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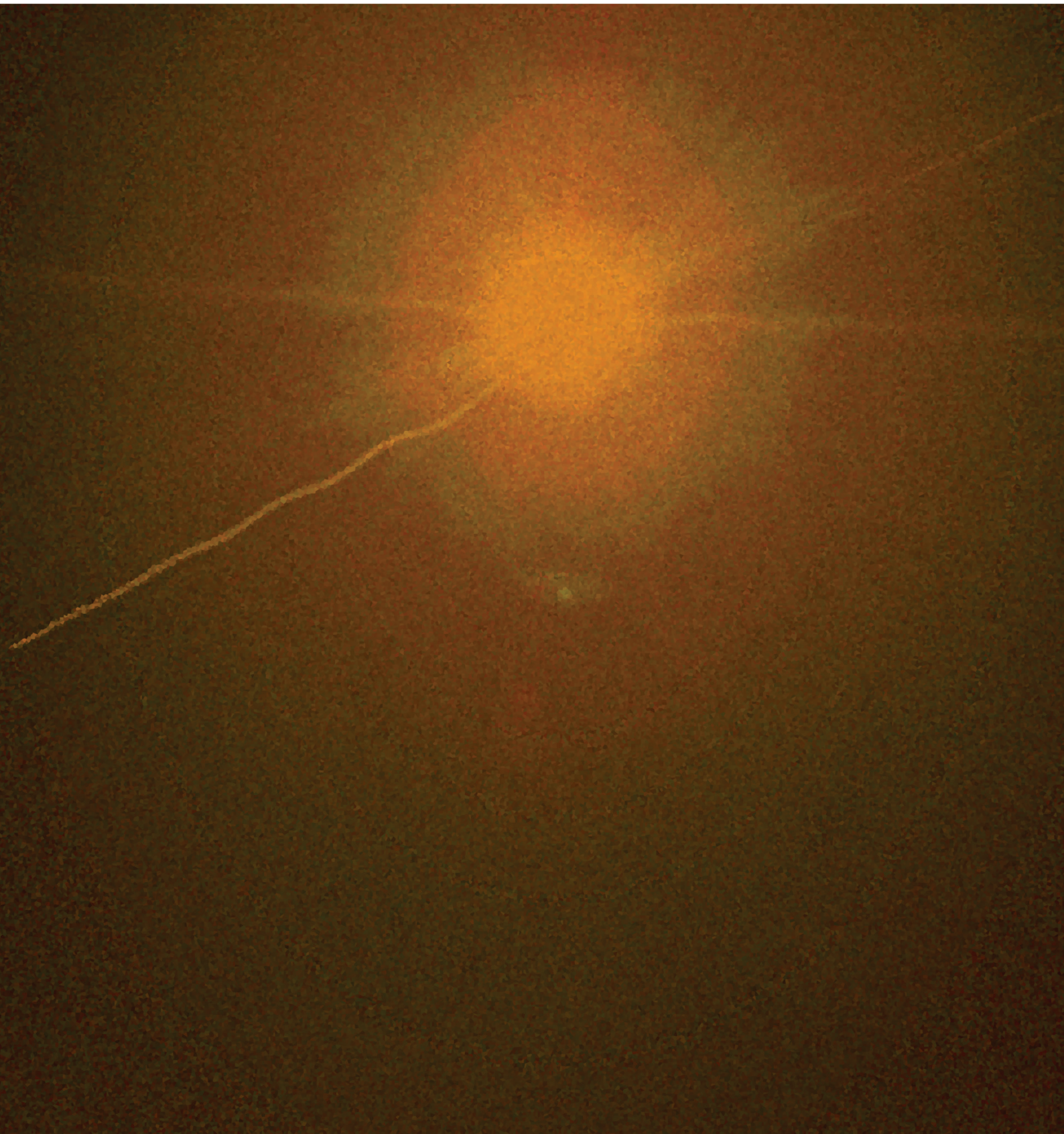

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The difficulties experienced by the individuals who received bariatric surgery: the patients' experiences in the Turkey

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Abstract

Introduction: Although bariatric surgery affects the quality of life of the patients positively; patients may experience some difficulties especially during the early post-surgery period (1st month). The study was descriptively conducted in order to explore the difficulties experienced by the individuals who received bariatric surgery.

Method: The study was undertaken with 32 patients who received bariatric surgery at the General Surgery Clinics of the four large hospitals eligible to provide bariatric surgery. The data collection tool was designed by the researcher using the literature. The questionnaire form designed was administered to the patients before the surgery, in the 2nd week and in the 4th week after surgery. For the data assessment, descriptive statistical methods (numbers, percentages, means and standard deviation) and Mc Nemar test were used.

Results: According to the results obtained from the study; it was found out that at the end of the second week; 78% of the patients had pain in the wound area, 62.5% had nausea, 53.1% had constipation, 40.6% suffered from frequent waking at night, 46.9% had difficulty walking due to pain in the wound area, 59.4% could not bath alone and 34.3% returned to the work late. It was seen that in most of the patients, these problems either disappeared or decreased at the end of the fourth week.

Conclusion: According to the results obtained from the study; it was noted that patients met a lot of difficulties during the first two weeks after the surgery in the first month but these difficulties gradually reduced. In line with the study findings, it was recommended that patients and their significant others should be provided with planned training and counseling services.

Key Words: Bariatric Surgery, Difficulty, Nursing Care

Introduction

Today, obesity –accepted as a universal health problem- is described as a higher amount of body fat than the ideal level.[1] Obesity is also termed as bariatrics today. Bariatrics is the branch of medicine that deals with the causes, prevention, and treatment of obesity. [2]

According to the report of WHO, prevalence of the overweight and obesity has been continually increasing in the world. There were 200 million obese adults in 1995 in the world while it was 300 million in 2000. According to the report of the WHO, there were more than 400 million obese people and more than 1.6 billion overweight people in the world in 2007 and it is estimated that the number of the obese people will reach 700 million while the number of the overweight people will reach 2.3 million in 2015.[3] According to the report of the Turkish Statistical Institute in 2010, prevalence of overweight among the adult men varied between 32% and 79% while it was between 28% and 78% among the adult women. Prevalence of obesity among the adult men varied between 5% and 23% while it was between 7% and 36% among the adult women. In Turkey; the rate of the overweight or obesity in men was 50.5% while it was 49.4% among women. The rate of overweight in men (37.3%) was higher than women (28.4%).[4]

