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PEER SUPPORT IN PATIENTS WITH TYPE 2 DIABETES

MEDSEBOJNA POMOČ MED BOLNIKI S SLADKORNO BOLEZNIJO TIPA 2

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Abstract

Introduction: *Type 2 diabetes affects people in their productive years and significantly influences their quality of life. Organized peer support provided by specially trained patients or volunteers who have experience with diabetes can be of crucial importance in supporting a patient's endeavours to lead a healthy lifestyle while managing the disease.*
Objective: *The aim of this research was to establish whether organized peer support exists in diabetes organizations of the Gorenjska region, Slovenia, and how patients feel about the usefulness of and the need for implementing a peer support system.*
Methods: *The sample included 78 respondents, accounting for 58.6% of all type 2 diabetes cases treated for the first time at the specialist diabetes clinic of the Jesenice General Hospital in 2009. The participants were given a questionnaire in which they indicated the level of agreement with the given statements on a five-point scale. The Cronbach alpha for all 18 statements was 0.71.*
Results: *Organized peer support is not yet available for members of diabetes organizations in the Gorenjska region. Most respondents do not perceive diabetes as a source of great emotional stress or as a reason for a lower quality of life. Patients receiving insulin therapy (p=.013), and those with chronic complications (p=.037), reported significant deterioration in quality of life. Women were more eager to learn how their peers manage their lives (p=.045), and to obtain information from experienced peers to help and support them (p=.032). A positive correlation was found between the respondents' opinion that diabetes presents a source of high emotional stress and that shearing experience with peers would help them reduce this stress (r=.517, p=.000); that peer experience would help them in everyday, practical situations (r=.306, p=.007); and that peer experience would help them manage their life with diabetes better (r=.447, p=.000).*
Discussion: *The research results stressed the need for introduction of peer support. We were surprised by the patients' low level of awareness regarding the benefits they could derive from talking to peers. Peer support interventions would bring the desired level of quality to the concept of personalization in diabetes care. Treatment practices for patients with diabetes in Slovenia have shown that organizing a peer support system is considered an option, but has not yet become a standard practice. Peer support can be a powerful source of empowerment and of individualisation of treatment. Its implementation, however, will have to involve the active participation of members of health care teams treating patients with diabetes.*

Key words: peer support, self-management, diabetes, social support, patients, quality of life

Izvirni znanstveni članek
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Izvleček

Izhodišča: *Sladkorna bolezen tipa 2 prizadene ljudi v produktivnem življenjskem obdobju in močno vpliva na kakovost njihovega življenja. Bolnikova odgovornost za uspešnost zdravljenja in dolgotrajno uspešno vzdrževanje zdravega načina življenja je zelo velika. Pri prizadevanjih za zdrav življenjski slog v času bolezni je bolniku v veliko oporo*

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Prispevek je nastal na osnovi opravljenega raziskovalnega projekta pri predmetu Na dokazih podprta zdravstvena nega v okviru magistrskega študijskega programa Zdravstvena nega na Visoki šoli za zdravstveno nego Jesenice.

