

RATING PREVENTIVE ADVICE FOR OPPORTUNITIES TO REDUCE THE LEVEL OF DEPRESSION. CONDUCT AND ANALYSIS OF RESULTS

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consultation

depression prevention

satisfaction areas

Summary

Objectives: The aim of the studies was to find out whether an early preventive intervention may reduce the effects of depression, and whether a preventive consultation may decrease susceptibility to depression in the long term.

Methods: The following research tools were used in the studies: Two-Question Test (TQT) used for early detection of depression and its intensity, HS-20 Scale, Beck's Scale, Satisfaction Areas Scale (SAS) used among other things for examining the areas of satisfaction, Participants' Assessment of the Preventive Consultation Questionnaire (PAPCQ), Demographic Questionnaire.

Results: The results showed among other things that on the TQT scale, HS-20 Scale, Beck's Scale, participants of consultations obtained high scores, which may suggest the occurrence of depression. It can be observed that people participating in the second consultation have statistically significantly lower level of depression compared with the level of depression observed among them during the first consultation. It can also be observed that the areas of satisfaction increased in seven cases.

Conclusions: It can be noted that consultations conducted within the framework of this research led to positive changes in people who had participated in preventive consultations. The following hypothesis can be formulated: the level of depression reduced and some areas of satisfaction may increase in the examined group due to consultations.

Introduction

Epidemiological data suggest that the number of people suffering from mental disorders, including depressive disorders [1], has been increasing year by year. According to the study by Laserre et al. [2], the mortality rate for people with depressive episode is three times higher than for people without such diagnosis. The authors of this study think that depression is accompanied by high likelihood of committing suicide, and

that a depressive episode itself should be treated as a life-threatening condition [2]. The authors of a comment published in the *Lancet* [3], October 6, 2012, also address the problem of depressive disorders in Europe. They think that negative social changes, such as rising unemployment especially among young people, and increasing poverty in large groups of people, may be the causes of depression. The *Lancet's* authors blame an unwieldy health system which trims the scope of its services for people. Additionally, they claim that there is a close link between alcohol abuse and depression, and they list effects of depression, such as suicide, self-mutilation, and series of other negative effects [3]. The analysis of data on mental disorders and brain diseases [1] from 2011 shows that each year 38,2% of the EU population (all countries in the EU) suffers from mental illness. Furthermore, studies conducted in recent years indicate that disorders of the brain are the main and most common cause of health and fitness loss in Europeans, and that the prevalence of such disorders is high (both annual and total prevalence rates) [4, 5]. According to the study by Wittchen et al. [1], depression accounts for 6,9% of all mental disorders occurring in the countries in the EU. Other sources report that the incidence of depression is 5-10% [6], including chronic affective disorders [6]. The above-mentioned findings indicate the need to search for a method detecting and preventing, at least to some degree, the occurrence of a severe mental crisis in the form of a depressive episode. Few studies address the issue of depression prevention, though the needs are much bigger [3]. The Andrews et al. [7] study suggests that the lack of educational programs may inhibit the treatment of all patients in the future, and due to the lack of prophylaxis, the treatment costs of numerous patients will rise immeasurably. Referring to Perlis and Giles [8], it can be said that the described situation provides the grounds for discussing the necessity of depression prevention and its quick implementation in the health care system. Actions directed toward prevention of depression have been taken and it is expected that they will minimize side effects of depression in patients, their families, societies and health care systems [9]. Studies conducted in Norway and Denmark indicated a very interesting diagnostic value of three questions in excluding or confirming early signs of depression in adolescents. Diagnostic value of the three-question test was similar to that of complex diagnostic tools [10]. Using a simple behavioral activation treatment of adults with depression, Richards et al. [11] obtained similar results to those obtained using CBT (cognitive behavioral therapy). Ito et al. [12] developed a unified educational procedure for people with anxiety and depressive disorders who are waiting for treatment, which indicates the need for employing simple, easy-to-use, and effective methods for diagnosing and reducing symptoms not only in the area of prevention, but also in the area of treating anxiety and depressive disorders.