Obesity is treated with two methods: medical methods and surgical methods. Medical methods like medications, diets and exercise lose 8-10% of the body weight at the beginning. But, bariatric surgery provides permanent weight loss in 95% of the patients and plays a key role in the treat-

ment of cardiovascular diseases and such diseases accompanied by obesity as stroke, hypertension, cancer (breast cancer, prostate cancer, colon cancer, endometrium), Type II diabetes, osteoarthritis, cystic diseases, gastroesophageal reflux, sleep apnea, shortness of breath. [6,7,8,9] However, weight lost between the 18th and 24th months is regained and 12% of the patients develop infection complication in the operation area.[10]

According to our observations and literature; especially during the first month, patients who receive bariatric surgery suffer from such problems as pain and infection in the wound area, dyspnea, impaired physical movements due to the pain in the wound area, nausea, constipation, diarrhea and problems of night-sleep.[11,12,13,14] Also; the studies conducted point out that during the early post-surgery period; independently performed activities of daily living –like sleeping, putting on/taking off clothes, personal hygiene, toileting- is negatively affected among the patients due to the pain and restricted movements caused by the absolute bed rest after abdominal surgery. [15,16,17] Again, it was discovered in the studies conducted that in addition to the health costs; inability to temporally work or loss of job after the surgery create many problems in answering basic needs, too. [18]

The literature emphasizes that systematic and planned follow-ups should be realized so that during this period, these patients can lead the most similar life styles to the past life styles, they can gain dependency in performing activities of daily living and possible complications can be detected and prevented earlier. [19,20,21] However, no study on the care and difficulties experienced by the people who received obesity operation was seen in our country. We were of the opinion that with the current study, determining the needs or the difficulties experienced by the bariatric surgery patients in the first month would be helpful in planning and implementing a nursing care of quality and would increase their quality of life.

Method

This study was designed as a descriptive. This study was conducted in the general surgery unit of four university hospital. The sample of the study was determined dependent on the significance of the difference between the two rates according to the formula for the calculation of power analysis and sample size. In our study, it was found out that patients had pain in the wound area most after the surgery. The rate of experiencing pain in the wound area was 78.1% in the 2nd week and this rate reduced to 21.9% in the 4th week. Judging by the difference between these rates, power analysis and sample power was found to be 99%. Although the researcher intended including more patients in the study, the study was completed with 32 patients because the number of the patients decreased due to the changes in social insurance payment schedule and sample power was found to be 99% as the result of the power analysis.

The data of the study were collected using questionnaire form designed with literature.[7, 22, 23, 24] The questionnaire form was consisted of two parts: the first part included 11 questions about the descriptive characteristics of the patients who received obesity operation, 4 questions about obesity and 14 questions about the surgery. The second part included 56 questions under 10 titles about the difficulties that individuals who had obesity operation experienced.

Written permissions from the ethical committee and the hospital management were obtained. Patients who were included in the study were met one day before the surgery at the clinics. The patients were informed of the purpose of the research and their written informed consents were obtained. First, the questionnaire form about the descriptive characteristics was filled in by the patients. The patients were reminded that after the hospital discharge, they would be called in the second week to learn how their conditions were and to determine the difficulties they experienced and that they would refill in the questionnaire form in the fourth week with a face to face interview to uncover the difficulties they experienced until then in the fourth week when they came to hospital for the control. The patients were phoned in the second week and were made to fill in "the survey form to determine the difficulties experienced by the individuals who received bariatric surgery" and they were reminded about the medical checks in the fourth week. In the fourth week, two patients filled in "the survey form to determine the difficulties experienced by the individu-

als who received bariatric surgery" with a face to face interview and 19 patients filled in the form on phone because they were out of Ankara and 11 patients filled in the form on phone because they did not want to come to and they had nobody to help them come though they stayed in Ankara. Length of phone interview lasted nearly 20-30 minutes while face to face interview lasted nearly 30-35 minutes. The analyses of the data were performed with SPSS 13.0 program. For the data assessment, descriptive statistical methods (numbers, percentages, means and standard deviation) were utilized. Mc Nemar test were used to compare the status of difficulty experience in weeks.[25] The accepted level of significance for all analyses was $p < 0.05$. In the study, information about the descriptive characteristics of the patients was independent variables while the difficulties experienced were dependent variables.

With the bell curve, under how many titles of the 10 titles the patients experienced difficulties were established while the frequency of difficulty experience was being found. It was understood that most of the patients experienced difficulty under 4-6 titles whereas they did not experience difficulty fewer than 4 titles and more than 9 titles. Accordingly, those who told that they had difficulty under 4-6 titles were accepted to have difficulty at "moderate" level. The frequency of difficulty experience was accepted "less" if there were 0-3 difficulties; "moderate" if there were 4-6 difficulties and "more" if there were 7-10 difficulties.

Results

When the Table 1 was examined, it was seen that mean age of the participant patients was 35.8 ± 8.2 and most of the patients were women (84.4%). When the educational status of the patients was examined, it was interesting to find that 46.9% of the patients had university degree.

Although it was not presented in the Table, half of the patients told that their economical income status was moderate. It was understood from the Table that nearly all of the patients (96.9%) were helped by someone for the care during post surgery period and these were one of the members of the family. 59.4% of the patients told that they were informed of post surgery life in the hospital before the discharge and 94.7% of them stated that the training given was sufficient. It was noted that the training content included homecare, diet and the time of the medical checks.

Table 1. Patients' Sociodemographic Characteristics

Sociodemographic Characteristics	Number	%
Age		
21-35	16	50.0
36-↑	16	50.0
Gender		
Female	27	84.4
Male	5	15.6
Educational Status		
Primary school	10	31.2
Higher school	7	21.9
University	15	46.9
Availability of significant others to help care		
Yes	31	96.9
No	1	3.1
Hospital discharge course taken		
Yes	19	59.4
No	13	40.6
Quality of Hospital discharge course (n: 19)		
Sufficient	18	94.7
Not sufficient	1	5.3

When the Table 2 was examined, it was found out that 62.5% of the patients had at least one illness except for obesity. Patients told that after the obesity diagnosis, they were treated with diet, exercise, drug therapy, surgical treatment (gastric banding) and acupuncture. It was seen that 71.9% of the patients had third degree obesity before the surgery whereas the situation changed in the second week and the fourth week after surgery: accordingly; 59.4% of the patients were third degree obese in the second week after surgery while 53.1% of the patients were obese in the fourth week after surgery. Although it was not specified in the Table, when the patients were asked about the reasons for surgery, they told that they wanted bariatric surgery due to inability to lose weight with other treatment methods (81.2%) and the diseases caused by obesity (18.8%).

