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Psychosocial health care needs of people with type 2 diabetes in primary care: Views of patients and health care providers

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Abstract

Aims: This study examined (a) psychosocial health care needs of people with type 2 diabetes from the perspective of patients and diabetes healthcare providers in primary care, in terms of topics, attention in diabetes care and preferences and (b) factors associated with a positive attitude towards specialized psychosocial health care.

Design: Qualitative focus group study.

Methods: Using purposive sampling, participants were selected from general practices. In 2012–2013, three focus groups were conducted in people with type 2 diabetes ($N = 20$) and three with healthcare providers ($N = 18$).

Results: Opinions differed considerably on whether there was a need for psychosocial health care. Topics focused mainly on diabetes-specific issues ranging from a need for additional diabetes education to attention and support in regular diabetes care. However, not all healthcare providers felt competent enough to address psychosocial problems. Some participants reported a need for specialized psychosocial help. A positive attitude towards specialized psychosocial health care appeared to be influenced by care setting (e.g., in the primary care practice or 'outside' mental health care), care accessibility, proactive discussion of psychosocial issues with and referral by healthcare providers and previous experiences with psychosocial health care.

Conclusion: Although only few participants expressed a need for specialized psychosocial care, attention for psychosocial well-being in regular diabetes care was generally appreciated.

Impact: People with type 2 diabetes generally felt psychosocial care could be provided as part of regular diabetes care. Suggestions for healthcare providers to meet psychosocial health care needs include training and discussion tools.

KEYWORDS

focus groups, healthcare providers, needs, nurses, primary care, psychosocial, qualitative research, type 2 diabetes

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1 | INTRODUCTION

Having diabetes may result in diabetes-specific emotional problems, such as worries about complications, feelings of guilt or awkward social interactions with regard to self-care activities (Snoek et al., 2000). Moreover, diabetes has been related to 60% higher odds of experiencing depression compared with people without diabetes (Ali, Stone, Peters, Davies, & Khunti, 2006) and 20% higher odds of having an anxiety disorder (Smith et al., 2013). In general, emotional distress in diabetes, particularly depression, has been shown to have a negative impact on diabetes self-care (Aikens, 2012; Gonzalez et al., 2008) and diabetes outcomes such as a higher risk of developing complications (Black, Markides, & Ray, 2003; Lin et al., 2010; Williams et al., 2010) and is also related to higher mortality rates (Van Dooren et al., 2013) and decreased quality of life (Ali et al., 2010).

1.1 | Background

Several diabetes guidelines have recommended that addressing psychosocial issues should be part of routine diabetes care, for example by using screening questionnaires (American Diabetes Association, 2016; IDF Clinical Guidelines Task Force, 2012). An implicit assumption of this approach is that heightened levels of distress on questionnaires indicate a higher need for psychosocial help. However, some people with diabetes do not report high distress scores on questionnaires, but do have a need for discussing stress and mood with a healthcare provider (Snoek et al., 2011). Furthermore, studies in outpatient care have shown that only 30–40% of those with elevated levels of emotional distress accept referral or treatment (Fleer et al., 2013; Snoek et al., 2011). This could reflect the fact that most people use their own coping resources, including social support, to handle difficulties. For some, however, it could also signal a negative attitude towards specialized psychosocial health care, where benefit is to be expected from professional help.

There have been some quantitative studies into psychosocial health care needs in diabetes, including the international Diabetes Attitudes, Wishes and Needs 2 (DAWN2) study (Nicolucci et al., 2013), the SHARED study (Survey of Healthcare professionals and patients to Assess REal perceptions on Diabetes issues; Hajos, Polonsky, Twisk, Dain, & Snoek, 2011) and work from the Australian Centre for Behavioural Research in Diabetes (Browne, Scibilia, & Speight, 2013; Speight, Browne, Holmes-Truscott, Hendrieckx, & Pouwer, 2012). Unfortunately, qualitative studies about this topic are limited, although they have the advantage of determining the patients' view without preselecting possible themes and answers. The few qualitative initiatives that have been undertaken have not clearly differentiated between type 1 and 2 diabetes or the setting where care is provided (Beverly, Brooks, Ritholz, Abrahamson, & Weinger, 2012; Stuckey et al., 2014). This differentiation is important, as type 1 and type 2 diabetes are different conditions, for example, in terms

of pathophysiology, age group and treatment (American Diabetes Association, 2016). Furthermore, the level of medical and psychosocial complexity of diabetes may differ between care settings. For example, a recent study reported considerably lower levels of diabetes-specific distress in people with type 2 diabetes in primary care compared with hospital-based secondary care (4% vs. 19%; Stoop et al., 2014). Similar differences have also been reported for depressive symptoms (Nefs, Pouwer, Denollet, & Pop, 2012; Pouwer et al., 2010).

In addition to exploring needs, we need to gain insight in factors that influence the attitude towards specialized psychosocial health care, for example if one would be willing to try psychological treatment if faced with emotional difficulties. Although effective interventions are available (Van der Feltz-Cornelis et al., 2010), it is known from clinical practice that having emotional problems does not automatically mean actually needing or being willing to accept psychological help. But the reasons for not accepting a psychosocial health care offer can be very diverse. To our knowledge, this process has not been examined in diabetes care.

2 | THE STUDY

2.1 | Aims

The aims of this qualitative study are to examine: (a) the psychosocial health care needs of Dutch people with type 2 diabetes from the perspective of both patients and diabetes healthcare providers, in terms of topics, attention in diabetes care and preferences; and (b) the factors that impede or facilitate a positive attitude towards specialized psychosocial health care in people with diabetes. Since most people with type 2 diabetes in The Netherlands are treated in primary care (Hamberg-van Reenen, 2011), our study focuses on the primary care setting, where healthcare providers include the general practitioner, the practice nurse and in some cases the diabetes nurse.

2.2 | Design

This was a qualitative study among people with type 2 diabetes and diabetes healthcare providers, using focus group methodology.