Therefore, psychoprevention, which is directed towards preventing various forms of pathology (it can be defined as prevention or psychological prevention) [13, 14], seems to be very useful. As Sęk writes [13, 14], psychoprevention involves using psychological and social mechanisms that may serve to “reveal an individual’s developmental potential,

prevent the possibility of the occurrence of disorders, and minimize disorders or prevent their development” [13, p. 379]

Referring to Caplan’s classification [13, 14], three types of prevention can be distinguished: 1. primary prevention which is targeted at reducing the likelihood of the development of disorders, 2. secondary prevention which is used, when early symptoms of disorders occur in order to prevent their development and reduce their duration (psychotherapeutic techniques can be used in this type of prevention), 3. tertiary prevention which is used to prevent effects of a past disease or hospitalization, counteract disease reoccurrence and rehospitalization, and minimize adverse effects of a disease. Especially the first type of prevention seems to be interesting when it comes to the prevention of mental disorders (especially depressive disorders in the light of the program discussed in this paper). Mrazek and Haggerty [15] formulate the need for prevention and health education in a similar way. In this context, it’s worth mentioning Grzesiuk’s suggestion [16] that there are other approaches in psychotherapy for people with mental disorders and psychoeducation may play a crucial role. As Sęk observes [14], a clinical psychologist or psychiatrist can promote health in two ways: on the one hand by “propagating psychological knowledge useful for health promotion”, on the other hand by “shaping health resources and health-oriented behavior.” [14, p. 260]

This paper describes a program in which the applied prevention had features of an universal educational intervention addressed to people who had expressed a desire to participate in preventive consultations [see 17]. This type of prevention seems to have the shape of an easily accessible health education aiming at teaching simple health-oriented behaviors, strengthening mental toughness, and developing resiliency [see 18, 19, 20]. An educational campaign was conducted to support the program. Information about the program was spread via local television stations, advertising posters in public means of transportation, and local radio stations and newspapers. Social media, especially the website at www.profilaktykaderpesji.malopolska.pl, were an important step towards participation in personal consultation. Answering the questions posted on the site stimulated reflection and gave certain schematic knowledge motivating people to call a helpline and arrange to meet an educational program consultant. Consultations were free of charge thanks to the funds of the project organizer - the Marshal's Office of the Małopolska Region.

The Józef Babiński Specialist Hospital in Cracow (in scientific cooperation with the Institute of Applied Psychology at the Jagiellonian University) (program no.: I/1618/PS/2323/13 of 1 October 2013) was responsible for executing the program.

Aim

The purpose of this research was to assess whether the undertaken preventive intervention may contribute to the decrease in the intensity of depressive symptoms. The research involved comparing two measurements of the level of depressive mood (reported by people participating in a preventive consultation), and examining whether a preventive

consultation may bear on the change of this level (examined after one month). The study model did not involve comparing the change of mood level depending on the applied type of prevention; it was aimed at preliminary assessment whether a statistically significant change occurs, which could suggest a relationship between the change and the execution of a preventive consultation.

The research was also aimed at examining satisfaction areas (susceptibility and resilience) which may contribute to the enhancement or reduction of the occurrence of depressive symptoms. Also of interest was the issue of what kind of people participated in preventive consultations.

The Course of Preventive Consultations

Consultations were held in Cracow and other localities in the Małopolska Region in years 2012 and 2013, and were attended by people who, for various reasons, often motivated by anxiety about their own health, felt the need to consult a specialist about their mental state. Consultations were free of charge thanks to the funds of the project organizer - the Marshal's Office of the Małopolska Region. The Józef Babiński Specialist Hospital in Cracow (in scientific cooperation with the Institute of Applied Psychology at the Jagiellonian University) was responsible for executing the program. Consultants were people who had received special training and had a medical or psychological education and experience in working with people suffering from mental disorders (psychologists, psychotherapists and psychiatrists).

A preventive consultation consisted of a 45-minute conversation. At first, participants were to complete the Satisfaction Areas Scale (SAS) with a consultant. Based on the obtained results, it was possible to identify important areas whose modification could increase a participant's satisfaction with life.

The following research questions were posed:

1. In what state of mind did subjects come forward to participate in a preventive consultation?
2. What was the level of satisfaction with the examined areas of life in people coming forward to participate in a preventive consultation?
3. How did participants evaluate preventive consultations conducted by consultants according to the procedure of the program?
4. Did participants report different assessment of their state of mind and satisfaction level in the examined areas of life in the second study after a month compared with the previous study?
5. Do the three tools which were used to measure the level of mood (depression) give similar results (does the TQT scale as a new tool give similar results to those obtained using the two other scales that have been used to diagnose depression for a long time)?

6. What are the relationships among the studied variables (the levels of mood and the level of satisfaction with the studied areas of life, and a participant's assessment of a preventive consultation)?

