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Evidence-Based Management 21

Supporting people with diabetes-related stress and depression

Diabetes can have a significant detrimental impact on wellbeing and psychological functioning. Warren Gillibrand and Phil Holdich explain how practice nurses can help people with diabetes deal with stress or depressive illness

Psychological distress or depression can affect a person's motivation and ability to cope with self-management of diabetes (Snoek and Skinner, 2006), including adhering to prescribed medications, appropriate diet, keeping active and monitoring blood glucose levels (Fisher et al, 2007; Gonzalez et al, 2007). People with diabetes and a comorbid mental health problem such as depression have poorer glycaemic control and a higher risk of morbidity and mortality (Williams et al, 2004; Fisher et al, 2007).

However, studies such as the DAWN (Diabetes Attitudes, Wishes and Needs) study (Alberti, 2002) have shown that many nurses and physicians do not recognize depression, anxiety and

emotional problems in people with diabetes (Alberti, 2002; Pouver et al, 2005).

Health professionals may often be preoccupied with metabolic outcomes (Alberti, 2002), whereas people with diabetes have to achieve a balance between keeping well and living a normal life (Dunning, 2009). Consequently, the practitioner should be supportive in helping the person with diabetes to maintain this balance (Dunning, 2009). Additionally, all health professionals should be aware of potential mental health issues for people with diabetes.

Assessment of Mrs Jones' care needs

Recognizing and managing anxiety, stress and depression may be associated with improved function and better

outcomes in people with a long-term condition such as diabetes (National Institute for Health and Clinical Excellence (NICE), 2009); careful and sensitive questioning, employing good listening skills, can help. While Mrs Jones (*Case Study*) may not necessarily be clinically depressed, the loss of her husband, early signs of complications (retinal changes) and a comorbid illness (hypothyroidism) might have both psychological and physical effects on the management of her diabetes.

Gonzalez et al (2007) report that non-adherence to diabetes treatment is associated with depression. Furthermore, a comorbid, long-term condition may exacerbate mood and anxiety in people with diabetes and

compromise self-management (Piette and Kerr, 2006).

Although it may be unsurprising that trying to manage more than one condition can impact on diabetes, this is a factor that can be overlooked by health professionals (Piette and Kerr, 2006); additionally, it is a consideration for many older adults whose risk of more than one long-term condition increases exponentially with age (Department of Health, 2008).

Bruce et al (2005), who reported the incidence of depression and mortality for the Fremantle Diabetes Study (a prospective study of patients with type 2 diabetes), suggested that there is a correlation between the development of diabetes complications and the onset of depression. However, the mechanism of this

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CASE STUDY I

Mrs Susan Jones is a 63-year-old woman who has had type 2 diabetes for 15 years. She has been a regular attender at the practice diabetes clinic until her husband died last year; she had missed her last two appointments before attending today. She was usually a talkative and active lady, with well-controlled diabetes. Today she appears tired and uncommunicative and her weight has increased significantly. Mrs Jones had her eyes screened over a year ago, which

showed background retinopathy. She also has hypothyroidism for which she takes levothyroxine 50 µg.

Table C1. Susan's data

Biometric data	Medication
HbA _{1c} 88 mmol/mol (10.2%)	Metformin 500 mg, twice daily
Cholesterol 5.4 mmol/litre	Glizalide 160 mg, twice daily
Blood pressure 146/82 mmHg	Pioglitazone 30 mg

relationship is uncertain. There may be either an aetiological effect (e.g. by increasing counterregulatory hormones) or depression may develop as a result of the burden of disease.

Williams et al (2004) advise that effective care for depression may impact positively on self-care ability and, ultimately, on health outcomes. However, in order to help Mrs Jones it is important to assess her mental state using a simple screening tool for depression.

Depressive illness and diabetes-related stress

A major depressive episode can be persistent and debilitating (NICE, 2009), and is twice as common in people with diabetes and two to three times more common in women compared to the general population (Anderson et al, 2001; Rubin et al, 2004; Bruce et al, 2005). Depression may be underdiagnosed and undertreated in 50% of cases, and is often unrecognized by both patient and health professional (Anderson et al, 2001; Rubin et al, 2004).