organizirana medsebojna pomoč, ki jo ponujajo za to posebej izobraženi bolniki ali prostovoljci, ki imajo izkušnje s sladkorno boleznijo.
Cilji: *Z raziskavo smo želeli ugotoviti, ali v gorenjskih društvih diabetikov obstaja organizirana medsebojna pomoč ter kakšna so mnenja in stališča bolnikov o uporabnosti in potrebnosti sistema medsebojne pomoči. Podati smo želeli tudi mnenja anketiranih bolnikov o obravnavanem raziskovalnem vprašanju.*
Metoda: *V vzorec smo vključili 78 oseb, kar je 58,6 % vseh obravnavanih bolnikov s sladkorno boleznijo tipa 2, ki so bili leta 2009 prvič obravnavani v Diabetološki ambulanti Splošne bolnišnice Jesenice. Uporabili smo metodo anketiranja, anketiranci pa so se do trditev opredelili z ocenami od 1 do 5. Izračunani Cronbachov koeficient alfa za 18 uporabljenih trditev je znašal 0,71.*
Rezultati: *V gorenjskih društvih diabetikov medsebojna pomoč ni organizirana. Anketiranci sladkorne bolezni v večini ne doživljajo kot vir čustvenega stresa, predvsem pa niso mnenja, da je bolezen krivec za slabšo kakovost življenja. Bolniki, ki se zdravijo z inzulinom (p=0,013), ter bolniki, ki že imajo kronične zaplete sladkorne bolezni (p=0,037), navajajo, da je njihova kakovost življenja znatno slabša. Kako drugi bolniki urejajo svoje življenje, bolj zanima ženske anketiranke (p=0,045), ki si želijo predvsem tistih informacij, ki bi jim bile v pomoč in oporo (p=0,032). Ugotovili smo statistično značilno pozitivno povezanost med navajanjem sladkorne bolezni kot vira hudega čustvenega stresa, in mnenjem, da bi jim izkušnje drugega bolnika s sladkorno boleznijo pomagale pri premagovanju težav (r=0,517, p=0,000). Prav tako smo ugotovili statistično značilno pozitivno povezanost z mnenjem, da bi jim izkušnje drugih pomagale pri čisto praktičnih vsakodnevnih opravilih (r=0,306, p=0,007) in predvsem pri obvladovanju življenja s sladkorno boleznijo (r=0,447, p=0,000).*
Razpravljanje: *Z našo raziskavo smo ugotovili, da je vzpostavitev medsebojne pomoči pri bolnikih s sladkorno boleznijo tipa 2 nujno in smiselno. Presenetilo nas je, da se veliko število bolnikov ne zaveda, da bi jim pogovori z drugimi bolniki lahko zelo koristili. Z medsebojno pomočjo bi si namreč zagotovili želeno raven kakovostnega življenja in personalizacijo obravnave. Obravnava bolnikov s sladkorno boleznijo v Sloveniji kaže, da o uvedbi organiziranega sistema medsebojne pomoči sicer razmišljamo, v prakso pa ga še nismo dosledno uvedli. Medsebojna pomoč lahko pomembno vpliva na opolnomočenje bolnikov in individualizacijo njihove obravnave, zato jo moramo v prihodnosti nujno uvesti v obravnavo bolnikov s sladkorno boleznijo. Pri tem pa moramo upoštevati, da bo neobhodna pomoč zdravstvenih delavcev in članov tima za zdravstveno obravnavo bolnikov s sladkorno boleznijo.*

Ključne besede: vzajemna pomoč, samopomoč, sladkorna bolezen, socialna pomoč, bolniki, kakovost življenja

1 Introduction

Diabetes is a chronic, incurable and progressive disease. According to some predictions, the type 2 diabetes epidemic will have spread to as many as 333 million people around the world by 2025 (1). Many patients are expected to suffer from such complications as blindness, chronic kidney disease, lower extremity amputation, peripheral neuropathy, and lower quality of life (1). From a psychological point of view, diabetes results in greater dependency on others and brings about changes in social connections—at work, with friends and within the family (2). Self-management is crucial in ensuring a higher quality of life, and preventing chronic complications associated with the disease. The responsibility for adopting lifestyle changes should be assumed by both patients and their family members (3). Engaging in regular self-management activities will help patients reduce diabetes-related complications and attain a subjectively high level of well-being and a feeling of control over the disease (4). According to the authors of the Slovenian Guidelines for the Health Care of Patients with Type 2 Diabetes (5) patients experience difficulties in making and sustaining the lifestyle changes and often require additional help in doing so, since their motivation tends to decrease over time. Receiving support can be very helpful while adopting the necessary lifestyle changes; moreover, it encourages patients to introduce positive changes into their lives (6).

Peer support has been formally defined as »the provision of emotional, appraisal and informational assistance by a created social network member who possesses experiential knowledge of a specific behaviour or stressor and similar characteristics as the target population, to address a health-related issue of a potentially or actually stressed focal person« (7). A peer may have greater understanding about an individual's situation than their family members or other social network members. Veshnesky also sees peer support as a reliable and potentially permanent type of support during crucial events in life (1). Some authors (8)

have observed promising new forms of social support for diabetes patients: group consultations, Internet or telephone-based peer support and social support groups. These new forms of social support could be integrated in the work of diabetes care teams, offering new possibilities to help patients with diabetes, making it easier for them to adapt to life with diabetes and assist them in making decisions that are supported by experts' advice.