2.3 | Sample/participant description and selection

Participants were selected from general practices affiliated to the PoZoB managed care organization. This organization currently organizes the diabetes care of over 15,000 people with type 2 diabetes. The sampling frame included those who completed screening questionnaires on emotional distress and consented to being contacted. As there was no infrastructure available to work with multiple language versions or to assist people who were illiterate with the completion of the questionnaires, insufficient mastery of Dutch as judged by the general practitioner was an exclusion

criterion. The questionnaires assessed symptoms of anxiety (7-item General Anxiety Disorder questionnaire, GAD-7 (Kroenke, Spitzer, Williams, Monahan, & Lowe, 2007), depression (9-item Patient Health Questionnaire, PHQ-9 (Kroenke, Spitzer, & Williams, 2001) and diabetes distress (20-item Problem Areas In Diabetes survey, PAID (Polonsky et al., 1995). We used a purposive sampling strategy (in contrast to a random sampling strategy) to ensure that a diversity of persons and thereby possibly a wide variety of experiences, were represented (Barbour, 2001; Marshall, 1996). The purposive sampling strategy was based on factors that we expected to be related to psychosocial healthcare needs, namely age (less than age 65 or age 65 and over), sex, diabetes treatment (using or not using insulin), and symptoms of emotional distress (having or not having a heightened score: GAD ≥ 8 (Kroenke et al., 2007), PHQ ≥ 7 (Lamers et al., 2008), or PAID ≥ 15 (corresponding with the 80th percentile). People were approached by the first author by telephone and, if they showed interest, received an information letter providing details of the qualitative study.

The healthcare providers were also selected using purposive sampling (Barbour, 2001; Marshall, 1996), based on profession (general practitioner, practice nurse, or diabetes nurse), years of work experience in the current profession and participation (yes/no) in a study that investigated the effectiveness of an intervention for people with a chronic disease and comorbid anxiety and/or depression. For the purposes of this study, both the first author and staff members of the managed care organization approached healthcare providers by mail, telephone, or face-to-face contact. Interested healthcare providers received an information letter explaining the purpose of the focus group study. To facilitate an open discussion, healthcare providers in a particular focus group all worked for different general practices.

2.4 | Data collection procedure

An important advantage of working with a focus group compared with individual interviews is that group interaction can stimulate the in-depth exploration of a topic (Kitzinger, 1995). The size of a focus group should be small enough for participants to feel enough at ease to be able to share their opinions and experiences and large enough to reap the benefits of group interaction and, as such, have a diversity of opinions and experiences. According to Kitzinger, optimal group size is between four and eight participants (Kitzinger, 1995), however, group sizes between 6-12 participants have also been proposed (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009). Our target was focus groups consisting of between five and 10 participants each. In 2012-2013, three separate focus group sessions were held for people with type 2 diabetes, each lasting from one and a half to 2 hr. Likewise, three sessions with healthcare providers of approximately an hour were also organized. After these six focus group sessions, data saturation was reached (Boeije, 2002).

Before the start of the focus group discussions, people with type 2 diabetes completed additional questions on the burden of diabetes (10-point Likert-scale ranging from 1 'not at all burdensome' to 10

'very burdensome'), diabetes treatment, diabetes complications, and history of treatment for psychological problems. Healthcare providers were asked to report their sex, date of birth, function and years of working experience.

Key topics explored in all focus groups were: (a) psychosocial healthcare needs (topics, attention in diabetes care and preferences); and (b) attitude of people with type 2 diabetes with regard to specialized psychosocial help. During the focus groups an observer was present to assist the moderator and take notes. All the focus groups were audio-recorded and fully transcribed by the observer and subsequently checked by the moderator against the audio recordings. To ensure anonymity, participants' names were replaced by consecutive participant numbers and place of residence was not transcribed.

2.5 | Ethical considerations

All participants provided written informed consent. The study has been approved by the Psychology Ethics Committee of Tilburg University, The Netherlands (EC-2010.29). At all times before, during, or after the focus group encounter participants had the option to withdraw their consent. Given the delicate nature of discussing psychosocial problems and healthcare needs in a group setting, each focus group was started with some basic discussion rules (e.g., confidentiality; letting other people finish their sentences; respecting other opinions). Participants were explicitly asked for permission to audiotape the conversation. They were also provided with a piece of paper to write down information that they did not want to discuss in the group.

2.6 | Data analysis and rigour

The main goal of our research was not to develop a theory or find relations among categories, but to answer questions about the 'what, why, and how' of psychosocial healthcare needs among people with type 2 diabetes (Cho & Lee, 2014). In this respect it fits qualitative content analysis more than the grounded theory approach (Cho & Lee, 2014). However, while the constant comparison method is a core element of grounded theory, it can also be used for other analyses including the assessment of data saturation across multiple focus groups (Boeije, 2002; Onwuegbuzie et al., 2009). Therefore, data were analysed using the constant comparison method (Boeije, 2002). Two researchers independently coded the transcripts to identify themes (Barbour, 2001). Firstly, open coding was carried out inductively to identify the different responses. Secondly, responses (codes) were compared within and between focus groups and grouped together into categories (axial coding). These categories were grouped in a hierarchical structure and themes were derived from the data (selective coding; Boeije, 2002; Onwuegbuzie et al., 2009). Themes emerging from the focus groups were compared between the ones held by people with type 2 diabetes and the ones held by healthcare providers (triangulation; Boeije, 2002). Paper and pencil, Word, Excel, and Visio were used during these

various phases. On several occasions during the process, analyses were discussed. Coding disagreements were resolved by discussion. Two researchers selected quotes illustrative of the themes. Factors that facilitate or impede the addressing of psychosocial problems by healthcare providers and the extent to which people with diabetes have a positive attitude towards specialized psychosocial health care were categorized into organizational factors, healthcare provider factors and factors related to people with diabetes (individual factors; Collins, Westra, Dozois, & Burns, 2004).

The themes emerging from selective coding were used as the main story line of the FINDINGS section, with categories and quotes used in text and tables for illustrative purposes. The term 'participants' is used to indicate that both people with diabetes and healthcare providers mentioned a particular theme. When a theme was only mentioned by people with diabetes or only by healthcare providers, the specific group is mentioned explicitly.