Table 2. Patients' Characteristics Regarding Disease

Length of obesity	Number	%
1-5 years	16	50.0
6-15 years	13	40.7
16-21 years	3	9.3
Comorbities to obesity		
Yes	20	62.5
No	12	37.5
Disease (n:20)	*	**
Hypertension	11	34.4
Shortness of Breath	8	25.0
Type II Diabetes Mellitus	4	12.5
Sleep Apnea	3	9.4
Osteoarthritis	1	3.1
Obesity Treatment (n:32)	*	**
Diet	31	96.9
Exercises	28	87.5
Medication Treatment	27	84.4
Surgical Treatment (Gastric banding)	6	18.8
Acupuncture	4	12.5
Pre-surgery BMI		
30-35 (1st Degree Obesity)	1	3.1
35-40 (2nd Degree Obesity)	8	25.0
40 ≥ (3rd Degree Obesity)	23	71.9
Post-surgery BMI in the second week		
25-30 (overweight)	1	3.1
30-35 (1st Degree Obesity)	3	9.4
35-40 (2nd Degree Obesity)	9	28.1
40 ≥ (3rd Degree Obesity)	19	59.4
Post-surgery BMI in the fourth week		
25-30 (overweight)	1	3.1
30-35 (1st Degree Obesity)	8	25.0
35-40 (2nd Degree Obesity)	6	18.8
40 ≥ (3rd Degree Obesity)	17	53.1
Medical Check-ups		
No	30	93.8
Once	2	6.2
Perceived health status in the second post-surgery week		
Good/OK	16	50.0
Moderate	14	43.8
Bad	2	6.2
Perceived health status in the fourth post-surgery week		
Good/OK	28	87.5
Bad	4	12.5

** more than one answer were obtained.*
***Percentages were calculated with "n".*

It was discovered that patients stayed at the hospitals for averagely 6.5± 1.6 days after surgery. 93.9% of the patients told that they did not go to hospital for medical checks after surgery. 9.4% of the patients (3 patients) were re-hospitalized due to such causes as the stitches breaking open and infection development in the wound area. Although it was not shown in the Table, the question "Did anything that worried you happen after surgery?" was answered "yes" by 40.6% of the patients in the second week and 18.8% in the fourth week after surgery. These rates were caused by such patients' worries as "Will I be able to eat?", "Will weight-losing continue preeminently?" and "Will I put on weight again?" When the patients were asked about their health status in the second week after surgery; 50% answered "OK" while 6.3% "bad"; but in the fourth week, 87.5% answered "OK" while 12.5% "bad". Those who answered "bad" -both in the second week and the fourth week- to the question about how they were comprised those who told that they were "bad" due to infection in the wound area.

When the Table 3 was examined, it was found out that of the difficulties experienced by the patients in relation with the wound area, pain in the wound area was the most common problem reported (in the second week, by 78.1% of the patients and in the fourth week by 21.9% of the patients) while the second most common problem reported was drainage from the wound area (in the second week, by 31.3% of the patients and in the fourth week by 9.4% of the patients).

Those who had pain in the wound area told that they did not do anything for this pain while those who had drainage, temperature and swelling in the wound area told that they dressed the wounds.

The difficulties experienced by the patients about nutrition were nausea (in the second week, by 62.5% of the patients and in the fourth week by 37.5% of the patients) and distention (in the second week, by 62.5% of the patients and in the fourth week by 56.3% of the patients); respectively. Also, it was noted that patients had difficulty taking eating position due to the pain in the wound area (in the second week, by 28.1% of the patients and in the fourth week by 9.4% of the patients). After the statistical analysis, it was seen that there was a significant difference between the second

Table 3. Post-surgery Difficulties experienced by those who received Bariatric surgery (n=32)

Difficulties	Post surgery follow-up								McNemar (P value)
	2nd Week				4th Week				
	Yes		No		Yes		No		
	Number	%	Number	%	Number	%	Number	%	
Shortness of Breath	10	31.3	22	68.7	6	18.8	26	81.2	**0.125**
Pain	25	78.1	7	21.9	7	21.9	25	78.1	**0.000**
Drainage	10	31.3	22	68.8	3	9.4	29	90.6	**0.039**
Nausea	20	62.5	12	37.5	12	37.5	20	62.5	**0.096**
Distention	20	62.5	12	37.5	18	56.3	14	43.8	**0.688**
Difficulty with eating position	9	28.1	23	71.9	3	9.4	29	90.6	**0.031**
Constipation	17	53.1	15	46.9	12	37.5	20	62.5	**0.227**
Diarrhea	10	31.3	22	68.8	3	9.4	29	90.6	**0.016**
Frequent waking at night	13	40.6	19	59.4	6	18.8	26	81.3	**0.016**
Inability to do easy	19	59.4	13	40.6	6	18.8	26	81.3	**0.000**
Inability to cook	16	50.0	16	50.0	3	9.4	29	90.6	**0.000**
Difficulty walking due to the pain	15	46.9	17	53.1	2	6.3	30	93.8	**0.000**
Difficulty sitting down and standing up due to the pain	14	43.8	18	56.3	1	3.1	31	96.9	**0.000**
Inability to baht alone	19	59.4	13	40.6	5	15.6	27	84.4	**0.000**
Difficulty using the toilette	16	50.0	16	50.0	1	3.1	31	96.9	**0.000**
Inability to wash hair	9	28.1	23	71.9	1	3.1	31	96.9	**0.008**
Difficulty putting on/taking off clothes alone	8	25.0	24	75.0	1	3.1	31	96.9	**0.016**
Feeling weak	14	43.8	18	56.2	8	25.0	24	75.0	**0.031**
Delayed starting to work	11	34.3	21	65.7	6	18.8	26	81.2	**0.025**

week and fourth week only in terms of taking the eating position ($p<0.05$). The patients told that they went out to open air places, took medication or tried to eat slowly as a measure against nausea and vomiting. Those who suffered from distention told that they drank soda water or walked and changed eating position to eliminate the difficulty taking eating position.