However, not all people with diabetes who present with depressive-type symptoms are clinically depressed; they may be experiencing emotional and diabetes-related distress (Fisher et al, 2007). Consequently, some screening tools for depression may not detect emotional stress that is specific to living with a long-term condition such as diabetes (Fisher et al, 2007).

Gilbody et al (2006) found that cross-sectional surveys of depression identified people who were suffering from 'transient distress', which would

often resolve within a few weeks. This supports the recommendation to 'watch and wait' before intervention in those screened as having 'mild' depression (NICE, 2009).

NICE (2009) describes depression as a 'broad and heterogeneous diagnosis'; for people with diabetes, this may be within a range of different types of emotional distress and poor psychological wellbeing (Alberti, 2002). Symptoms may range from persistent sadness to suicidal ideation (Table 1). The main characteristics are a marked lowering of mood and loss of interest or pleasure in usual activities (anhedonia), which may be indicated by responses to two simple screening questions (see below).

Screening

There are a number of screening tools for psychological and emotional health that have a value for research but which may be unwieldy for use in practice. Furthermore, for patients who are expecting their health professional to be helping them to manage the physical symptoms of their diabetes, introducing a psychological inventory may appear threatening and inappropriate (Hermanns et al, 2006). Consequently, a lead into asking about mood might begin with questions about how the person with diabetes feels about his/her diabetes. For example, ask questions such as:

- ▶ How are you finding living with diabetes?
- ▶ Do you think that the way you are feeling affects your self-care (such as diet, monitoring and exercise)?

Table 1. Symptoms of depression

- Persistent, sad, irritable or 'empty' mood
- Loss of interest in activities once enjoyed, including sexual intercourse
- Significant change in appetite or body weight
- Difficulty in sleeping, waking early or oversleeping
- Feelings of worthlessness, helplessness or guilt
- Decreased energy, fatigue or feeling 'lacklustre'
- Restlessness and irritability
- Difficulty concentrating and remembering
- Recurring thoughts of death or suicide

From: National Institute of Health and Clinical Excellence, 2009.

- ▶ Are there other aspects of your life that are taking priority at the moment?

Once this type of dialogue is established, it may then be appropriate to introduce some specific questions that may help to identify any depressive illness (NICE, 2009):

- ▶ During the past month, have you often been bothered by feeling down, depressed or hopeless?
- ▶ During the past month, have you often been bothered by having little interest or pleasure in doing things?

NICE (2009) advises caution, to avoid a 'symptom count'; however, if the person answers 'yes' to either of these questions, the patient should be referred to an experienced mental health assessor who can review the patient's

mental state along with his/her physical and social functioning to identify if he/she is likely to have a depressive illness. A more comprehensive assessment may be implemented using the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* inventory of depressive symptoms (American Psychiatric Association, 1994 (Table 2)).

Initial management

There are a number of risk factors that might alert the nurse to exploring with Mrs Jones whether she might be depressed (Pouwer, 2009). Despite fitting the higher risk profile of an older woman with diabetes, she has had a major life event—her recent bereavement. Mrs Jones is likely to be grieving and may benefit from counselling if she is finding this difficult to cope with. Furthermore, Mrs Jones

Table 2. Definitions of depression (from DSM-IV)*

<i>Subthreshold depressive symptoms</i>	Fewer than five symptoms of depression
<i>Mild depression</i>	Few, if any, symptoms in excess of the five required to make the diagnosis, and symptoms result in only minor functional impairment
<i>Moderate depression</i>	Symptoms or functional impairment are between 'mild' and 'severe'

* DSM-IV is published by the American Psychiatric Association (1994)
From: National Institute of Health and Clinical Excellence, 2009.

has a comorbid condition and has early diabetic eye disease, and may need to be given an opportunity to discuss how she perceives her future and what she feels she can do to reduce the onset of diabetic retinopathy.