3 | FINDINGS

3.1 | Characteristics of focus group participants

In total, 107 people with type 2 diabetes were invited to participate, of whom 20 (19%) accepted and were able to join the focus group. Each focus group consisted of six or seven persons. Reasons for not participating included: not experiencing diabetes as a burden; being satisfied with the care received from their diabetes healthcare providers and thereby not feeling the need to participate; not regarding participation as a priority in their busy schedule; not being able to come to the focus group meeting (either due to mobility problems, or because of the date and time of the focus group); not feeling confident enough to talk in a group about diabetes; and having no interest (no reason specified). A total of 18 healthcare providers participated in the healthcare provider focus groups (between five and seven in each group): 10 general practitioners (50% female), six practice nurses, and two diabetes nurses (100% female). Reasons for not participating among healthcare providers were: too busy; maternity leave; unable to attend on the given date and time; having no interest; or no specified reason. Participant characteristics are shown in Table 1.

3.2 | Is there a need for psychosocial health care?

There was a considerable difference of opinion as to whether psychosocial support is necessary. Several people with diabetes did not experience psychosocial problems and, moreover, several healthcare providers did not recognize any particular heightened needs in this group. However, other participants did express or identify needs.

3.3 | Factors related to experiencing psychosocial health care needs

Participants raised several specific issues as being (potentially) distressing (Table 2), mainly focusing on the burden of living with

TABLE 1 Characteristics of participants

	People with type 2 diabetes (N = 20)	Healthcare providers (N = 18)
	N (%) or Mean \pm SD [min.–max.]	N (%) or Mean \pm SD [min.–max.]
Age, years	67 \pm 6 [55–79]	47 \pm 10 [24–62]
Sex, female	7 (35%)	13 (72%)
Using insulin	7 (35%)	–
Diabetes complication(s) ^a	8 (40%)	–
Burden diabetes	5 \pm 3 [1–10]	–
Elevated symptoms of anxiety, depression and/or diabetes distress ^b	7 (35%)	–
Clinical experience, years	–	12 \pm 10 [2–30]

^aCardiovascular ($n = 5$), neuropathy ($n = 3$), and/or retinopathy ($n = 4$). None had self-reported nephropathy. ^bElevated anxiety symptoms were defined as a Generalized Anxiety Disorder questionnaire (GAD-7) total score ≥ 8 , elevated depressive symptoms as a Patient Health Questionnaire (PHQ-9) total score ≥ 7 , and diabetes distress as a Problem Areas In Diabetes (PAID) total score ≥ 15 .

diabetes. For example, some participants noted that difficulties were experienced in connection with being diagnosed and having to 'accept' having this condition (quote 1). Distress was also related to specific diabetes-related problems, such as suboptimal glycaemic control, (fear of) complications and worries about future insulin use (quote 2). In addition, diabetes treatment was considered a source of emotional burden or distress, including following recommendations about lifestyle (quote 3, 4), side effects of insulin (hypoglycaemia, skin irritations) and other medications and difficulties incurred with fitting recommendations into a person's daily life (quote 5, 6). Participants also mentioned experiencing feelings of embarrassment, for example, having to inject in public places, or having to cover skin irritations and having to reject food in social situations (quote 7, 8).

People with diabetes also mentioned diabetes care as a stress factor. Frustrations included: (a) not feeling supported by the healthcare provider; (b) receiving unrealistic, unattainable advice; (c) feeling that the healthcare provider did not take the context of the person into consideration when interpreting lab data or when giving advice; (d) receiving contradictory advice from different healthcare providers; (e) practical difficulties with regard to diabetes care appointments (e.g., healthcare providers not keeping their appointments; a mismatch in the timing of receiving lab results and having an appointment with a healthcare providers); or (f) not receiving adequate care (e.g., because the healthcare provider has insufficient knowledge, or does not take (somatic) complaints seriously). Psychosocial problems solely mentioned by healthcare providers were those of addiction (food or alcohol) and sexual complications.

TABLE 2 Factors related to having or not having psychosocial healthcare needs

Experiencing psychosocial healthcare needs			
Q1	Psychosocial burden DM	'Acceptance' of diagnosis	PWD17: So I was very shocked, but also very focused on diet and everything else, perhaps a bit extreme, as in that is definitely not going to happen to me [amputations]
Q2		DM events	HCP3: And if people really, at least this is what I've found, start to show signs of depression or fear due to the illness, that's often when they have to start injecting. When they start on insulin
Q3		DM treatment	PWD13: Then you reach a certain age and you have the financial means to afford to do things but you can't do anything [because of diabetes]. And I like [...] the good life, so I just love to bike around and visit a pub or eating place, and because these are precisely the things I'm not allowed to do, I'm finding having diabetes hard
Q4			HCP9: Actually I think that general practitioners have long failed to acknowledge just how difficult it really is to make a change in lifestyle. [...] It doesn't help when you simply say that you have to lose weight or you have to take more exercise. Therefore, even though there will not always be an explicit demand for psychosocial health care, I think there is an implicit need for it.
Q5		Fit into daily life	PWD9: So what I'm struggling with is mainly that you need to live a regular life. If I'm on leave and want to go out to dinner, I always have to order a table long in advance because I must be sure that I've eaten something before seven o'clock, so then I become very restless. And that's, I do find that difficult
Q6			HCP2: And I also see, because as a diabetes nurse it's the group that injects [insulin] four times a day that I'm most involved with, quite a lot of depression. [...] And it's often young people who run into problems trying to combine it with work, and yes it also puts a considerable strain on relationships and daily activities; and yes, try fitting four injections a day into your regular daily life
Q7		Embarrassment	PWD8: But then I had such hard discs [lipoatrophy] in my legs, in my upper legs and I was black and blue. I didn't dare go swimming with my grandson, I kept on my clothes
Q8			HCP10: But I think the environment is also very important for overcoming that embarrassment. (HCP8: yes) Just like at birthday parties, you don't actually dare to say (HCP11: yes, exactly) no cake for me
Q9	Not related to DM		PWD3: In fact, I need a consultation with a psychologist. But this has to do with the past, with things I experienced then. That kind of thing. In fact, it doesn't have anything to do with diabetes
Q10	Summation DM and not DM		HCP2: It's not only a chronic condition, but often when something happens in their environment, being fired, or someone dying, HCP3: divorce. HCP2: divorce, yes. HCP7: then it's all together HCP2: too much
Not experiencing psychosocial healthcare needs			
Q11	Not noticing psychosocial issues		HCP1: I don't really see it either, depression in people with diabetes. On the other hand, we don't focus on it enough to be able to pick out masked depression in diabetes patients. [...] It can be rather difficult if you don't specifically ask about it
Q12	Effective coping		PWD11: If it stays like this, I'll get to a hundred
Q13			PWD5: It's the same thing as when it's really hot and you say 'Oh it's so hot'. That'll make you sweat even more. I always say you just need to keep on working and stop talking about the heat. Then it won't bother you as much. Everyone will be sweating anyway. And I think it's the same with diabetes. I never talk about it. I'll never read medical prescriptions or things like that. If the doctor prescribes, that's alright with me
Q14			PWD9: As far as that's concerned, I am quite good. I'll eat a chocolate cream puff when I feel like it, maybe even two a day or whatever. I'm not like 'and and', but more like 'or or'. So it's either the one thing or the other. It's sometimes hard but I can do it
Q15			PWD15: Just keep on fighting, stay positive (PWD20: yeah) and eat healthily, yes, that'll make you feel like you're doing all you can. (PWD20: that's right) And if it doesn't work out any more, well then, that's a shame
Q16			PWD11: In the early stages, I once saw a dietician and she told me what to eat and what not to eat. My wife was there with me and she heard that it's good to eat plenty of fish. [...] My wife really tries to take that into account when she's cooking