In Slovenia, diabetes organizations under the Slovenian Diabetes Association have been operating for over fifty years. Their main aims include raising awareness on diabetes, disseminating information, connecting patients with diabetes and striving for the best possible quality of diabetes care (9). Members of diabetes organizations can participate in different activities (10) through which they connect and where, in addition to diabetes outpatient clinics, they receive the greatest amount of information and support. This is also the setting for solving most of the patients' problems.

Peer support in Slovenia is organized for different groups of people, including oncology patients (11), stoma patients (12), neonatal mothers requiring breastfeeding assistance (13, 14) and older people (15). In all these groups, support is provided by specially trained non-professional advisers and experts; sometimes a psychologist is included in these teams.

New and efficient forms of support for patients with diabetes will have to be introduced in the future, as the number of patients with diabetes is constantly increasing and diabetes care teams are usually overloaded. Experts have found that the forms and methods used in patient health education are not always providing the desired results in clinical practice, which is why more efficient ways of helping patients with diabetes are continuously being sought. A promising source of help is peer support—support offered by other experienced patients or by people close to the patient. Peer supporters draw on their own experience, which is an extremely important source of information, yet has to be supported by expert advice, making close cooperation with diabetes health professionals necessary. This research looks into peer support among patients with diabetes in the Gorenjska region, Slovenia.

2 Empirical part

2.1 Objective, research questions and hypotheses

The main objective of the study was to find out what patients with diabetes think of peer support—do they desire it, would they use it if it were available, and do they feel that peer support would improve their diabetes self-management abilities.

We searched for answers to two research questions: does organized peer support exist among members of the Gorenjska region diabetes organizations, and do patients wish to partake of the experience of a well-managed patient?

Four hypotheses were put forward:

H1 – A statistically significant correlation exists between the type of diabetes treatment and patients' opinion on the necessity of peer support.

H2 – A statistically significant correlation exists between the duration of diabetes and patients' opinion on the necessity of peer support.

H3 – A statistically significant correlation exists between the occurrence of chronic complications and patients' opinion on the necessity of peer support.

H4 – A statistically significant correlation exists between patients' gender, age, and level of education and their opinion on the necessity of peer support.

2.2 Instruments

A new questionnaire was compiled to meet the needs of this research, based on an overview of relevant literature. In addition to the demographic information contained in the respondent sample description, the questionnaire contained 18 statements. The participants were asked to rate the level of their agreement with the statements on an ordinal and interval five-point scale. The statements referred to impact of diabetes on everyday life of the patients with diabetes, to influence of peer support on different aspects of their life (e.g. selection of the right diet) and to their level of interest in peer support.

The reliability of the score for all 18 statements was measured with Cronbach's alpha (.71), a measure of internal consistency which translates into medium reliability, according to Cencič (16).

2.3 Respondent sample description

The research was conducted on two samples of respondents. The first sample included presidents of diabetes organizations from Jesenice, Kranj, Škofja Loka, Tržič, Domžale and Kamnik, who answered a structured interview about organized self-help currently available to patients with diabetes in Gorenjska region.

The study was based on a nonrandom and purposeful sample that included all patients with type 2 diabetes who, in 2009, were treated for the first time at the specialist diabetes clinic of Jesenice General Hospital.

Permission to conduct the research was obtained from the management of the Jesenice General Hospital.

2.4 Data collection

Data for the empirical section of the study were obtained in two ways:
The presidents of the Gorenjska diabetes organizations agreed to participate in a structured interview conducted over the telephone. Their answers were important for obtaining basic and background information on the current diabetes patient peer support in the Gorenjska region.
The patients described in the respondent sample were mailed a semi-structured questionnaire, and asked to provide their demographic data and specify the level of their agreement with the statements in the questionnaire.