Studied Group

298 individuals participated in the studies (223 females, i.e. 74.75%, and 75 males, i.e. 25.25%). The mean age of the subjects was 43 years (age range 18-83 years). The educational background of the participants: higher education (including bachelor's degrees) – 40.5%, secondary education – 36%, vocational education – 18.6%, elementary education – 4.4%. The place of residence of the subjects: a large city with a population over 500,000 – 39.8%, a large town with between 10 000 and 100 000 inhabitants – 22.8%, a city with a population over 100 000 – 2.7%, a town with a population under 10 000 – 6.1%, a village – 28.6%. The group was dominated by working people (over 50%); 20% of the subjects were still studying (42% of them were students). Approx. 50% of the participants reported various health problems (somatic ones); 31% of the subjects admitted to visiting a psychiatrist. The subjects were not treated pharmacologically.

Research Tools

Before the beginning of a consultation, the participants were asked to complete the following questionnaires: the Two-Question Test (TQT), the Beck Hopelessness Scale (HS-20), the Beck Depression Inventory. Also before the beginning of a consultation, the subjects were asked to give their consent (in writing) to participate in the study and to the processing of their personal data for the purposes of the program.

After a consultation, the subjects were asked to complete the Participant's Assessment of the Preventive Consultation Questionnaire (PAPCQ). After approximately a month, the subjects were asked to complete the above-mentioned questionnaires again.

1. The Two-Question Test is used for preliminary diagnosis of depression and its intensity. It consists of two expanded diagnostic questions that enable a subject to determine the intensity of typical symptoms of depressive syndrome.

Question 1. (TQT1) During the past month, have you felt bothered by feeling low, depressed or hopeless? concerns mood drop, apathy, and negative thoughts about the future.

Question 2. (TQT2) During the past month, have you been bothered by having little interest in or satisfaction with your work? concerns apathy, abulia, and anhedonia.

The authors (Walczewski, Müldner-Nieckowski, Słowik) developed this tool based on existing tools that are used to examine mood level (an inner area) and assessment of functioning (an external area). Thanks to an authorial modification, the tool has a rating scale (1-10), which enables quantitative assessment of results. Two known and standardized tools for examining depression (see below no. 2 and no. 3) were used to examine the TQT tool accuracy. Analyses of the validity of the tool conducted in the

group of 298 individuals show that there are relatively high and significant correlations of the TQT scale with the Beck Depression Inventory and the Beck Hopelessness Scale (HS-20) (Beck et al. 1974; cf. Stach 1991). They prove the validity of the TQT scale as a tool for examining depression. The correlation of the sum of the TQT questions (TQT1 and TQT2) with HS-20 is $r=0,51$ ($p<0,001$), with the Beck Depression Inventory $r=0.65$ ($p<0.001$). Correlations were also high for each of the two questions. Correlations between particular items of TQT1 and TQT2: $r=0.53$, $p<0.001$.

2. The Beck Depression Inventory.

It is a well-known and often used tool for examining the level of depression. It's a 21-item self-report instrument. During the test, a subject is asked to take a stance on given statements on a four-point scale. Thereby she/he refers to the presence and severity of various depression symptoms such as cognitive disorders, anhedonia, or somatic complaints. A total score is the sum of all points a subject assigns to items she/he chooses (the more severe symptom, the higher the number of points). The literature of the subject presents several different approaches to assessing numerical score. It is, however, generally assumed that score above 10 may indicate the occurrence of mild depressive symptoms, above 20 – moderate depressive symptoms, and above 30 – severe depressive symptoms.

3. The Beck Hopelessness Scale (HS-20) based on Polish adaptation by Stach [21]. It is a tool for examining a subjective evaluation of the future. A subject is asked to take a stance on 20 statements (both pessimistic and optimistic statements). Points are given for assigning the letter "T" ("Truth") to pessimistic statements and the letter "F" ("False") to optimistic ones. A total score is the sum of answers evaluated according to this answer key. A high score represents a high level of hopelessness, that is a negative evaluation of the future, which indicates depression.

4. The Satisfaction Areas Scale (SAS). It is an authorial tool (Müldner-Nieckowski, Walczewski, Słowik) enabling a relatively quick assessment of an individual's satisfaction with functioning in 22 areas referring, among other things, to self-assessment, assessment of self-activity and self-efficacy, and assessment of relationships with other people. The most important areas of life appearing in tools generally used to assess life quality were taken into consideration. The test assesses a patient's functioning by asking about a patient's level of well-being in particular areas, and not about the level of disorders or difficulties. The tool underwent analysis in a group of 373 people for the purpose of establishing internal consistency: Cronbach's alpha: 0,93; split-half reliability calculated using the Spearman-Brown formula: 0.91. Based on the analysis, it can be stated that internal consistency is high, and all the questions are strongly correlated with an overall result. Test-retest correlation coefficient is also satisfactorily high (Pearson's $r=0.60$, $p<0.001$).