However, there are physiological problems that may be a cause or a result of Mrs Jones' mental state, and these will need to be addressed. A thyroid function test may reveal that her levothyroxine needs to be increased, which may have contributed to her weight gain and general lethargy affecting her motivation.

Hyperglycaemia will affect her energy levels and motivation; again this might be a result or a cause of her low mood. Also, she may not be adhering to taking her medications; exploring if and how she takes her oral hypoglycaemic medication may reveal whether they are working effectively with her current food intake and activity level.

A change in treatment is recognized as a risk factor for depression in diabetes and, unless this is indicated (e.g. if Mrs Jones is unable to tolerate metformin), it should be avoided. However, in Mrs Jones' case, there is scope to increase the dose of metformin to 1 g twice daily and pioglitazone to 45 mg, or to introduce a combination such as Competact (pioglitazone 15 mg and metformin 850 mg) twice daily.

Despite Mrs Jones' increase in weight, estimating her body mass index is probably unhelpful at this stage and only likely to reinforce her low mood. Thus the focus should be on exploring what

she is currently eating and where she feels she might be able to make some small and achievable changes.

While it may appear that Mrs Jones is not coping with her diabetes, there may be personal strengths that can be identified or reinforced to help Mrs Jones further.

Coping

Fisher et al (2007) suggest that addressing personal and diabetes-related stress by reinforcing coping strategies and problem solving is likely to be more meaningful and effective than treatments specific to depression.

Miller (2000) described how people with a long-term condition respond to a variety of stressors that may impact on their ability to cope. Miller calls these various domains 'power resources' (Figure 1). These power resources may be weakened by the experience of having a long-term condition; through recognizing and understanding what these power resources are, the nurse may be able to provide more useful and specific support to enable Mrs Jones to manage her diabetes during this period of emotional distress.

Some relatively simple interventions may be helpful, such as helping Mrs Jones to recognize and understand her low mood while reassuring her that what she is feeling is quite common and will usually subside. Her diabetes is not well-controlled so she will feel lethargic and generally unwell. Therefore, helping her to reduce her blood glucose may improve her 'energy' and motivation. Mrs Jones has clearly been successful managing her

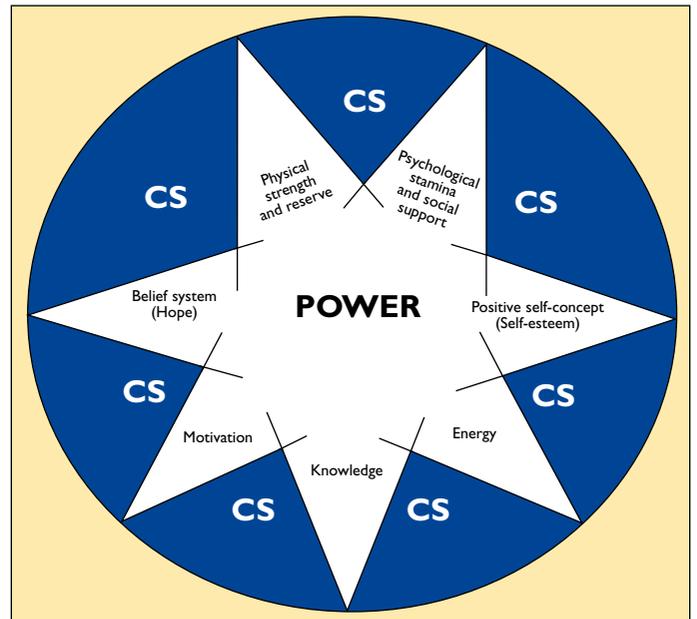


Figure 1. Coping strategies and power resources. From Miller (2000).

diabetes previously, and discussing this with her may help to improve her self-esteem.

These are positive interventions that do not require specialist input, although support or supervision from a specialist practitioner is helpful (Pouwer, 2009).