2.5 Data analysis

The obtained data were analyzed with the SPSS programme, version 18. Descriptive statistics, analysis of variance (one-way ANOVA), the t-test, and the Pearson correlation coefficient were used.

3 Results

The telephone interviews of the presidents of Gorenjska region diabetes organizations have shown that no organized peer support is provided for diabetes patients in the region, an observation supported by all of the six interviewees (100%). Peer support is reportedly provided randomly and informally and involves only those individuals who intensively seek information from other patients themselves. The members who turn to the organizations for help during office hours are always given information (this is normally the president's job or the job of other volunteers). Additionally, their members and non-members can receive information from nurses or doctors at their local diabetes clinic. Overall, the presidents of diabetes organizations are in favour of peer support and see the need for this kind of support, but they expressed their doubts in the motivation of a significant share of their members/patients.
A total of 142 new diabetes cases were documented in the above mentioned hospital in 2009. Eighty-five questionnaires were returned, and a further seven were eliminated because they were not adequately completed.

The respondent sample presented in this study therefore consists of 78 patients with diabetes (58.64%); 51 (65.4%) males and 27 (34.6%) females. The average age of the respondents was 60.33 years, and the majority (49 - 62.8%) had completed a vocational school or a secondary school. The average duration of diabetes was 25.68 months. Most respondents were living with their partner or child (65; 83.3%), 12 (15.4%) were living alone, and one of them was living in an old people's home. The majority of respondents (56; 71.8%) were taking oral antihyperglycemic agents (OHAs), 12 (15.4%) were on non-pharmacological therapy, three (3.8%) were on OHAs and insulin, and seven (9.0%) were receiving insulin therapy alone. Out of all respondents, 23 (29.5%) reported one or more chronic complications at their first visit to a specialist, 36 (46.2%) reported no chronic complications, and 19 (24.4%) did not know whether they had chronic complications or not.
Results of semi-structured questionnaires filled out by patients with diabetes:
The statements about the influence of diabetes on quality of life (Table 1) —"Diabetes is a source of high emotional stress for me" and "My life after getting diabetes is significantly worse than before"—were rated low (2 – disagree). The answers to the statement "I am interested in hearing how other, well-managed patients with diabetes manage their lives" support the fact that most respondents desire organized peer support. The statements "I am the most decisive factor when it comes to managing diabetes well" and "The goals that I wish to meet have to be made together with health care workers" were rated the highest (4 - agree).
A statistically significant higher percentage (p=.013) of respondents receiving insulin therapy reported that their lives after getting diabetes were significantly worse than before, compared to those receiving OHAs, or a combination of OHAs and insulin (Table 3). The respondents receiving OHAs therapy reported a significantly higher level of agreement (p=.008) with the statement that hearing the experience of a well-managed peer would make it easier for them to select the right diet, and have expressed a statistically significant greater desire to hear how well-managed peers manage their lives (p=.003).

Table 1. Results for statements of patients with diabetes on the disease and the level of information provision by health care professionals.
Tabela 1. Rezultati trditev v zvezi z boleznijo in informiranjem s strani zdravstvenih delavcev po oceni anketirancev/ bolnikov s sladkorno boleznijo.

Statement	M	SD	Mo
Diabetes is a source of high emotional stress for me.	2.29	1.008	2
My life after getting diabetes is significantly worse than before.	2.55	1.052	2
I am interested in hearing how other, well-managed diabetes patients manage their lives.	3.41	.946	4
I am the most decisive factor when it comes to managing diabetes well.	4.03	.938	4
The goals that I wish to meet have to be set together with health care workers.	4.09	.706	4
I have received enough professional information from my doctor/diabetes expert; I do not need to heart he experience of my peers.	3.54	.940	4
I have received enough professional information from my nurse/educator; I do not need to hear the experience of my peers.	3.55	1.025	4
Health care workers took enough time to talk to me.	3.74	.806	4

M = Mean (five-point scale: 1 = strongly disagree, 5 = strongly agree), SD = Standard Deviation, Mo= Mode

Table 2. Results for statements, by treatment modality
Tabela 2. Rezultati trditev glede na vrsto zdravljenja sladkorne bolezni.