- 5. The Participant's Assessment of the Preventive Consultation Questionnaire (PAPCQ).** It contains 12 questions (each with a 0-5 scale) whose answers constitute a feedback on the quality of a participant's contact with a consultant and possible benefits resulting from her/his participation in a consultation. The questions refer to the specificity of preventive advice and are one of its elements. It is an authorial tool (Słowik, Walczewski, Müldner-Nieckowski), that is why it underwent a validity analysis in a group of 373 people in which high internal consistency was demonstrated (Cronbach's alpha: 0.83).
- 6. Demographic Questionnaire.** The questionnaire contains a series of questions concerning population characteristics such as age, gender, place of residence, education, occupation, health state.

Research Methodology

The subjects entered preventive consultations voluntarily. Preventive consultations were conducted by a consultant psychologist. People who were afraid of coming down with depression (now or in the future) were invited for consultations. Information about the program was spread via local television stations, advertising posters in public means of transportation, and local radio stations and newspapers. The first stage (the first study) was attended by 298 participants; the second study after a month was attended by 77 individuals.

The questionnaires used in the research were completed by participants in the presence of a person conducting a consultation. A preventive consultation lasted between 45 minutes and 1 hour. In an initial phase of a consultation, participants answered the two questions of the Two-Question Test by saying 'yes' or 'no'. Additionally, each answer was given on a 1-10 scale which described the level of intensity of a given symptom according to a subject's feeling. Next a participant answered 22 questions of the Satisfaction Areas Scale (SAS); results were noted by a consultant on a satisfaction level scale (from 1 to 7 points). It should be noted that the course of a preventive consultation depended on the results of SAS, and a consultant entered into a conversation about areas of life in which a low level of satisfaction occurred. Then a consultant communicated psychoeducational information on possibilities of introducing a positive changes in a given area – by participants on their own or with the help of a specialist. Next a participant completed two tests: the Beck Depression Inventory, and the Beck Hopelessness Scale (HS-20). Finally a participant filled in the Participant's Assessment of the Preventive Consultation Questionnaire (PAPCQ). After one month since the first study, consultants asked participants to complete the tests again in order to examine the effect of the first stage.

Results

Measurement 1 (the study was conducted during a consultation).

Table 1 below presents mean scores for the examined variables, such as the level of depression (measured using three tools: TQT, HS-20, the Beck Depression Inventory), and the sum of ratings for satisfaction with functioning in different life areas (SAS), and a participant's assessment of a consultation (PAPCQ).

Table 1. Descriptive statistics for the examined variables

Variable	N	Minimum	Maximum	Mean	SD
HS-20	298	1.00	20.00	10.24	4.76
The Beck Depression Inventory	298	1.00	48.00	18.69	9.83
SAS Total	288	1.00	151.00	87.48	23.49
TQT Total	298	1.00	20.00	12.73	5.02
TQT 1	298	1.00	10.00	7.20	2.55
TQT 2	298	1.00	10.00	5.74	3.03
PAPCQ	298	13.00	60.00	49.55	8.63

SD – standard deviation. The full names of the variables can be found in the description of the tools.

The obtained results showed that the participants gained relatively high scores on the TQT scale (consisting of two diagnostic questions with scales: TQT1 and TQT 2) which may indicate depressive symptoms and their intensity. This may suggest that the participants had lowered mood (mean scores for two 10-point scales are 7.20 and 5.74 respectively; total score for both of these scales was quite high, i.e. 12.73).

It's worth noting that by choosing a particular question, a subject indicated the occurrence of symptoms (in accordance with the assumptions of a test question), and at the same time, she/he marked the intensity of her/his symptoms (the choice of symptom occurrence indicates lowered mood, and the level of intensity defines it additionally). This may indicate that consultations were attended mainly by people experiencing depression-related problems of various etiologies and intensities. High level of lowered mood in the examined group (according to sten norms calculated for the purpose of this research) was also confirmed by the mean score (10.24) obtained on the HS-20 scale. Based on the accepted norms, the score obtained on the Beck's scale (18.69) indicates mildly elevated level of depression in the examined group (this score is slightly milder compared with the two previous ones). It seems, however, that the scores of the three scales are consistent and indicate a similar level of lowered mood in people who attended consultations.