Note. Q: Quote; DM: Diabetes Mellitus; PWD: person with type 2 diabetes; HCP: healthcare provider.

Participants noted that not just diabetes and its treatment could cause distress and induce a need for psychosocial health care, but also personality and having experienced negative life events (quote 9). Furthermore, it was reported that the combination of diabetes- and non-diabetes related factors, such as work and family-related issues, comorbidities and a lack of social support, could lead to an increased burden and, therefore, to an increased need of psychosocial health care (quote 10).

3.4 | Factors related to not having psychosocial health care needs

Approximately half the people with type 2 diabetes did not experience a need for psychosocial health care, did not feel burdened by their diabetes, or did not have the feeling that diabetes had an impact on their mood. Moreover, several healthcare providers did not see a heightened need for psychosocial health care in this group, although some healthcare providers wondered whether this was due to underrecognition by healthcare providers (Table 2; quote 11). Participants mentioned that not (yet) experiencing diabetes as a serious disease and not feeling constrained by the diabetes regimen were related to not having psychosocial needs. A few healthcare providers labelled this as 'denial' or 'lack of understanding'.

People with diabetes also described coping styles that helped them to be less affected by their condition, for example, having a positive view about their future (quote 12), using an avoidant coping style, for example, not talking or reading about diabetes (quote 13), or using an active problem-solving coping style, for example, actively searching for information on diabetes or finding a way to incorporate food restrictions into their daily lives (quote 14). Moreover, 'accepting' and taking responsibility, thereby trying hard to prevent the worsening of diabetes, was described (quote 15). Being supported by a partner who prepared healthy meals, helped to remember when medication should be taken, or was there to assist when a hypoglycaemic event occurred, was considered helpful (quote 16).

TABLE 3 Who should provide psychosocial health care?

Q17	PWD15: No, I don't need that. I don't need a psychologist for that any more. That's what I have my practice nurse for. PWD20: yes, but she is not always your psychologist. [...] and definitely not in my case. PWD15: No but she's like a psychologist, at least mine is
Q18	HCP14: It seems to me that in general there doesn't seem to be that much need for mental support by a psychologist in particular, but as you get to know the people better [...] they tend to share a lot of their problems. These could, for instance, [lead to] a suboptimal glycaemic control. But there still is the need to talk about it, but that can be done at the general practice, I wouldn't actually say solved, but still people are not often referred
Q19	PWD9: When I'm feeling a bit down due to the diabetes I'd like the cause to be treated and then I'd rather go to the diabetes nurse than to a specialized mental healthcare setting
Q20	HCP13: But you also need to have a certain expertise. Not every practice nurse has to have that. That's not necessary, when it's about accepting, learning to accept, dealing with a chronic disease, or with loss or sorrow. In that case a mental healthcare practice nurse may be able to do more

Note. Q: Quote; PWD: person with type 2 diabetes; HCP: health care provider.

3.5 | Who should provide psychosocial health care?

Following these reflections, participants discussed who should provide psychosocial health care when people with diabetes experienced a need for it (Table 3). Most participants stated that the support provided in current diabetes health care was experienced as sufficient (quote 17, 18). One suggestion made by people with diabetes to improve care was to have a more specialized diabetes healthcare provider (e.g., diabetes nurse), especially when the distress was related to diabetes (quote 19). Another suggestion made by both people with diabetes and healthcare providers was referral to specialized psychosocial health care (e.g., psychologist or social worker). This was especially suggested when psychosocial problems were not specifically related to diabetes, for example, in case of life events or when psychosocial problems were complex (Table 2, quote 9). Healthcare providers considered specialized mental health care particularly useful in case of bariatric surgery or when they were not confident about being sufficiently competent to handle psychosocial issues (Table 3, quote 20). A third suggestion for providing psychosocial support were peer groups (including online forums) and a last suggestion was that people should help themselves or talk to a family member or friend. Healthcare providers also mentioned a need for specialized psychosocial care professionals to aid in lifestyle advice. Some healthcare providers stated that they would prefer a psychosocial healthcare provider, such as a mental healthcare nurse, to provide support to people with diabetes in the case of psychosocial problems, rather than it being an additional task left to them.