Statement	exercise and diet		OHAs		OHAs and insulin		insulin		differences according to treatment modality	
	M	SD	M	SD	M	SD	M	SD	F	p
My life after getting diabetes is significantly worse than before.	1.92	.996	2.64	1.052	1.67	.577	3.29	.488	3.815	.013
Hearing the experience of a well-managed peer would make it easier for me to select the right diet.	3.25	.754	3.32	1.011	1.67	.577	2.33	1.211	4.262	.008
I am interested in hearing how well-managed peers manage their lives.	3.17	1.030	3.61	.867	3.33	.577	2.29	.756	5.075	.003

M = mean (five-point scale: 1 = strongly disagree, 5 = strongly agree), SD = Standard Deviation, p= threshold statistical significance $\leq .05$

We have confirmed the hypothesis No.1 that statistically significant correlation exists between the type of diabetes treatment and the patients' opinion on the necessity of peer support.
Since no statistically significant differences have been found for the duration of diabetes, the hypothesis No.2 "A statistically significant correlation exists between the duration of diabetes and patients' opinion on the necessity of peer support" can not be confirmed.

Respondents with chronic complications (M=2.96) agreed to a statistically significantly degree (p=.037) with the statement that their lives after getting diabetes were significantly worse than before (F=3.440) (Table 3). A statistically significant higher percentage (p=.024) of respondents with chronic complications (M=3.91) felt that they had received enough professional information from their nurse/educator, and that they did not need to hear their peers' experience (F=.918).

Table 3. Results for statements by presence of chronic complications.
Tabela 3. Rezultati trditev glede na prisotnost kroničnih zapletov sladkorne bolezni.

Statement	Yes		no		don't know		differences according to existence of complications	
	M	SD	M	SD	M	SD	F	p
My life after getting diabetes is significantly worse than before.	2.96	1.107	2.25	.906	2.63	1.116	3.440	.037
I have received enough professional information from my nurse/educator; I do not need to hear the experience of my peers.	3.91	1.019	3.22	1.072	3.78	.732	3.918	.024

M = mean (five-point scale: 1 = strongly disagree, 5 = strongly agree), SD = Standard Deviation, p= threshold statistical significance $\leq$ .05

The results support our hypothesis No.3 that a statistically significant correlation exists between the presence of chronic complications and the patients' opinion on the necessity of peer support.
Statistically significant gender-based differences in the respondents' opinions were found (Table 4). Women report more often that they were struggling emotionally after being diagnosed with diabetes (p=.007), and they also feel that their life after onset of diabetes is significantly worse than before (p=.038). Also, women feel that hearing a peer's experience would make it easier for them to select the right exercise regime (p=.012) and a proper diet (p=.046). Women are more interested in hearing how their well-managed peers manage their lives than men are (p=.045), and more likely to turn to experienced peers for important information from which they could draw help and support (p=.032).
The hypothesis No.4 has been partly confirmed by a statistically significant difference between males or females. No statistically significant correlation, however, has been found between the respondents' age, and level of education and their opinion on the necessity of peer support. Similarly, there were no statistically significant differences in terms of the respondents' social status.

Table 4. Results for statements referring to the influence of diabetes on quality of life and the respondents' opinions on peer support, by gender.
Tabela 4. Rezultati trditev o vplivu sladkorne bolezni na življenje bolnikov in njihova mnenja o medsebojni pomoči glede na spol anketirancev.

