007, <i>n</i> |
|------------------------------|--|
| Diabetes specialist nurse | 17 |
| Consultant diabetologist | 6 |
| Medical specialist registrar | 3 |
| Associate specialist | 5 |

depression. We have compared the results of our survey with that by Mitchel et al (2000) (Table 3).

Management

Various interventions were used to treat the psychiatric conditions of the 21 individuals who attended the clinic. Psychopharmacological treatments included antidepressants, antipsychotics and appetite suppressants. Psychological interventions included cognitive-behavioural therapy sessions offered at the psychological medicine unit.

Discussion

In this survey, adjustment disorder was the most common psychiatric disorder diagnosed in the liaison psychiatry diabetes clinic ($n=6$, 28.5%). Common mental disorders are more prevalent in our clinic than severe mental illness which is more likely to be encountered in an exclusive psychiatric setting.

In this cohort, individuals with an adjustment disorder were distressed by problems of living with diabetes – they were ashamed to inject insulin at the workplace and frustrated with unpredictable blood glucose levels, which led to demotivation for monitoring. Many harboured inaccurate assumptions about insulin, relating it to end-stage disease.

Fear about taking insulin was common. It is important to recognise erroneous assumptions about diabetes, like those mentioned above, as they may be treated by psychoeducation and cognitive-behavioural therapy. Diagnosing depression in diabetes can pose a challenge, as high blood glucose level in itself can lead to depressive symptoms, like fatigue, changes in sleep patterns, changes to appetite and weight. The feelings of helplessness and hopelessness that manifest in depression may contribute to poor self-management of diabetes. For many participants in our survey, diabetes was a life event which triggered depression, leading to only partial adherence to medication and worsening of diabetes.

There was no significant difference between service users' baseline characteristics in both periods. The level of non-attendance to the clinic was 34.3% in our study, as compared with 22% in the previous study. There were more individuals with type 2 diabetes referred to the clinic between 2006 and 2007 (56.2%) than in 1997–1998 when the majority had type 1 diabetes (70.9%).

Psychoeducation formed an important aspect of the treatment provided in this clinic and has a good evidence base in the treatment of diabetes (Rubin et al, 1989), as many individuals are distressed by the demands of living with diabetes such as careful eating, drawing blood and checking insulin level several times a day. This was seen to lead to dysphoric feelings and a fear of taking insulin, followed by a lack of motivation to monitor one's blood glucose levels, which in turn led to complications. Six of the referred individuals were treated with medications – five with antidepressants and one with an antipsychotic.

This liaison psychiatry diabetes clinic is a unique pragmatic model, with a psychiatrist embedded within

**Table 3. Principal psychiatric diagnosis comparing the two reports**

| Diagnosis | Individuals diagnosed with a psychiatric problem, n (%) | |
|--|---|-----------|
| | 1997–1998 ¹ | 2006–2007 |
| Adjustment disorder | 3 (12.5) | 6 (28.5) |
| With comorbid anxiety | – | 2 (9.5) |
| With comorbid alcohol dependence | – | 2 (9.5) |
| Depression | 9 (37.5) | 5 (23.8) |
| Personality disorder | 5 (21) | 2 (9.5) |
| Needle phobia | 1 (4.1) | 1 (4.7) |
| Eating disorder not otherwise specified | 2 (8.3) | 1 (4.7) |
| Bulimia | 1 (4.1) | – |
| Hypoglycaemic anxiety | – | 1 (4.7) |
| Schizophrenia | 1 (4.1) | 1 (4.7) |
| Bipolar disorder | – | 1 (4.7) |
| Sexual dysfunction | – | 1 (4.7) |
| Anger problems | – | 1 (4.7) |
| Alcohol dependence | 2 (8.3) | 1 (4.7) |
| Alcohol-induced mood disorder | 1 (4.1) | – |
| Alcohol-induced anxiety disorder | 1 (4.1) | – |
| Adverse effects of medications | 1 (4.1) | – |
| Bereavement | 1 (4.1) | – |
| Personality traits or mental disorder affecting medical condition | 9 (37.5) | – |
| No psychiatric problems | 3 (13) | 1 (4.7) |
| Total number of individuals referred to the liaison psychiatry diabetes clinic | 31 | 32 |

1. Mitchel et al, 2000.

the multidisciplinary diabetes team. This is unique in that in most liaison clinics, such as cardiology or dermatology, it will be a psychologist who is part of the team. Working with the liaison psychiatrist, apart from providing support to the diabetes team, allowed for psychiatric assessment, diagnosis and treatment in the diabetes centre, thereby reducing stigma of attendance to a mental health clinic. It was also no longer necessary to refer service users to busy and overstretched inner city community mental health teams. The psychiatrist was in direct contact with the diabetes team and they discussed each individual referred to the clinic. Psychiatric problems could be early detected and treated.

Liaison psychiatric teams also educate and support medical teams in recognising symptoms of psychiatric illness; such was the case in the liaison psychiatry diabetes clinic. Despite the focus on psychiatric diagnosis and treatment, a large majority of service users (18 out of the 21 assessed) were also seen by clinical psychologists from the psychological medicine team after initial assessment by the psychiatrist in the liaison psychiatry diabetes clinic, as they required psychotherapeutic intervention.

The diagnostic differences between the present and Mitchel et al's (2000) report could be attributed to different diagnostic approaches.

Declaration of interest

None.

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- ***Madhusudan Dalvi** Specialist Registrar in Psychiatry and Honorary Research Fellow, South Kensington and Chelsea Mental Health Centre, and Division of Neurosciences, Imperial College London, 1 Nightingale Place, London SW10 9NG, email: madhusudan.dalvi@imperial.ac.uk, **Michael Feher** Consultant Physician in Diabetes, Clinical Pharmacology and Internal Medicine and Honorary Senior Lecturer, Chelsea and Westminster Hospital, and Imperial College London, **Esra Caglar** Senior House Officer in Liaison Psychiatry, South Kensington and Chelsea Mental Health Centre, **Jose Catalan** Consultant Liaison Psychiatrist, South Kensington and Chelsea Mental Health Centre, London