3.6 | Attention to psychosocial issues by diabetes health care providers

People with type 2 diabetes were generally satisfied with the time and attention received from their healthcare provider though a few persons felt a lack of support. Several ways were described by participants by means of which emotional distress could be

- Q21 PWD6: I've sometimes seen on television people who have fallen into a coma, and to start with, you don't know how to deal with it. And that's exactly what happened to me, which is why I think it's so important to receive special care, to know what you should do, how you should deal with it, while you're losing consciousness. I was lucky enough to receive decent support from the hospital, but they did ask me to bring my wife to every consultation, so that if it [*hypoglycaemia*] happens at home she'll know what to do
- Q22 HCP16: I still ask that now and then, especially of older men, who say they'll be fine as long as they get their pills. I sometimes ask to them bring their wives, because they are usually the ones who do the shopping and who decide on what they're going to eat
- Q23 PWD20: Diabetes can affect your life negatively and a practice nurse should pay attention to that too (PWD18: right) and not just to the glucose levels
- Q24 HCP13: Yes, also since it [*depression*] does have consequences for the disease itself: the diabetes is getting worse of course, people [...] don't stick to your advice, or they don't take any exercise

Note. Q: Quote; PWD: person with type 2 diabetes; HCP: healthcare provider.

diminished by the healthcare provider, including (a) meeting a need for additional diabetes education when the condition and its management made people with diabetes insecure; (b) helping with the 'acceptance process'; (c) supporting the application of treatment recommendations in daily life; (d) increasing self-reliance and (e) considering involving the partner in the treatment process (Table 4, quote 21, 22). In addition, people with diabetes thought that healthcare providers could prevent distress by having up-to-date diabetes knowledge. Participants also recommended that advice and care should be tailored to the personal situation, including well-being and comorbidities (quote 23), since these factors could influence the uptake of treatment recommendations and diabetes outcomes (quote 24). Apart from diabetes-related skills, participants also indicated that the general communication skills of healthcare providers could help to reduce distress. Another desire expressed by people with diabetes was the healthcare providers' assistance in finding the correct (psychosocial) healthcare professional for referral.

Healthcare providers considered it helpful to address psychosocial issues proactively, especially in the case of sensitive topics, such as sexual problems. They said that this might reduce the barrier for people with diabetes for mentioning a psychosocial problem, such as sexual difficulties, as and when it occurs.

Participants acknowledged that the bond between healthcare provider and patient is an important factor in addressing psychosocial issues. Healthcare providers mentioned that factors that impeded addressing psychosocial issues by the diabetes healthcare provider were time pressure, not viewing addressing these issues as part of their job and not feeling sufficiently competent in addressing these issues.

3.7 | Factors that facilitate or impede a positive attitude towards specialized psychosocial health care

Barriers and facilitators to having a positive attitude towards specialized psychosocial health care in people with diabetes were divided

TABLE 4 Important considerations with respect to addressing psychosocial problems by the diabetes healthcare provider

into organizational factors, healthcare provider factors and factors related to people with diabetes (Table 5).

3.7.1 | Organisational factors

Easy access to care reduced barriers for people with diabetes. Fewer barriers were experienced when care was provided by a healthcare provider with whom the person with diabetes was familiar (e.g., practice nurse or general practitioner) (quote 25). Several general practices had a practice nurse for psychosocial healthcare working in the practice and healthcare providers noted that a referral to this practice nurse was relatively easily accepted. Online interventions were also mentioned as being potentially easily accessible, although some participants mentioned a lack of personal interaction as a downside to online interventions. In case of individuals with functional limitations, proximity and ease of entrance to where the care is being provided were preconditions. Flexibility in the organization was requested by people with diabetes. For example, the opportunity to switch healthcare providers to obtain the most harmonious match could facilitate being open (quote 26). The costs of specialized psychosocial health care were mentioned as a barrier by participants (quote 27).

3.7.2 | Healthcare provider factors

Diabetes healthcare providers could play a role in reducing the barriers for discussing psychosocial problems and accepting help by proactively addressing these issues and by guiding people towards the appropriate care (quote 28). People with diabetes identified several healthcare providers' characteristics that facilitated an open attitude towards psychosocial health care, including sufficient time being taken, being competent and being knowledgeable about diabetes. The type of provider (e.g., psychologist or social worker) could influence whether or not help was accepted (quote 29). For example, a diabetes healthcare provider was preferred in issues related to diabetes distress (Table 3, quote 19). A feeling of trust between

TABLE 5 Factors related to a positive attitude with respect to specialized psychosocial health care in people with type 2 diabetes

Organisational factors	
Q25	HCP3: I refer them to the general practitioner. (HCP7: me too) because that's normally the first thing you do. That's what people are used to [<i>the general practitioner</i>]. I inform the general practitioner in advance, preferably on the same day, [...] so that they can't go home and change their minds. That works fine
Q26	PWD14: So the social worker as well as the organisation need to, or the person himself needs to, accept that sometimes you run into people you don't get on with. If that happens, you have to take the step to go to someone else
Q27	HCP12: Costs are also a barrier for some people. [...] In those cases, the practice nurse specialized in mental health care is a good alternative; but I understood that the compensation for primary care psychologists is going to change [...], and that patients' contributions will go up
Healthcare provider factors	
Q28	HCP2: I notice that if things are discussed with me, so when people discuss their sexual problems with me, I can more easily motivate them to discuss these with their general practitioner. I have noticed that you can lower that threshold
Q29	PWD14: But to say straight away that that social worker is useless. PWD9: I wouldn't do that, I am not saying that he isn't useless, but just that I wouldn't choose him. I wouldn't give myself away
Q30	PWD6: No, but if you have a psychologist, you have to make sure that she's experienced and is able to discuss things with you. Not the other way around. She has to advise me what to do. [...] I just wanted to say that it didn't work out and I don't want it any more
Factors related to the person with diabetes	
Q31	HCP13: I also think you have to be easily accessible, because in my experience, people already have so much to do. For many people, it is simply one step too far to have to see a psychologist and discuss your disease

Note. Q: Quote; F: Facilitator; B: Barrier; PWD: person with type 2 diabetes; HCP: healthcare provider.

the healthcare provider and the person with diabetes was also mentioned as important in stimulating a positive attitude towards psychosocial health care. Moreover, the method used by the healthcare provider should match the expectations of the person with diabetes (quote 30).

3.7.3 | Factors related to the person with diabetes

It was also mentioned that the ease with which help was accepted also depended on factors related to the person with diabetes. Healthcare providers mentioned the readiness to change in people with diabetes and a clear request for help as facilitating factors and the busy schedule of a person with diabetes as a barrier against visiting additional healthcare providers (e.g., a psychologist; quote 31). Also positive or negative experiences with psychosocial health care influenced whether someone had a positive or negative attitude towards psychosocial health. Some healthcare providers mentioned that people with diabetes usually focused on the somatic aspects of diabetes, such as blood glucose levels and less on the psychosocial aspects.