Statement	Men		Women		
	M	*SD*	M	SD	t p
Ever since I learned I have diabetes, I have been struggling emotionally.	2.43	1.136	3.07	.874	-2.777 .007
My life after getting diabetes is significantly worse than before.	2.37	1.113	2.89	.847	-2.107 .038
Hearing the experience of a well-managed peer would make it easier for me to select the right exercise regime.	2.63	.937	3.23	1.032	-2.582 .012
Hearing the experience of a well-managed peer would make it easier for me to select the right diet.	3.00	.980	3.50	1.105	-2.028 .046
I am interested in hearing how well-managed peers manage their lives.	3.25	.977	3.70	.823	-2.034 .045
An experienced peer would give me important information from which I could draw help and support.	3.35	.913	3.81	.749	-2.190 .032

M = mean (five-point scale: 1 = strongly disagree, 5 = strongly agree), SD = Standard Deviation, p= threshold statistical significance $\leq$ .05

The results of correlation analysis of dependent variables showed a statistically significant positive correlation between the fact that respondents have been struggling emotionally since they learned they had diabetes, and their desire to hear how their peers manage their lives (r=.328, p=.003). Also, a positive correlation was found to exist between the respondents' opinion that diabetes presents a source of high emotional stress and their desire to hear how the peers manage their lives (r=.253, p=.025), as well as their opinion that their lives are significantly worse than before and the desire to hear how their peers manage their lives (r=.292, p=.010). There was a positive statistically significant correlation between the respondents' opinion that they perceive diabetes as a source of high emotional stress and that hearing the peers' experience would help them reduce this stress (r=.517, p=.000); that the peeers' experience would help them in everyday practical situations (r=.306, p=.007); and that hearing their peers' experience would help them manage their life with diabetes better (r=.447, p=.000). The results have also shown a statistically significant correlation between the respondents' opinion that their lives are significantly worse after having been diagnosed with diabetes and their opinion that sharing experience would help them cope emotionally (r=.401, p=.000), reduce emotional stress (r=.233, p=.040), help them manage their lives (r=.244, p= .031), and offer help and support (r=.317, p=.005). A statistically significant positive correlation was also established between experiencing diabetes as a source of high emotional stress and the desire to talking to a psychologist (r=.24, p=.036), but a significant negative correlation was found between experiencing diabetes as a source of emotional stress and believing that the doctor or specialist has given enough expert advice (r=-.335, p=.003). Last of all, a statistically significant positive correlation was found to exist between the opinion that a peer's experience would make it easier for the patient to select a proper diet and the right kind of exercise (r=.809, p=.000).

4 Discussion

The presidents of the Gorenjska region diabetes organizations agreed that there is no peer support available for their patients with diabetes, and added that the motivation level of their members varies considerably, and that the number of younger members is low. Peer support is informal and random; there is

even concern that the information disseminated may not be based on facts as provided by experts. The presidents of diabetes organizations find the idea of peer support interesting and useful. They are of opinion that peer support as an organized form of support is not widely known among their members, but they believe that it could contribute to a higher quality of life of patients with diabetes. This belief is shared by the authors of Slovenian Guidelines for the Health Care of Patients with Type 2 Diabetes (5), who stated: "Patients with diabetes must be regarded as integrated personalities who should be given a central role in treating their condition. Therapies must be planned jointly, with other members of patients' health care work groups and family members being included in the care process." Patients are equal team members and contribute to creating an integrated care plan (9).

The answers to the statement "I am interested in hearing how well-managed peers manage their lives" support the fact that the majority of respondents desire this kind of organized peer support. We were surprised by the patients' low level of awareness of the fact that they could benefit from talking to peers. This is in keeping with the results of clinical studies and with data from studies conducted abroad, in which international experts have reflected on the most effective ways of offering organized peer support (17). In other countries, the non-professional advisers who offer support receive systematic preliminary training and full support from experts, who can be reached over the telephone at any moment. Peer support interventions have also been documented (7). Social support (which peer support is a part of) has an important role in enabling patients to self-manage their condition. However, social support can be either positive or negative (18), because a family is not necessarily supportive. For patients without family support and for those without close family members or a solid social network, support from professionally trained peers could signify the difference between a high and low quality of life.

Research has shown that patients who feel that their lives after being diagnosed with diabetes are significantly worse than before, and patients who see diabetes as the reason for a lower quality of life (in terms of their emotional state, a source of high emotional stress, etc.), have expressed a greater desire for peer support. Experience has shown that patients still feel stigmatized by their condition and tend to hide it in social situations. A similar conclusion has been reached by the authors (18) of a qualitative research conducted among patients with diabetes in Slovenia. They found that patients prefer personalized support to general guidelines. Even though they refer to personalized support offered by physicians, we should not forget that patients with diabetes in Slovenia receive health care advice from nurses, so the statement can be extended to refer to all health care professionals. Peer support interventions would bring the desired level of quality to the concept of personalization.