The most common difficulty experienced by the patients about excretion was constipation (in the second week, by 53.1% of the patients and in the fourth week by 37.5% of the patients) while the second most common difficulty was diarrhea (in the second week, by 31.3% of the patients and in the fourth week by 9.4% of the patients).

When the sleeping difficulty was examined according to the weeks; it was found out that the most common sleeping difficulty was frequent waking at night (in the second week, by 40.6% of the patients and in the fourth week by 18.8% of the patients). It was seen that the difference between the second week and fourth week was statistically significant in terms of sleeping difficulty ($p<0.05$). The reasons for the frequent waking at night –as reported by the patients- were pain in the wound area and staying at the hospital.

It is seen that in the second week, patients suffer from difficulty walking and sitting down and standing up due to the pain the operation site and have difficulty performing instrumental activities of daily living such as preparing food and doing easy housework. Patients who experienced these difficulties related to movement told that they either used crutches or used corsets due to these difficulties and also were helped by someone while performing these activities.

Patients stated that they more frequently experienced difficulty mostly with toileting (in the second week, by 50% of the patients and in the fourth week by 3.1% of the patients) and bathing alone (in the second week, by 59.4% of the patients and in the fourth week by 15.6% of the patients) while

less frequently, they had difficulty putting on or taking off clothes alone and washing hair. There was statistically significant difference between the second week and fourth week only in terms of experiencing these difficulty ($p<0.05$). The patients told that the difficulties experienced about personal hygiene and putting on/taking off clothes were caused by the pain in the wound area and the fear that their stitches would break open due to the movements. Patients who experienced difficulties about personal hygiene and putting on/taking off clothes told that there was someone helping them do these activities.

Patients told that having surgery, pain and feeling weak caused delayed work-return. In this sense; patients suffered from feeling weak (in the second week, by 43.8% of the patients and in the fourth week by 25% of the patients) most and returning work late (in the second week, by 34.4% of the patients and in the fourth week by 18.8% of the patients) in terms of frequency. The comparison between the second week and the fourth week revealed that there was statistically significant difference between the second week and fourth week only in terms of experiencing difficulty ($p<0.05$). Those who told that they felt weak tried to cope with this problem by resting while those who had difficulty starting the work got sick report.

The Table 4 demonstrated the frequency of the difficulties experienced by the patients who received bariatric surgery in the first month after surgery. It was seen that 59.4% of the patients had difficulty occasionally while 40.6% had difficulty frequently.

Table 4. Frequency of difficulty experienced by those who received Bariatric surgery within the 1st post-surgery month (n=32)

Frequency of difficulty	Post surgical follow-up (4th Week)	
	Number	%
Moderate	19	59.4
Much	13	40.6
TOTAL	32	100.0

Table 4.1 presented the status of having difficulty in the first month after surgery according to the descriptive characteristics of the patients who had bariatric surgery. When the Table was analyzed, it was found out that 43.8% of the patients who belonged to 21-35 age group had often difficulty. When the patients were analyzed in terms of

Table 4.1. Frequency of difficulty experienced by those who received Bariatric surgery within the 1st post-surgery month according to sociodemographic characteristics

Sociodemographic Characteristics	Frequency of difficulty				TOTAL	
	Moderate		Much		Number	%
	Number	%	Number	%		
Age						
21-35	9	56.2	7	43.8	16	100.0
36-↑	10	62.5	6	37.5	16	100.0
Total	19	59.4	13	40.6	32	100.0
Educational Status						
Primary School	10	90.9	1	9.1	11	100.0
High School	2	28.6	5	71.4	7	100.0
University	7	50.0	7	50.0	14	100.0
Total	19	59.4	13	40.6	32	100.0
Hospital discharge course taken						
Yes	9	47.4	10	52.6	19	100.0
No	10	76.9	3	23.1	13	100.0
Total	19	59.4	13	40.6	32	100.0
Comorbities to obesity						
Yes	9	45.0	11	55.0	20	100.0
No	10	83.3	2	16.7	12	100.0
Total	19	59.4	13	40.6	32	100.0

educational status, it was seen that 90.9% of those with primary school degree had occasionally difficulty while those with high school degree had often difficulty. When patients' status of receiving training on hospital discharge was analyzed, it was noted that 52.6% of those receiving training on hospital discharge and 23.2% of those not receiving training on hospital discharge often had difficulty. It was seen that 55% of those who had an accompanying disease had often difficulty.

Discussion

There are various methods that provide a well balanced body weight, decrease morbidity and mortality risks related to obesity and increase quality of life.[26] In the obesity treatment; there are five methods: diet, physical activity, behavior change therapy, medication and surgical treatment.[27] The study of Çayir et al. (2011) reports that 66.7% of the obese patients received an obesity therapy previously.[28] Similarly; the patients of the current study told that they received diet therapy –in particular- (96.9%), exercise therapy (87.5%), medication therapy (84.4%), surgical therapy (gastric banding) and acupuncture therapy.

With such medical methods as diet, exercise, behavior change therapy, medication therapy; weight loss can be achieved. Literature emphasizes that these kinds of methods provide a 10% weight loss.[1] Although an acceptable level of weight loss can be achieved with non-surgical methods; these fail to keep weight loss. Despite some risks posed by bariatric surgery for the obese individuals, it is an effective and long term method to lose weight. In the study of McMahon et al. (2006); it was found out that patients lost 15-30 kilos in the first three months thanks to loss of appetite and early satiation feeling.[10] Weight loss in our patients started from the second week. While 71.9% of the patients were third degree obese before the surgery (BMI; ≥40), in the fourth week 53.1% of these patients were third degree obese (BMI; ≥40).

The studies on the quality of life of the obese patients after bariatric surgery, too, report that bariatric surgery is more effective as compared to other methods and increases quality of life.[29,30,31,32] According to WHO, quality of life is described as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.[33] In this sense, the patients were asked about health status after surgery. In the second week, 50% of the patients told that they were "OK" while in the fourth week 87.5% of the patients told that they were "OK". Those who answered "bad" -both in the second week and the fourth week- to the question about their health status comprised those who told that they were "bad" due to infection in the wound area.