Supporting a person with diabetes during periods of distress and low mood can be achieved by an understanding of improving self-efficacy, coping skills and helping the individual to recognize and manage stressors. Some of these techniques are borrowed from the cognitive behavioural therapy approach. They do require some skill and practice, but should be within the remit of motivated care providers for people with diabetes (Peyrot and Rubin, 2007). However, for those individuals who screen positive for depression, there is specific guidance for the management of the condition (NICE, 2009).

Management options

NICE (2009) recommends a 'step' approach to managing depression based on best evidence, which guides the management of depression in relation to the severity of depressive symptoms (Figure 2). The best management depends on a person-centred approach to care, which enables openness and trust between the health professional and the person with diabetes.

Non-drug therapies are favoured initially for all but persistent or severe depression; indeed, 'watchful waiting' may be adequate for subclinical or mild depression as long as the health professional remains in contact, ideally with a follow-up clinic appointment or a phone call within the first 2 weeks.

More formal management may require referral for 'talking therapies', such as cognitive behavioural therapy, which focuses on the thinking patterns that cause symptoms;

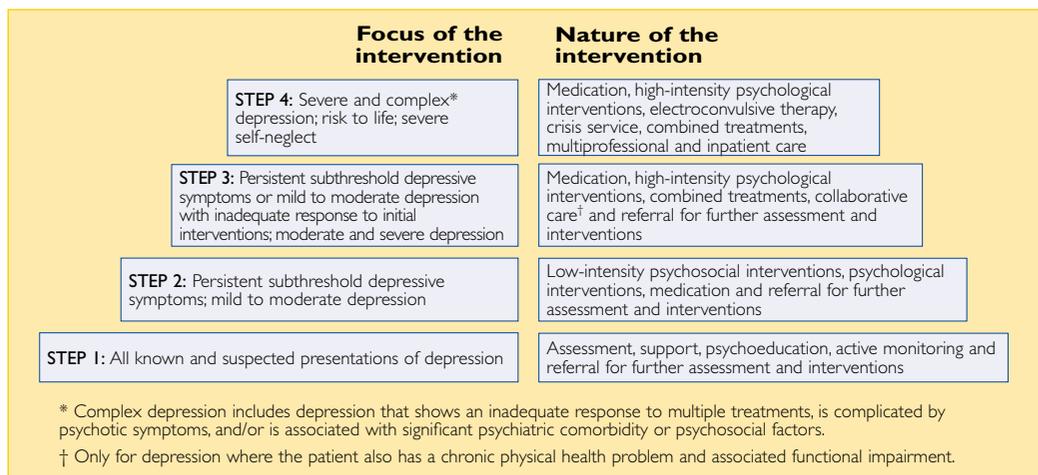


Figure 2. The 'step' approach to managing depression (National Institute for Health and Clinical Excellence, 2009)

or counselling and psychotherapy services, which explore concerns and relationships and encourage personal reflection.

There are a range of antidepressants that may be used, including selective serotonin reuptake inhibitors, which may have some benefits for people with diabetes associated with less weight gain and some improvement to insulin sensitivity (Rubin et al, 2008). However, these will require careful monitoring and management to avoid side effects and problems relating to early withdrawal.

Adjunctive treatments that may also be helpful include exercise and strategies to improve sleep patterns, such as avoiding alcohol and excessive eating at bedtime (NICE, 2009).

Conclusions

There is good evidence for psychological, social and physical interventions to support the person with diabetes-related stress or depression that can be implemented by health practitioners. Primary care is well positioned to provide comprehensive care for people

with diabetes and depression. However, that care may often be suboptimal as a result of poor recognition of depression, inadequate management (e.g. lack of integration with specialist mental health services) and inconsistent monitoring of patients (Williams et al, 2004; Gilbody et al, 2006).

Suboptimal care might be improved by more systematic educational interventions involving combined case management and integration with secondary care (National Prescribing Centre, 2005; Gilbody et al, 2006). This is a logical extension of good practice in shared care for people with diabetes who have complex needs.