Patients have expressed their interest in other sources of information, such as friends, acquaintances, and the media (18), but these are not necessarily based on expert facts and can therefore be potentially dangerous. Treatment practice for patients with diabetes in Slovenia has shown that organizing a peer support system is considered an option, but has not yet become a standard practice. Since self-care support is available for other groups, organized support for patients with diabetes should be easier to implement. At the end of 2009, the Ministry of Health of the Republic of Slovenia formulated national guidelines for treating patients with diabetes mellitus over the following decade (9). The introduction of new forms of social support (with peer support considered as especially promising) is seen as one of the future challenges. The national programme stresses the importance of cooperation of appropriately trained non-professional advisers and other members of health care teams, in diabetes organizations, and in other settings.

Patient organizations and other non-governmental organizations may significantly contribute to life-long learning of patients with diabetes and to raising their awareness about the importance of self-management. Patients who are experienced in self-managing and self-caring and who can, thanks to their knowledge and skills, help other patients, their close relatives and friends self-manage the condition, or encourage them to change their lifestyle, can play an important role as advisers (9).

Our conclusions are supported by Veshnesky (1), who has found that getting peer support may improve psychological and physical outcomes in patients with diabetes. Negative results can also be prevented if, in addition to receiving peer support, patients have the opportunity to consult a doctor or a nurse (1). This view is supported by the fact that managing diabetes is a task for the entire team, comprised of the patient, health care professionals, and members of the patient's broader social network.

On the other hand, patients have stated that they are not interested in hearing how peers manage their lives provided that they receive sufficient information from doctors and nurses. This view reflects their trust in health care professionals and shows that alternative

forms of support are not widely accepted, but it may also have to do with the respondents' character.

The type of therapy received influences the respondents' opinion on their quality of life. The patients receiving insulin therapy feel that their quality of life is significantly worse than before, a view indicating that giving insulin injections acts as a stressor and points to the awareness that this type of therapy is permanent. In practice, patients often perceive the administration of insulin as a final proof that their condition is real and unavoidable. Patients tend to be most vulnerable emotionally when they are diagnosed with diabetes and have to face changes, such as therapy intensification and occurrence of chronic complications (5). Patients receiving OHA therapy were more willing to hear their peers' experiences.

We found no evidence to support the hypothesis that the respondents' opinions are statistically significantly correlated with the duration of diabetes. Neither has there been any evidence that chronic complications, age or education level have impact on the patient's desire for peer support. However, we did find a statistically significant correlation between gender and the desire to talk to a peer. Women reported emotional struggles more frequently than men, and they were also more likely to seek advice from their peers about the right diet and exercise regime.

5 Conclusion

In the Gorenjska region of Slovenia, currently no organized peer support is available for diabetes patients. Moreover, non-health care professional advisers or peer advisers are given no special training or support from experts. Discussions between patients with diabetes take place on an informal level, and only between those patients who meet for reasons other than diabetes peer support. Because of the unsystematic nature of support many people who desire this type of help get overlooked, especially because they do not know how to obtain support. The information disseminated among patients with diabetes is non-professional and often contains half-truths, raising further doubts as to the correct course of action.

Because of the small sample size, research results can not be generalized to the entire population. The study provides a general overview of the level of mutual help among patients with diabetes and of the respondents' attitudes to new forms of help, such as peer support. Undoubtedly, this form of support has stimulated great interest both among patients with diabetes and the presidents of diabetes organizations in the region of Gorenjska. The establishment of a peer support system including specially trained patients has been included in the national programme by the Slovenian Ministry of Health, stressing the role of this form of support in raising the quality of patients' treatment.

Additional research is needed to establish the desire for peer support in patients from other parts of Slovenia, to determine which training and education options would best suit advisers, and what forms of organized peer support would be best suited for the Gorenjska region and for the whole Slovenia.

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