4 | DISCUSSION

Both in focus groups of people with type 2 diabetes and in those of healthcare providers, opinions differed considerably as to whether there was a need for psychosocial care. Not perceiving diabetes as

a serious disease, effective coping and the perception of receiving adequate social support were reported to diminish the need for psychosocial health care. The needs that were expressed focused predominantly on distress related to diabetes and its management, such as help in incorporating lifestyle advice into daily life and additional diabetes education when a person feels insecure about the condition. These needs also included working with a healthcare provider who is aware of the personal circumstances of the person with diabetes, who listens to emotional problems and provides support. According to most participants, these types of care could be provided by healthcare providers as part of regular diabetes care. A minority of the participants mentioned the need for a referral to a specialized psychosocial healthcare provider.

Another theme that emerged during the focus groups was responsibility for initiating discussion of psychosocial problems and the possibility of additional psychosocial health care. Diabetes care has been changing from a directive role for the healthcare provider to increasing empowerment of patients and shared decision-making (Ursum, Rijken, Heijmans, Cardol, & Schellevis, 2011). However, based on the discussion in the focus groups, it should be noted that people with diabetes differ in their preference for either a directive approach or an approach with a more prominent role for the patient, also in the case of psychosocial healthcare support.

In general, people with diabetes were satisfied with the attention they received from their healthcare provider for their well-being.

However, suggestions for improvements were made, such as tailoring advice to the personal situation, which could reduce frustration with regard to treatment. For healthcare providers to be able to meet the psychosocial healthcare needs of people with type 2 diabetes, the following factors were identified as being important: (a) having adequate communication skills; (b) having up-to-date knowledge of diabetes and its treatment; and (c) knowing the personal circumstances of the person. Since participants acknowledged the importance of the role of the healthcare provider in addressing psychosocial issues, a precondition is that healthcare providers should be sufficiently skilled for this task. However, not all healthcare providers were convinced of their competence with regard to addressing psychosocial needs.

A solution mentioned by healthcare providers to help increase their competence, confidence and awareness, was to provide additional professional trainings. These could focus on how to discuss and treat emotional problems and how to provide integrated care for psychosocial problems in people with diabetes. Increased awareness and communication could be facilitated by having a set of questions easily available to discuss these topics. One study in an outpatient care setting in Amsterdam found that regular assessment of well-being by a diabetes nurse specialist and discussing the results, increased the emotional well-being of people with diabetes and satisfaction with the care provided by the diabetes nurse specialist (Pouwer, Snoek, van der Ploeg, Ader, & Heine, 2001). In that study, the diabetes nurses received half a day of training, including general counselling skills and how to discuss emotional well-being using the results of a computerized assessment that used a short well-being questionnaire (Pouwer et al., 2001). However, training of regular care health professionals might not be sufficient for all issues, given that results from the Hampshire Depression Project clearly showed that a clinical-practice guideline and practice-based education on how to recognize and treat depression did not improve depression outcomes in primary care (Thompson et al., 2000). As suggested by healthcare providers in this study, the assistance by a mental health care nurse in case of psychosocial problems or difficulties in lifestyle adjustments, might be another solution.

The attitude of people with diabetes regarding specialized psychosocial health care is also important. Several factors were mentioned during the focus groups as potential barriers, including organizational factors (e.g., accessibility of psychosocial health care) and personal factors (previous positive or negative experiences with psychosocial health care). Healthcare providers could play an important role in reducing barriers; for example, by initiating a conversation about sensitive topics, such as sexual complications. In addition, healthcare providers could create realistic expectations about psychosocial health care, discuss referral and help to find a healthcare provider who supports the needs of the patient.

Barriers that may be experienced with regard to face-to-face interventions may not be an issue when using online interventions. This type of intervention could overcome barriers, such as time limitations and mobility problems and, due to the relatively anonymous setting of an online intervention, could also facilitate

disclosure. There is an effective online intervention aimed at people with diabetes and a depressed mood (Van Bastelaar, Pouwer, Cuijpers, Riper & Snoek, 2011). Online interventions appear to be especially effective when they include personal coaching (Spek et al., 2007).

4.1 | Limitations

The major strength of this study is that the perspectives of both people with diabetes and healthcare providers were explored, which provided a more complete view on psychosocial healthcare needs and the provision of psychosocial health care. An important limitation of this study is that recruitment took place in primary care practices in one region of the Netherlands, with participants mainly residing in rural or semi-rural areas and one small city. It might be that other themes would have been identified by people residing in large cities. The same applies to people who are illiterate or who do not understand Dutch; these groups were excluded from the study due to practical reasons. Another limitation is that we did not have quantitative descriptive data available with respect to some potentially relevant factors, including hypo- and hyperglycemia, HbA_{1c} and family support.

5 | CONCLUSION

In conclusion, opinions differed on whether or not there was a need for psychosocial health care in people with type 2 diabetes in primary care. The needs that were expressed by the participants focused predominantly on diabetes-related distress and could be addressed during regular diabetes care. In general, attention for psychosocial problems was appreciated and was regarded as the task of healthcare providers. However, not all healthcare providers felt competent enough to address psychosocial problems. To better meet the psychosocial healthcare needs of people with type 2 diabetes, discussion tools and additional training can be provided to healthcare professionals working in regular diabetes care, with mental healthcare nurses readily available for assistance.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

AUTHORS' CONTRIBUTIONS

All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE (<http://www.icmje.org/recommendations/>)]:

- substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;
- drafting the article or revising it critically for important intellectual content.