On the other hand, the mean score for the 22 mentioned areas of satisfaction with life is 87.48 and above the mean (it may be considered as an average score, i.e. a slightly elevated score). The rating of a conducted consultation (and consequent benefits for a

subject) was relatively high, i.e. 49.55 (the maximum score was 60). Next the analysis of particular satisfaction areas was performed. Table 2 below presents the analysis results.

Table 2. Descriptive statistics for particular items of the SAS (satisfaction areas)

Variable SAS items	N	Minimum	Maximum	Mean	Standard deviation
1. Effects of actions	290.00	1.00	7.00	4.11	1.88
2. Social contacts	290.00	1.00	7.00	4.08	1.60
3. Handling difficult situations	290.00	1.00	7.00	3.34	1.83
4. Physical activity	286.00	1.00	7.00	3.91	1.88
5. Interactions with people	290.00	1.00	7.00	4.60	1.83
6. Future possibilities and plans	285.00	1.00	7.00	3.56	1.57
7. Influence on your own life	287.00	1.00	7.00	3.83	1.67
8. Handling everyday affairs	288.00	1.00	7.00	4.45	1.57
9. Mental state	289.00	1.00	7.00	2.96	1.68
10. Willingness to act	289.00	1.00	7.00	3.83	1.73
11. Physical health	287.00	1.00	7.00	4.17	1.70
12. Achievements	288.00	1.00	7.00	4.71	1.46
13. Way of spending free time	288.00	1.00	7.00	3.92	1.70
14. Self-complacency	289.00	1.00	7.00	3.80	1.58
15. Memory and concentration	289.00	1.00	7.00	3.98	1.72
16. Appetite	289.00	1.00	7.00	4.63	1.80
17. Sex life	283.00	1.00	7.00	3.53	1.97
18. Work	288.00	1.00	7.00	4.22	1.90
19. Sleep	288.00	1.00	7.00	3.78	1.90
20. Interactions with family members	288.00	1.00	7.00	4.58	1.76
21. Taking care of yourself	288.00	1.00	7.00	4.50	1.48
22. Current life situation	289.00	1.00	7.00	3.48	1.79
SAS Total	288.00	22.00	154.00	87.48	23.49

Some items were omitted by the respondents so the N varies

The statistics presented above show that the average level of satisfaction with various areas of life in participants was above the mean, i.e. 87.48 (the maximum score was 154). Scores for the majority of the examined satisfaction areas also exceeded the average. The highest-rated items were: interactions with people and family members, appetite, taking

care of yourself, and handling everyday affairs (which indicates moderately good functioning). Mental state, on the other hand, was the lowest-rated item.

Then correlation analyses between the examined variables were performed. Their results are shown in Table 3 below.

Table 3. Relationships between the variables under study

Variable	HS-20	The Beck Depression Inventory	SAS Total	PAPCQ	TQT 1	TQT 2
The Beck Depression Inventory	0.62**					
SAS Total	-0.56**	-0.53**				
PAPCQ	-0.14*	-0.03	0.08			
TQT 1	0.47**	0.62**	-0.54**	0.00		
TQT 2	0.41**	0.51**	-0.57**	0.03	0.49**	
TQT Suma	0.48**	0.64**	-0.49**	0.00	0.84**	0.88**

Pearson's r correlations, *: $p < 0.05$, **: $p < 0.01$

The correlation analysis shows significant (and clear) relationships between all variables measuring the level of depression (derived from the tests used in the studies, i.e. between the Beck Depression Inventory, HS-20, TQT both as total and separately as TQT1 and TQT2). The obtained correlations are positive, which shows that if the level of depression is high in one test, it's also high on another scale measuring depression. This result may indicate that the studies are consistent and that a high score in one test is confirmed to be significant and high in other tests. Based on the above discussion, it seems that the TQT (the Two-Question Test) is a good predictor for a preliminary diagnosis of depression (which was also one of the research assumptions).

It can be observed that the subjects have high level of depressive symptoms. Significant correlations occur between all variables measuring depression and the examined areas of satisfaction (SAS). These correlations are negative, i.e. the lower the level of depression (confirmed to the same degree by all the test, i.e. the Beck Depression Inventory, HS-20, TQT1, TQT2), the higher the level of satisfaction areas in the subjects (and vice versa, the higher the level of depression, the lower the level of satisfaction areas in the subjects).

It can be observed that the higher the level of depression, the more often a subject consults a psychologist or a psychiatrist. Furthermore, there is a relationship between a subject's age and the assessment of a consultation, i.e. the older a subject, the better

her/his rating of a consultation; on the other hand, compared with younger subjects, older individuals receive worse ratings from a consultant.