After the surgery, patients may suffer from inability to cough, to breathe deeply, to move due to surgical traumas and have pulmonary infection, atelectasia and pneumonia due to the weakening of abdominal and intercostals muscles.[16, 34] Occurrence of these problems may cause such symptoms as shortness of breath, coughing and sputum. [35,36] In the study of Schauer et al. (2000), it was explored that morbid obese patients who received laparoscopic roux-en-y gastric bypass procedure suffered from problems such as pulmonary effusion (0.7%), atelectasia (4.4%), shortness of breath (0.36%) and pneumonia (0.36%).[37] Similarly; our patients had such respiratory problems as shortness of breath, coughing and sputum more in the second week whereas it was told that they had these problems less in the fourth week (See Table 3). It was observed that movement difficulty was seen among these patients due to thick fat tissue. It was found out that the problems like coughing and sputum occurred owing to respiratory tract infections.

Skin perfusion and wound infection caused by lack of oxygenation and opening of the incisions are more common among the obese people because of fat and intense subcutaneous fat tissue. Complaints like warmth, drainage, swelling, pain and increased body temperature indicate wound infection. [38,39,40] Literature states that infection in the wound area affects healing of the wound negatively.[16,41,42] In the study of Christou et al. (2004); it was found out that the rate of wound infection was 16% after the surgery among the patients who had open bariatric surgery.[43] In the study of Chopra et al. (2010); it was noted that the rate of wound infection was 12% following the surgery among the patients who had open Roux-en-y gastric bypass procedure.[42] In our study, it was noted that 31.3% of the patients were hospitalized due

to drainage, 9.4% due to swelling and warmth in the wound area and –despite not presented in the Table- 6.3% due to increased body temperatures during the early weeks (See Table 2). These results concurred with the literature. The difference in the rates of problems in the wound area was statistically found to be significant in terms of the second week and the fourth week (See Table 3).

Patients may suffer from nutritional problems after bariatric surgery. The most important problems related to gastrointestinal system experienced by the patients after bariatric surgery were nausea, vomiting, palpitation, sweating, tachycardia, hypotension, syncope during the early period while hypoglycemia, hunger, weakness, confusion and dumping syndrome due to trembling during the late period.[8,16,44] Since the capacity of the stomach is reduced after surgery; nausea, vomiting, gastric dilatation and abdominal distension occurs owing to excessive eating.[8,16,45,46] In a study conducted by Wu et al.(2008); it was explored that patients suffered from loss of appetite, reduced meal frequency and amount, abdominal distention, nausea and swallowing difficulty after combined gastrectomy and pancreatic resection.[45] As for our study, it was seen that our participant patients had mostly nausea, distention and difficulty eating due to the position (See Table 3).

It is emphasized that patients may suffer from nausea, vomiting, oral liquid intolerance and slowed bowel movements as well as soft excretion and intestinal gas after bariatric surgery.[45, 47, 48, 49] In our study, it was seen that 53.1% of the patients had constipation because their oral intake started with liquids (milk, ayran, etc.). Besides, it was seen in our study –unlike the literature- that 31.3% of the patients had diarrhea because they started soft diets in the second week while this rate reduced to 9.4% in the fourth week (See Table 3). The difference between the second week and the fourth week was considered statistically significant ($p<0.05$) and it was in agreement with the literature in this sense.

Another crucial risk factor in obesity is Obstructive Sleep Apnea Syndrome (OSAS) manifested by snoring, apnea and daytime sleepiness. It is underlined that signs of OSAS increase with weight gain and decrease with weight loss.[50] Additionally, it is reported that staying away from home and pain in the operation area deteriorates sleep routines of the patients.[36] Valencia-Flores et al. (2004) detected that OSAS symptoms of the patients who received bariatric surgery decreased between the 6th and 13th months after surgery.[51] In the study of Haines et al. (2007); it was observed that OSAS symptoms of the patients reduced until the 11th month after surgery.[52] In our study, though not specified in the Table, three patients emphasized that they had sleep apnea before the surgery whereas 15.6% of the patients suffered from sleep apnea after surgery. It was seen that 40.6% of the patients had troubles relating to frequent waking at night in the second week after surgery (See Table 3). When the second week and the fourth week were compared in frequent waking at night; the difference was statistically significant ($p<0.05$). Patients blamed staying at the hospital and pain in the wound area for the difficulties of frequent waking at night and less night sleep.

That patients become dependent or semi-dependent due to the surgery after the bariatric surgery affects negatively their independently performing activities of daily living.[53] Acute pain is experienced as a result of active-passive exercises in bed during the post surgery period and ambulation process.[54,55] The studies of the literature conducted in relation with quality of life after bariatric surgery indicated that positive improvements in physical activities of quality of life occur in direct proportion to weight loss.[7,30,31] However, these improvements occur only in the first 30 days. The study of Chang et al.(2010) demonstrated that physical status of the patients in the first month after surgery declined and this status improved between 3 and 6 months.[7] Results of these early period were similar to our results. In our study, it was found out that 46.9% of the patients suffered from pain while walking, 43.8% had pain while sitting down and standing up, 50% could not cook, 59.4% could not do minor housework (See Table 3). The difference between the second week and the fourth week was found statistically to be significant. Patients told that their difficulty with moving resulted from the pain in the wound area.

It was noted that after surgery, patients had difficulty performing such physical activities as toileting, bathing, putting on/taking off clothes alone due to the pain in the wound area.[36] These

activities are performed with more difficult among obese patients due to excessive body weight as compared with individuals of normal weight. The study of Dziurowicz-Kozlowska et al. (2005) demonstrated an improvement in physical activities three months after operation.[6] Yet, these results in the literature have been obtained late post-surgery period (>30 days). In our study, it was determined that 50% of the patients had difficulty toileting, 25% had difficulty putting on/taking off clothes alone, 28.1% had difficulty washing hair and 59.4% had had difficulty bathing alone (See Table 3). These difficulties were experienced till the second week and they almost disappeared in the fourth week. It was noted that patients with these problems moved with difficulty due to pain in the wound area and overweight.

It takes a long time for the patients to return to work due to an important surgery like abdominal surgery and late healing of the wound area. Literature reports that it takes nearly 30 days for the patients with laparoscopy or open bariatric surgery to return to work after the surgery.[16,30] In the study of Nguyen et al.(2001); it was found out that patients were able to return to work after a three months of post surgery period.[56] When having difficulty in work life in the first month after surgery was examined; it was seen that 34.3% of the patients came to work late and 43.8% suffered from fatigue (See Table 3). These results were similar to those in literature. Also, the facility in which the patients received bariatric surgery provided them sick leave for the post surgery period. The patients stated that the bariatric surgery rendered them weak; which delayed the start of the work, decreased their wish to work and reduced working hours.