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REFERENCES

- Aikens, J. E. (2012). Prospective associations between emotional distress and poor outcomes in type 2 diabetes. *Diabetes Care*, 35, 2472–2478. <https://doi.org/10.2337/dc12-0181>
- Ali, S., Stone, M. A., Peters, J. L., Davies, M. J., & Khunti, K. (2006). The prevalence of co-morbid depression in adults with Type 2 diabetes: A systematic review and meta-analysis. *Diabetic Medicine*, 23(11), 1165–1173. <https://doi.org/10.1111/j.1464-5491.2006.01943.x>
- Ali, S., Stone, M., Skinner, T. C., Robertson, N., Davies, M., & Khunti, K. (2010). The association between depression and health-related quality of life in people with type 2 diabetes: A systematic literature review. *Diabetes/Metabolism Research and Reviews*, 26, 75–89. <https://doi.org/10.1002/dmrr.1065>
- American Diabetes Association. (2016). Standards of medical care in diabetes - 2016. *Diabetes Care*, 39(Supplement 1), S11–S61.
- Barbour, R. S. (2001). Checklists for improving rigour in qualitative research: A case of the tail wagging the dog? *BMJ*, 322(7294), 1115–1117. <https://doi.org/10.1136/bmj.322.7294.1115>
- Beverly, E. A., Brooks, K. M., Ritholz, M. D., Abrahamson, M. J., & Weinger, K. (2012). Assessment of emotional struggles in type 2 diabetes: Patient perspectives. *Diabetes Care*, 35(8), e62. <https://doi.org/10.2337/dc12-0661>
- Black, S. A., Markides, K. S., & Ray, L. A. (2003). Depression predicts increased incidence of adverse health outcomes in older Mexican Americans with type 2 diabetes. *Diabetes Care*, 26(10), 2822–2828. <https://doi.org/10.2337/diacare.26.10.2822>
- Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and Quantity*, 36(4), 391–409. <https://doi.org/10.1023/A:1020909529486>
- Browne, J. L., Scibilia, R., & Speight, J. (2013). The needs, concerns and characteristics of younger Australian adults with type 2 diabetes. *Diabetic Medicine*, 30, 620–626. <https://doi.org/10.1111/dme.12078>
- Cho, J. Y., & Lee, E.-H. (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *The Qualitative Report*, 19(32), 1–20.
- Collins, K. A., Westra, H. A., Dozois, D. J., & Burns, D. D. (2004). Gaps in accessing treatment for anxiety and depression: Challenges for the delivery of care. *Clinical Psychology Review*, 24(5), 583–616. <https://doi.org/10.1016/j.cpr.2004.06.001>
- Fleer, J., Tovote, K. A., Keers, J. C., Links, T. P., Sanderman, R., Coyne, J. C., & Schroevers, M. J. (2013). Screening for depression and diabetes-related distress in a diabetes outpatient clinic. *Diabetic Medicine*, 30(1), 88–94. <https://doi.org/10.1111/dme.12001>
- Gonzalez, J. S., Peyrot, M., McCarl, L. A., Collins, E. M., Serpa, L., Mimiaga, M. J., & Safren, S. A. (2008). Depression and diabetes treatment nonadherence: A meta-analysis. *Diabetes Care*, 31(12), 2398–2403. <https://doi.org/10.2337/dc08-1341>
- Hajos, T. R. S., Polonsky, W. H., Twisk, J. W. R., Dain, M.-P., & Snoek, F. J. (2011). Do physicians understand Type 2 diabetes patients' perceptions of seriousness; the emotional impact and needs for care improvement? A cross-national survey. *Patient Education and Counseling*, 85(2), 258–263. <https://doi.org/10.1016/j.pec.2010.08.019>
- Hamberg-van Reenen, H. H. (2011). Diabetes mellitus: Hoe zijn preventie en zorg georganiseerd? [Diabetes mellitus: How are prevention and health care organized?]. *Volksgezondheid Toekomst Verkenning, Nationaal Kompas Volksgezondheid*. Retrieved from <http://www.nationaalkompas.nl/gezondheid-en-ziekte/ziekten-endaandoeningen/endocriene-voedings-en-stofwisselingsziekten-en-immuniteitsstoornissen/diabetes-mellitus/diabetes-mellitus-preventie-en-zorg/>
- IDF Clinical Guidelines Task Force. (2012). Global guideline for Type 2 diabetes. Retrieved from Brussels:
- Kitzinger, J. (1995). Qualitative research. Introducing focus groups. *BMJ*, 311(7000), 299–302. <https://doi.org/10.1136/bmj.311.7000.299>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606–613. <https://doi.org/jgi01114> [pii]
- Kroenke, K., Spitzer, R. L., Williams, J. B., Monahan, P. O., & Lowe, B. (2007). Anxiety disorders in primary care: Prevalence, impairment, comorbidity and detection. *Annals of Internal Medicine*, 146(5), 317–325. <https://doi.org/10.1136/annals.146.5.317> [pii]
- Lamers, F., Jonkers, C. C., Bosma, H., Penninx, B. W., Knottnerus, J. A., & van Eijk, J. T. (2008). Summed score of the Patient Health Questionnaire-9 was a reliable and valid method for depression screening in chronically ill elderly patients. *Journal of Clinical Epidemiology*, 61(7), 679–687. <https://doi.org/10.1016/j.jclinepi.2007.07.018>
- Lin, E. H. B., Rutter, C. M., Katon, W., Heckbert, S. R., Ciechanowski, P., Oliver, M. M., & Von Korff, M. (2010). Depression and advanced complications of diabetes. *Diabetes Care*, 33(2), 264–269. <https://doi.org/10.2337/dc09-1068>
- Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522–526. <https://doi.org/10.1093/fampra/13.6.522>
- Nefs, G., Pouwer, F., Denollet, J., & Pop, V. (2012). The course of depressive symptoms in primary care patients with type 2 diabetes: Results from the Diabetes, Depression, Type D Personality Zuidoost-Brabant (DiaDDZoB) Study. *Diabetologia*, 55(3), 608–616. <https://doi.org/10.1007/s00125-011-2411-2>
- Nicolucci, A., Kovacs Burns, K., Holt, R. I. G., Comaschi, M., Hermanns, N., & Ishii, H., ... The DAWN2 Study Group. (2013). Diabetes attitudes, wishes and needs second study (DAWN2™): Cross-national benchmarking of diabetes-related psychosocial outcomes for people with diabetes. *Diabetic Medicine*, 30(7), 767–777. <https://doi.org/10.1111/dme.12245>
- Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2009). A qualitative framework for collecting and analyzing data in focus group research. *International Journal of Qualitative Methods*, 8(3), 1–21. <https://doi.org/10.1177/160940690900800301>
- Polonsky, W. H., Anderson, B. J., Lohrer, P. A., Welch, G., Jacobson, A. M., Aponte, J. E., & Schwartz, C. E. (1995). Assessment of diabetes-related distress. *Diabetes Care*, 18(6), 754–760. <https://doi.org/10.2337/diacare.18.6.754>
- Pouwer, F., Geelhoed-Duijvestijn, P. H. L. M., Tack, C. J., Bazelmans, E., Beekman, A. J., Heine, R. J., & Snoek, F. J. (2010). Prevalence of comorbid depression is high in out-patients with Type 1 or Type 2 diabetes mellitus. Results from three out-patient clinics in the Netherlands. *Diabetic Medicine*, 27(2), 217–224. <https://doi.org/10.1111/j.1464-5491.2009.02903.x>
- Pouwer, F., Snoek, F. J., van der Ploeg, H. M., Ader, H. J., & Heine, R. J. (2001). Monitoring of psychological well-being in outpatients with diabetes: Effects on mood, HbA(1c) and the patient's evaluation of the quality of diabetes care: A randomized controlled trial. *Diabetes Care*, 24(11), 1929–1935. <https://doi.org/10.2337/diacare.24.11.1929>
- Smith, K. J., Bédard, M., Clyde, M., Gariépy, G., Pagé, V., Badawi, G., & Schmitz, N. (2013). Association of diabetes with anxiety: A systematic review and meta-analysis. *Journal of Psychosomatic Research*, 74(2), 89–99. <https://doi.org/10.1016/j.jpsychores.2012.11.013>