Measurement 2

After one month since the first consultation, the second study was conducted. 77 individuals participated in it. Several significant changes were observed. Table 4 presents these changes (intercorrelations between the variables from the first measurement and the second measurement, Pearson's r).

Table 4. **Comparison of the level of significance of differences between the first measurement and the second one with respect to the examined variables**

Variable	N	Mean		Standard deviation		t	df	p
		Measurement 1	Measurement 2	Measurement 1	Measurement 2			
HS-20	77	11.13	9.66	4.97	5.99	3.11	76	0.003
The Beck Depression Inventory	77	21.03	15.43	1.28	11.42	4.88	76	<0.001
TQT1	76	7.36	5.72	2.61	2.93	4.60	75	<0.001
TQT2	76	6.71	6.07	2.65	3.10	1.67	75	0.09
TQT Total	77	13.88	11.90	4.74	5.90	2.82	76	0.006
PAPCQ	75	49.84	36.03	8.19	8.68	12.68	74	<0.001

Significant for $p < 0,5$

The obtained results show that all rates of depression that were measured using the three tools, i.e. TQT, HS-20, the Beck Depression Inventory reduced significantly. This result is not statistically significant only in the case of one component (TQT2). However, here a certain tendency can also be observed, because the result in the second study is lower than in the first study (though it is not statistically significant). This, however, may be the result of a lower number of subjects compared with the first trial. It should be added that a pilot study (conducted one year earlier) also showed a statistically significant difference in the TQT2 scale between the first study and the second one [17]. Moreover, it is worth noting that the total score of the TQT is at the level of statistical significance (clearly lower during the study after one month compared with the first measurement). Summing up, it can be observed that in the case of measuring the level of depression with the following tests: HS-20, the Beck Depression Inventory, and TQT, the level of depression in the subjects decreased in the second measurement, i.e. after a preventive consultation (however, at the current stage of research, it is impossible to provide an unambiguous answer to the question about the cause of this change).

Then comparative analyses among 22 examined areas of satisfaction were performed (see Table 5).

Table 5. Comparison of the level of significance of differences between the first measurement and the second one on the SAS scale (total and between particular items of the SAS scale)

Variable Satisfaction areas (SAS items)	N	Mean		Standard deviation		t	df	p
		Measurement 1	Measurement 2	Measurement 1	Measurement 2			
1. Effects of actions	75	3.93	3.88	1.88	1.68	0.29	74	0.771
2. Social contacts	75	3.87	3.96	1.47	1.36	-0.59	74	0.559
3. Handling difficult situations	75	3.15	3.64	1.75	1.61	-2.48	74	0.015
4. Physical activity	75	3.55	3.37	1.81	1.67	0.99	74	0.326
5. Interactions with people	75	4.13	4.32	1.72	1.78	-1.16	74	0.249
6. Future possibilities and plans	72	3.44	3.60	1.40	1.70	-0.80	71	0.425
7. Influence on your own life	73	3.47	3.82	1.48	1.69	-2.04	72	0.045
8. Handling everyday affairs	74	4.15	4.30	1.51	1.58	-0.73	73	0.465
9. Mental state	75	2.99	3.68	1.63	1.63	-3.51	74	0.001
10. Willingness to act	75	3.47	3.87	1.54	1.60	-2.13	74	0.037
11. Physical health	75	4.12	4.09	1.64	1.59	0.17	74	0.863
12. Achievements	74	4.28	4.31	1.46	1.51	-0.21	73	0.835
13. Way of spending free time	75	3.67	3.95	1.54	1.63	-1.54	74	0.127
14. Self-complacency	75	3.53	3.75	1.46	1.62	-1.30	74	0.196
15. Memory and concentration	75	3.63	3.73	1.53	1.53	-0.63	74	0.531
16. Appetite	75	4.64	4.60	1.68	1.56	0.21	74	0.831
17. Sex life	74	3.57	3.16	1.89	1.92	2.25	73	0.028
18. Work	75	3.73	3.60	1.83	1.69	0.71	74	0.481
19. Sleep	75	3.53	4.21	1.74	1.73	-3.38	74	0.001

20. Interactions with family members	74	4.47	4.32	1.70	1.72	0.94	73	0.351
21. Taking care of yourself	75	4.17	4.11	1.38	1.52	0.40	74	0.693
22. Current life situation	75	3.24	3.67	1.64	1.62	-2.63	74	0.010
SAS Total	77	8.14	85.45	26.31	27.58	-1.92	76	0.059

Significant for $p < 0,5$; N – number of respondents

The comparative analyses conducted in the study of satisfaction areas (SAS) show that changes occurred in 7 areas of satisfaction one month after a preventive consultation. It can be observed that the level of satisfaction increased in the following areas: handling difficult situations, influence on your own life, mental state, willingness to act, sex life, sleep, current life situation. Moreover, a tendency towards an increase in the SAS total score can be observed (close to the margin of significance 0.059).