Quality of life of the patients changes positively after bariatric surgery. It is observed that in particular, after the early period (<30 days); in the 1st, 3rd, 6th and 12th months; an increased and apparent improvements occur in physical, mental, psychological and social functions.[30,31,37,56] In our study, too, it was found out that in addition to positive changes emphasized in literature, 71.9% of the patients had third degree obesity before the surgery (BMI; ≥40) whereas 59.4% of the patients were third degree obese in the second week after surgery while 53.1% of the patients were obese in the fourth week after surgery (BMI; ≥40) and health status of 50% of the patients were 'OK' in the second week while health status of 87.5% of the patients were 'OK' in the fourth week. Nevertheless, it was told by the patients that 59.4% had occasionally difficulty while 40.6% had frequently difficulty.

In our study, it was understood that those who were aged between 21 and 35, had primary school education, took hospital discharge course and had an accompanying disease had difficulty more (See Table 4.1). It may be thought that frequency of difficulty of these people was different because those with primary school degree had difficulty solving these problems; those who took hospital discharge course were aware of the seriousness of the situation and an accompanying disease caused other problems. In the study, we were of the opinion that no intervention was made to solve these problems and sufficient informing was not provided. Patients emphasized that the training was provided by the doctors and dieticians. To us, a more effective training should be provided to these patients by the nurses so that they can experience fewer problems at home and cope with the possible problems.

Conclusion

In line with the study results; it is seen that especially in the first month after bariatric surgery, obese patients experience pain and infection in the wound area, respiratory distress, nausea, vomiting, diarrhea and problems of night-sleep and their physical movements deteriorated due to the pain in the wound area and independent performance of activities of daily living such as putting on/taking off clothes, personal hygiene, toileting was negatively affected. It may be recommended that a well-planned patient training and consultancy service on the possible difficulties and coping skills should be given to the patients with different tools and instruments in a clear and understandable way, and long term studies in which quality of life of the patients who receive bariatric surgery is assessed should be undertaken.

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The genital hygiene status of adolescent girls who use herb hamam and depilatory cream to remove pubic hair (Case-Control Research)

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Abstract

Aim: This research to determine the condition of genital hygiene in adolescent girls who use depilatory creams and herb *Hamam* to determine what effect, if any, the use of these depilatory products have on their genital health.

Design: This research has been undertaken as a case-control study

Methods: The study was conducted with the sample of 101 adolescent girls, 34 of whom are *Hamam* herb users (case group) and 67 of whom are depilatory cream users (control group). The data collection in the study was conducted questionnaire revealing in two stages. The statistical analysis of the data obtained in the study was done by the SPSS 11.5 sofware tool.

Results: 96.3% of the girls remove pubic hair. 29.4% of those using *Hamam* herb are first-year students, while 26.5% of them are fourth-year students. 11.9% of those using depilatory creams are second-year students, while 32.8% of them are third-year students. As the school year is lower, a 0.2-fold increase is identified. 20.6% of the girls changing their underwear everyday use *Hamam* herb while 29.9% of them use depilatory creams. ($p < 0.05$). 79.4% of *Hamam* herb users and 76.1% of depilatory cream users stated that they have itching in the genital area. A statistically significant difference was found to exist between itching status and the materials used to remove pubic hair ($p < 0.05$). In previous studies, the data about using *Hamam* herb has not been observed. *Hamam* herb-using girls have been observed to be poorly informed about genital hygiene, and thus they have more genital itching and also suffer from abnormal vaginal discharge more frequently *Hamam* herb use has an adverse effect on women's health.

Key Words: Genital Hygiene, Pubic Hair, Adolescent Girls, *Hamam Herb*, Depilatory Cream

Introduction

Reproductive health is an important part of women's health. According to studies carried out in Turkey, genital infections seem to be a common problem among women in this country. Genital infections are more common and problematic among adolescent girls. In the literature, abnormal vaginal discharge and infections in adolescent girls are second only to dysmenorrhea in reported reproductive health issues. Genital hygiene is essential in order to protect against genital infection (Kwena et al, 2010; Özdemir et al, 2012; Steele et al, 2004; Şimsek et al, 2010; Tartaç and Ozkan, 2011).

The studies show that women applying insufficient or improper hygiene practices often suffer from abnormal vaginal discharge. Regional studies on this subject also show that genital infections are widely (52-92%) observed (Karatay and Özvariş, 2006). Hacialioğlu and his colleagues (2000) have found the incidence of genital infections in women as high as 71.1%. In addition, the same study suggested that in most of those cases, the women's genital hygiene practices are insufficient. When genital hygiene is ignored, susceptibility to genital infection increases. Unless it is treated, it may affect a woman's fertility, and may even cause pelvic inflammatory disease. Genital infections also reduce a woman's quality of life, often leading to social isolation. This, in turn, produces negative effects on a woman's sexual relations and even her family life (Apay et al, 2014; Demirbağ et al, 2012; Harness et al, 2012; Karatay and Özvariş, 2006; Ozkan and Kulakaç, 2011; Roberts et al, 2012; Palas and Pine, 2013).

Removal of pubic hair is one of the common genital hygiene practices of Turkish women. Many women consider pubic hair a nuisance and want to get rid of it (Ardağan and Bay., 2009). One of the most commonly used method to get rid of hair is depilatory creams, while the other is an arsenic sulphide-based depilatory called *hamam herb*. This arsenic-based depilatory is also known as *rhusma turcorum*, *orpiment, bath grass*, or *hürrem grass*, and is used widely in the Şanliurfa region. First used in public baths during the Ottoman Empire, this method is preferred by many women, since it is both affordable and easy to use.

Materials and Method

Research Type: This research has been undertaken as a case-control study to determine the condition of genital hygiene in adolescent girls who use depilatory creams and *Hamam* herb to determine what effect, if any, the use of these depilatory products have on their genital health.