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References

- Alberti G (2002) The DAWN (Diabetes Attitudes, Wishes and Needs) Study. *Pract Diabetes Int* 19: 22–4
- American Psychiatric Association (1994) *Diagnostic and Statistical Manual of Mental Disorders*. 4th edn (DSM-IV). APA, Washington
- Anderson RJ, Clouse RE, Freedland KE, Lustman PJ (2001) The prevalence of comorbid depression in adults with diabetes. A meta-analysis. *Diabetes Care* 24(6): 1069–78
- Bruce DG, Davis WA, Starkstein SE, Davis TME (2005) A prospective study of depression and mortality in patients with type 2 diabetes: the Fremantle Diabetes Study. *Diabetologia* 48: 2532–9
- Department of Health (2008) *Raising the Profile of Long-Term Conditions Care. A Compendium of Information*. DH, London
- Dunning T (2009) *Care of People with Diabetes. A Manual of Nursing Practice*. 3rd edn. Wiley Blackwell, Chichester
- Fisher L, Skaff MM, Mullan JT et al (2007) Clinical depression vs distress among patients with type 2 diabetes. Not just a question of semantics. *Diabetes Care* 30: 542–8
- Gilbody S, Sheldon T, Wesley S (2006) Health policy: should we screen for depression? *BMJ* 332: 1027–30
- Gonzalez JS, Safren SA, Cagliero E et al (2007) Depression, self-care and medication adherence in type 2 diabetes: relationships across the full range of symptom severity. *Diabetes Care* 30(9): 2222–7
- Hermanns N, Kulzer B, Krichbaum M, Kubiak T, Haak T (2006) How to screen for depression and emotional problems in patients with diabetes: comparison of screening characteristics of depression questionnaires, measurement of diabetes-specific emotional problems and standard clinical assessment. *Diabetologia* 49: 469–77
- Miller JF (2000) *Coping with Chronic Illness: Overcoming Powerlessness*. 3rd edn. FA Davis Company, Philadelphia
- National Prescribing Centre (2005) The management of depression in primary care. MeReC Briefing. Issue No. 31. NPC/NHS, London

National Institute for Clinical Excellence (2009) *Depression in Adults with a Chronic, Physical Health Problem. Treatment and Management*. Clinical Guideline 91. NICE, London

Peyrot M, Rubin RR (2007) Behavioral and psychosocial interventions in diabetes. *Diabetes Care* 30(10): 2433–40

Piette JD, Kerr EA (2006) The impact of comorbid, chronic conditions on diabetes care. *Diabetes Care* 29(3): 725–31

Pouwer F (2009) Should we screen for emotional distress in type 2 diabetes mellitus? *Nature Rev Endocrinol* 5: 665–71

Pouwer F, Beekman A, Lubach C, Snoek F (2005) Nurses' recognition and registration of depression, anxiety and diabetes-specific emotional problems in outpatients with diabetes mellitus. *Patient Educ Counsel* 60(2): 235–40

Rubin RR, Yong M, Marrero DG et al (2008) Elevated depression symptoms, antidepressant medicine use and risk of developing diabetes during the Diabetes Prevention Programme. *Diabetes Care* 31(3): 420–6

Rubin RR, Ciechanowski, P, Egged LE, Lin EH, Lustman PJ (2004) Recognizing and treating depression in patients with diabetes. *Curr Diabetes Rep* 4(2): 119–25

Snoek FJ, Skinner TC (2006) Psychological aspects of diabetes management. *Medicine* 34(2): 61–2

Williams JW, Katon W, Lin EHB et al (2004) The effectiveness of depression care management on diabetes-related outcomes in older patients. *Ann Intern Med* 140: 1015–24

KEY POINTS

- Psychological distress can profoundly impact on diabetes self-management
- Screening for depression and diabetes-related distress requires sensitive questioning
- Support and good management from health professionals are vital to recovery
- National Institute for Health and Clinical Excellence guidelines (2009) recommend a step approach for the management of depression