It is worth noting that the observed and analyzed patterns were already observed in the pilot study conducted a year earlier (in the current study conducted with a larger group, these changes are even more visible) [17].

Discussion

Several important observations were made in the conducted studies. Firstly, it seems (which was not immediately obvious at the beginning of the program) that there is a public awareness of depression and there are more people who are willing and determined to take a preventive advice, which on the one hand enables diagnosis and, on the other hand, enables enhancement of the scope of health-oriented actions. Furthermore, people coming for a consultation and educational advice make an attempt to determine their mental state on their own. Hopefully, this self-assessment is similar to an objective diagnostic assessment by a specialist conducting a consultation. The analysis of the results of the education and prevention program indicates such patterns. The positive changes (in the study after a month) observed in 7 satisfaction areas came as a pleasant surprise. Additionally, these changes also concerned the reduction of depressive symptoms which were examined using the three tests designed to measure the level of depression, i.e. the Beck Depression Inventory, HS-20, and TQT, however this observation needs further research. All changes mentioned here are statically significant. It should be noted, however, that at the current stage of research, it is impossible to provide an unambiguous answer to the question about the cause of these changes. The analysis of the screening tool for depression, i.e. the Two-Question Test is also interesting. The results of this test concur with those of more complex and recognized tools for measuring depression (which was also confirmed by the validity analysis presented in the tool description). This simple tool can be used to screen for depression for preventive purposes (research will be continued in a larger group of participants).

The obtained results provoke deeper reflection, provoking a search for the answer to the following question: by what mechanism does a one-time preventive educational consultation contribute to the occurrence of positive changes in people who came for a consultation? It seems to be related to three elements of an educational process connected with acquiring knowledge during a consultation by a participant. This knowledge could be named “antidepressant knowledge”. This process would consist of:

1. Focusing on news concerning depressive disorders available in the media and on the website and applying knowledge from news to oneself.
2. Objectivizing concerns and speculations about one’s own mental state in the presence and with the help of a consultant. The most important thing here is a subject’s personal contact with a consultant. Thus a subject could obtain:
 - a. the recognition of one’s own resources and life areas requiring particular health-oriented actions,
 - b. confirmation of possibility to gain positive influence on one’s own mental functioning, and consequently on mood enhancement,
 - c. declaration of one’s own further health-oriented actions supported by information concerning possibilities of introducing specific changes in life aimed at protecting against a permanent deterioration of mood.
3. The third factor that could influence the changes is the assessment of a consultation and its effects. The assessment was performed after approximately 4-5 weeks and aimed to consolidate knowledge gained during a consultation and hold a participant’s attention on an issue that was discussed during a preventive consultation. This should help maintain health-oriented habits (in lieu of previous adverse or ineffective elements of a person’s lifestyle) that were developed during a consultation.

Conclusions

1. People with lowered mood participate in a preventive consultation in a bid to find specialist help.
2. The participants of preventive consultations assess the level of satisfaction with many areas of their life fairly well; mental state is the lowest assessed area of life. So these are people with lots of external resources and at the same time with mental disturbances.
3. The quality of a preventive advice is rated highly by the participants, despite its limitations (short space of time, one-time contact).
4. The study repeated after one month showed a statistically significant improvement in mood and satisfaction with selected areas of life in the group of people who decided to complete the questionnaires again. These results do not testify to the causal role of a preventive consultation (although they imply that it might be possible), however they show the likelihood of occurrence of positive changes in mood in people who participate in the preventive program.
5. The studies also show that the results from the three tests measuring the level of depression are consistent. This may suggest that the simple Two-Question-Test measuring the level of depression gives results of similar accuracy as proven and more complex tools. The TQT test is easier and faster to use. Research will be continued in a larger group.
6. The differences observed between the measurements justify continuation of this research which will enable us to take a closer look at mechanisms of visible changes in subjects' mood and satisfaction with particular areas of life (the observed changes are interesting, but at the current stage of research, it is impossible to determine their significance).