Population and Sample: The population of the study consists of female high school students in Şanliurfa, Turkey. In this context, according to data compiled in 2014 by the Provincial Directorate of Education, there are 54 high schools in Şanliurfa. The researcher selected one high school from the list according to the random sampling method. Three hundred eighty-one girls are enrolled in the school. In order to identify the materials used, a survey method was followed asking questions such as, "What do you use to remove pubic hair? Why?" According to the survey, 34 of them said that they used *Hamam* herb powder, and 67 of them reported that they used depilatory creams. Others stated that they do not use any material or stated that they use a razor or other methods of epilation. Accordingly, the study was conducted with the sample of 101 adolescent girls, 34 of which are *Hamam* herb users (case group) and 67 of which are depilatory cream users (control group).

Data Collection Methods: The data collection in the study was conducted in two stages. In the first stage, the materials used in removing the hair in the genital area were determined asking the girls four questions: one of which is about whether they remove pubic hair, the second, about the materials they use, and the third, the reasons why they use them. In the second stage, 15 questions revealing socio-demographic characteristics and the girls' genital hygiene status were asked to both the case and control groups. The data were gathered handing out a data collection tool at an appropriate time in an empty classroom. It took an average of 10-15 minutes for the girls to fill out the questionnaire.

Ethical Aspects of the Research: The study was implemented with the written consent of both Provincial Directorate of Education and the Governor of Şanliurfa. Before the data collection phase, the school administration and the teachers were informed about the research topic, objective, duration, and the procedures to be performed. The school officials also examined the data collection tool. In the data collection phase, the students were also informed about the research topic, objective, duration, and the procedures to be performed, in order to fulfil the "informed consent" principle. They were also informed about the fact that they can withdraw from the study at any time, in order to fulfil the "autonomy" principle, and that the information they give will not be shared with anybody else, in order to fulfil the "Privacy and Protection of Privacy" principle, and that their identities will be kept confidential to fulfil the "Non-identity and Security" principle. Ensuring these principles, the researchers obtained data from the individuals who agreed to participate in the study.

Evaluation of the Research: The statistical analysis of the data obtained in the study was done by the SPSS 11.5 package program. In order to evaluate the data, descriptive statistics (frequencies and percentages) were used, and chi-square analysis and logistic regression were done as a correlation test between the two factors. Results were evaluated at a confidence interval of 95%-99%, and at a significance level of 0.05-0.01.

Findings

As shown in Figure 1, 96.3% of the girls remove pubic hair. 63.8% of the girls think that it would be more clean and healthy to remove the hair while 9.2% of whom think that non-removal of pubic hair would be a sin depending on their belief. 8% did not know why they removed pubic hair while 19% removed the hair because they felt more comfortable without the hair.

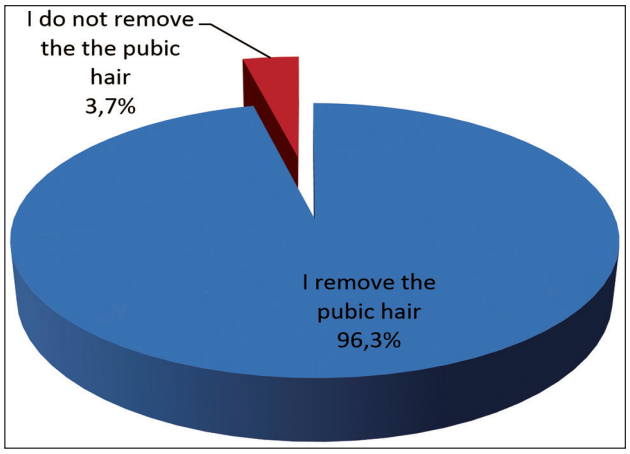

Figure 1. The Pubic Hair Removal Status of the Girls

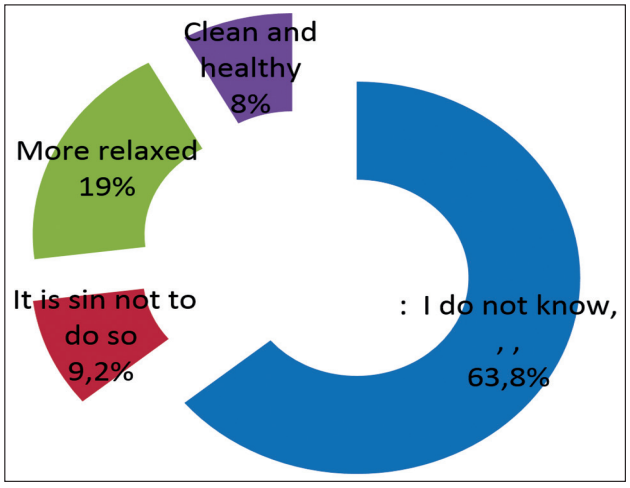

Figure 2. Reasons for the Girls' Hair Removal

Data collected in the Second Phase

In Table 1, socio-demographic characteristics of the girls were given. This data shows that 61.8% of the girls using *Hamam* herb and 43.3% of whom use depilatory cream are at the ages of 14-16. The correlation between the age and the material used to remove pubic hair were not found to be statistically significant ($p > 0.05$).

Data about the genital hygiene status of the girls are given in Table 2. 50.8% of the girls who were previously informed about "genital hygiene" use *Hamam* herb, while 79.1% prefer depilatory creams. The difference between these variables was found to be statistically significant ($p < 0.05$). 35.8% of the same group using *Hamam* herb and having knowledge of genital hygiene and 32.8% of depilatory cream users stated that they were informed by health professionals ($p > 0.05$). As for the methods used, 58.8% of those with a "front to back" practice use *Hamam* herb while 44.8% of them are depilatory cream users ($p > 0.05$). 20.6% of the girls changing their underwear everyday use *Hamam* herb while 29.9% of them use depilatory creams. ($p < 0.05$). 79.4% of *Hamam* herb users and 76.1% of depilatory cream users stated that they have itching in the genital area. A statistically

Table 1. Socio-Demographic Characteristics of the Girls

Variables	Hama Otu users (34)		Depilatory Cream users (67)		X^2	P
	N	%	n	%		
Age						
14-16	21	61.8	29	43.3	3.082	0,061
17-19	13	38.2	38	56.7		
Class						
First Year	10	29.4	0	0.0	28.127 R = 0.23	0,000 0.02
Second Year	8	23.5	8	11.9		
Third Year	7	20.6	37	55.2		
Fourth Year	9	26.5	22	32.8		
Education Level of Mothers						
Non-Literate	12	35.3	15	22.4	9.292	0.021
Literate	7	20.6	6	9.0		
Primary School Graduates	15	44.1	31	46.2		
Secondary and Higher School Graduates	0	0.0	15	22.4		
Family Income Level						
Low Income Level (Minimum Wage and less)	9	26.5	17	25.4	.309	.857
Middle Income Level (Minimum Wage-1500 TL)	14	41.1	27	40.3		
High Income Level (1500 TL and above)	11	32.4	23	34.3		