- Snoek, F. J., Kersch, N. Y. A., Eldrup, E., Harman-Boehm, I., Hermanns, N., Kokoszka, A., & Skovlund, S. E. (2011). Monitoring of Individual Needs in Diabetes (MIND): Baseline data from the Cross-National Diabetes Attitudes, Wishes and Needs (DAWN) MIND Study. *Diabetes Care*, 34(3), 601–603. <https://doi.org/10.2337/dc10-1552>
- Snoek, F. J., Pouwer, F., Welch, G. W., & Polonsky, W. H. (2000). Diabetes-related emotional distress in Dutch and U.S. diabetic patients: Cross-cultural validity of the problem areas in diabetes scale. *Diabetes Care*, 23(9), 1305–1309. <https://doi.org/10.2337/diacare.23.9.1305>
- Speight, J., Browne, J. L., Holmes-Truscott, E., Hendrieckx, C., & Pouwer, F. (2012). Diabetes MILES-Australia (management and impact for long-term empowerment and success): Methods and sample characteristics of a national survey of the psychological aspects of living with type 1 or type 2 diabetes in Australian adults. *BMC Public Health*, 12, 120. <https://doi.org/10.1186/1471-2458-12-120>
- Spek, V., Cuijpers, P., Nyklicek, I., Riper, H., Keyzer, J., & Pop, V. (2007). Internet-based cognitive behaviour therapy for symptoms of depression and anxiety: A meta-analysis. *Psychological Medicine*, 37(3), 319–328. <https://doi.org/10.1017/S0033291706008944>
- Stoop, C. H., Nefs, G., Pop, V. J., van, Wijnands- Gent, C. J. M., Tack, C. J., Geelhoed-Duijvestijn, P. H. L. M., & , ..., F. (2014). Diabetes-specific emotional distress in people with type 2 diabetes: A comparison between primary and secondary care. *Diabetic Medicine*, 31, 1252–1259. <https://doi.org/10.1111/dme.12472>
- Stuckey, H. L., Mullan-Jensen, C. B., Reach, G., Kovacs Burns, K., Piana, N., Vallis, M., & Peyrot, M. (2014). Personal accounts of the negative and adaptive psychosocial experiences of people with diabetes in the second Diabetes Attitudes, Wishes and Needs (DAWN2) Study. *Diabetes Care*, 37(9), 2466–2474. <https://doi.org/10.2337/dc13-2536>
- Thompson, C., Kinmonth, A. L., Stevens, L., Peveler, R. C., Stevens, A., Ostler, K. J., & Campbell, M. J. (2000). Effects of a clinical-practice guideline and practice-based education on detection and outcome of depression in primary care: Hampshire Depression Project randomised controlled trial. *Lancet*, 355(9199), 185–191. <https://doi.org/S0140673699031712> [pii]
- Ursum, J., Rijken, M., Heijmans, M., Cardol, M., & Schellevis, F. (2011). Nivel overzichtstudies - Zorg voor chronisch zieken. *Organisatie van zorg, zelfmanagement, zelfredzaamheid en participatie*. Utrecht: Nivel.
- Van Bastelaar, K. M. P., Pouwer, F., Cuijpers, P., Riper, H., & Snoek, F. J. (2011). Web-based depression treatment for type 1 and type 2 diabetic patients. *Diabetes Care*, 34(2), 320–325. <https://doi.org/10.2337/dc10-1248>
- Van der Feltz-Cornelis, C. M., Nuyen, J., Stoop, C., Chan, J., Jacobson, A. M., Katon, W., & Sartorius, N. (2010). Effect of interventions for major depressive disorder and significant depressive symptoms in patients with diabetes mellitus: A systematic review and meta-analysis. *General Hospital Psychiatry*, 32(4), 380–395. <https://doi.org/10.1016/j.genhosppsy.2010.03.011>
- Van Dooren, F. E. P., Nefs, G., Schram, M. T., Verhey, F. R. J., Denollet, J., & Pouwer, F. (2013). Depression and risk of mortality in people with diabetes mellitus: A systematic review and meta-analysis. *PLoS ONE*, 8(3), e57058. <https://doi.org/10.1371/journal.pone.0057058>
- Williams, L. H., Rutter, C. M., Katon, W. J., Reiber, G. E., Ciechanowski, P., Heckbert, S. R., & Von Korff, M. (2010). Depression and incident diabetic foot ulcers: A prospective cohort study. *The American Journal of Medicine*, 123(8), 748–754. e743. <https://doi.org/10.1016/j.amjmed.2010.01.023>

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