References

1. Wittchen HU, Jacobi F, Rehm J, Gustavsson A, Svensson M, Jönsson B. The size and burden of mental disorders and other disorders of the brain in Europe 2010. *Eur. Neuropsychopharm.* 2011, 21(9): 655–790.
2. Lasserre AM, Marti-Soler H, Strippoli MP, Vaucher J, Glaus J, Vandeleur CL. Clinical and course characteristics of depression and all-cause mortality: A prospective population-based study. *J. Affect. Disord.* 2016 Jan 1;189:17-24. doi: 10.1016/j.jad.2015.09.010. Epub 2015 Sep 14. 3.
3. Depression and the global economic crisis: is there hope? *Lancet* 2012, 380(9849): 1203.
4. Iacoviello BM, Alloy LB, Abramson LY, Choi JY. The early course of depression: a longitudinal investigation of prodromal symptoms and their relation to the symptomatic course of depressive episodes. *J. Abnorm. Psychol.* 2010, 119 (3): 459–467.
5. Fava GA, Tossani E. Prodromal stage of major depression. *Early Interv. Psychiatry* 2007; 1(1): 9–18.

6. Cuijpers P, Aartjan TF, Beekman MD, Charles F, Reynolds MD. Preventing depression a global priority. *JAMA* 2012, 307(10): 1033–1034.
7. Andrews G, Issakidis C, Sanderson K, Corry J, Lapsley H. Utilizing survey data to inform public policy: comparison of the cost-effectiveness of treatment of 10 mental disorders. *Br. J. Psychiatry* 2004, 184: 526–533.
8. Perlis ML, Giles DE. Self-reported sleep disturbance as a prodromal symptom in recurrent depression. *J. Affect. Disord.* 1997; 42 (2–3): 209–212.
9. Barrera AZ, Torres LD, Muñoz RF. Prevention of depression: the state of the science at the beginning of the 21st Century. *Int. Rev. Psychiatry* 2007; 19 (6): 655–670.
10. Mayor S. Depression in teenagers can be identified with three questions, study shows. *BMJ* 2016;352:i547.
11. Richards DA, Ekers D, McMillan D, Taylor RS, Byford S, Warren FC. i in. Cost and outcome of behavioural activation versus cognitive behavioural therapy for depression (COBRA): a randomized, controlled, non-inferiority trial. DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31140-0](http://dx.doi.org/10.1016/S0140-6736(16)31140-0)
12. Ito M, Okumura Y, Horikoshi M, Kato N, Oe Y, Miyamae M. et al. Japan Unified Protocol Clinical Trial for Depressive and Anxiety Disorders (JUNP study): study protocol for a randomized controlled trial. DOI: 10.1186/s12888-016-0779-8.
13. Sęk H. Społeczna psychologia kliniczna. Warszawa: PWN; 1993.
14. Sęk H. Promocja zdrowia i prewencja zaburzeń z perspektywy psychologii. In: Sęk H ed. *Psychologia kliniczna*. Warszawa: PWN; 2008, p. 256–268.
15. Mrazek PJ, Haggerty RJ. Reducing risks for mental disorders: frontiers for preventive intervention research. Institute of Medicine (US) Committee on Prevention of Mental Disorders. Washington (DC): National Academies Press, 1994.
16. Grzesiuk L. *Psychoterapia i praktyka*. Warszawa: ENETEIA; 2006.
17. Słowik P, Walczewski K, Müldner-Nieckowski Ł. Konsultacja profilaktyczna jako możliwość prowadzenia edukacji prozdrowotnej w zakresie profilaktyki depresji. Przebieg badań i analiza programu. W: Borzęcki A, red. *Problemy współczesnej higieny*. Lublin: Wydawnictwo Norbertinum, Drukarnia-Księgarnia; 2016, p. 329–347.
18. Ogińska-Bulik N, Juczyński Z. Skala pomiaru prężności — SPP-25. *Now. Psychol.* 2008, 3: 39–56.
19. Oleś P. *Psychologia przełomu połowy życia*. Lublin: Towarzystwo Naukowe KUL; 2008. 86 Krzysztof Walczewski i wsp.
20. Ogińska-Bulik N. Prężność a postraumatyczny rozwój u młodzieży. W: Ogińska-Bulik N, Miniszewska J ed. *Zdrowie w cyklu życia człowieka*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego; 2012, p. 75–87.
21. Stach R. *Uzależnienie od alkoholu a depresja. Możliwość stosowania psychoterapii poznawczej w leczeniu uzależnienia*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego; 1991.