Table 2. Data about the Girls' Genital Hygiene Status

Variables	Hamam Otu Users		Depilatory Cream Users		X^2	p
	n	%	n	%		
The Status of if previously informed about 'genital hygiene'						
No	14	41.2	14	20.9	4.630	0.029
Yes	20	50.8	53	79.1		
The source of information about genital area and hygiene						
I'm not informed.	14	41.2	14	20.9	5.136	.077
Sanitarian	12	35.8	22	32.8		
Non-Sanitarian (family and friends)	8	33.0	31	46.3		
Genital area cleaning method						
Correct Choice (front to back)	20	58.8	30	44.8	.347	.670
Wrong Choice (back to front, randomly)	14	41.2	37	55.2		
Underwear Changing Frequency						
Once a Week	9	26.5	3	4.5	11.110	0.004
Once in 2-3 Days	18	52.9	44	65.7		
Every day	7	20.6	20	29.9		
Itching status in the genital area						
Yes	27	79.4	51	76.1	0.068	.504
No	7	20.6	16	23.9		
Vaginal Discharge Type						
Greyish, fishy odour (unhealthy)	7	20.6	8	11.9		
White, odourless, slightly cheesy **(healthy)**	11	32.4	27	40.3	1.430	.698
Abundant, excessively foamy, greenish, smelly (unhealthy)	6	17.6	8	11.9		
Yellow and profuse **(unhealthy)**	10	29.4	24	35.8		
Reasons for material choice to remove pubic hair						
I do not know	12	36.4	10	14.7		
Easy and Painless	7	21.2	16	23.5	6.667	.083
Healthier	7	21.2	17	25.0		
Parents' suggestion	7	21.2	25	36.8		
Hair Removal Frequency						
Every Week	4	11.8	12	17.9		
Once in 15 Days	7	20.6	12	17.9	2.755	0.600
Once In a Month	3	8.8	5	7.5		
Depending on the growth of the hair	20	58.8	38	56.7		

significant difference was found to exist between itching status and the materials used to remove pubic hair ($p < 0.05$).

Discussion

Considering the knowledge and the practices of the girls, 41.5% of whom use depilatory creams or *Hamam* herb/orpiment (arsenic sulphide mineral) to remove pubic hair. According to the study conducted by Ardahan and Bay on nursing students, 4.1% of the first year students were found to use depilatory cream (Ardağan and Bay, 2009). The study conducted by Ünsal on college students shows that 13.5% of whom use depilatory cream while 47.3% of them remove pubic hair depending on the rate of the hair's growth (Ünsal, 2010). According to this study, the use of depilatory creams is more common compared to the earlier studies. The others are the materials suggested by the sources and accepted to be healthier (epilators, razor, etc.). Although the contents and the effects

of depilatory creams on health is not clear, the chemicals used also cause dermatitis and dermatosis (Altintaş, 2004). The content of these depilatory creams abundantly found on the market should be investigated, and the causes of the adverse effects on women's health should be examined. In addition, in previous studies, the data about using *Hamam* herb has not been observed.

The *Hamam* herb powder is popularly known as "*Zirnik* herb," and contains arsenic sulphide. It is a substance that can be easily found at herbalists' shops in Şanliurfa and other cities. Arsenic has many harmful effects on health, ranging from myocardial injury, peripheral arterial occlusion causing necrosis in lower extremities, skin and airway cancers, and skin lesions. Women who are frequently exposed to arsenic may have various reproductive health problems (Karatay and Özvariş, 2006). Because arsenic poses a significant threat to women's health, people should be informed about its harmful effects of arsenic. Perhaps, the sale of this harmful substance should be banned. In this context, depilatory creams can be considered to have less negative impact than *Hamam* herb. As for the reasons why the girls use depilatory creams or *Hamam* herb, the majority of them (54.8%) says that it provides easy and painless removal. Therefore, the use of wax, electric razor and glove is less than other materials.

Considering that 21.2% of the girls use *Hamam* herb because their parents recommend it, and 36.8% of them use depilatory creams for the same reason, it can be said that cultural and religious factors play an active role in acquiring knowledge and practice, and that mothers have more influence on their daughters and the power to sanction their behaviour. This situation should be investigated further, and the reasons should be determined.

One of the reasons why the girls choose this material is the frequency of hair growth. In this study, although the frequency of depilatory cream use and that of *Hamam* herb use are almost the same, it was observed that *Hamam* herb users remove their pubic hair more often. Hence, it can be said that they are more frequently exposed to arsenic.

61.8% of *Hamam* herb-using girls are aged 14-16, while 38.2% of them are aged 17-19. According to these results, it can be said that the older they are, the less they use *Hamam* herb, and the more they use depilatory cream ($p > 0.05$). As a result, the older they get, the more informed they get and the more healthy hygiene practices they have, because depilatory creams are recommended by health professionals and they have package inserts (informing users about how to use them and their side effects in written materials), while *Hamam* herb is a traditional alternative that comes without labelling or written instructions. The study also shows that during early puberty, girls have inadequate knowledge about reproductive health. During this period, they experience genital health problems due to lack of information. As they are not adequately informed about these in early stages of puberty, wrong practices can become ingrained attitudes and behaviours in the future. The earlier research on adolescents comprises 11-14-year-old primary school students, high school or college students. However, the studies on genital health have been carried out on women aged 15-49. Yet, the correlation analyses between age variable and other variables have not been able to be found in this literature. Data are presented only with descriptive statistics (Apay et al, 2014; Demirbağ et al, 2012; Harness et al, 2012; Karatay and Özvariş, 2006; Özkan and Kulakaç, 2011; Roberts et al, 2012; Palas and Pine, 2013). Therefore, the result of this research is highly significant in that it contributes to the literature.

Another factor that increases knowledge is the school year. In this study, in later school years, the number of *Hamam* herb and depilatory cream users decreases gradually, correct hygiene practices are more common and their knowledge about them increase. This is perhaps due to their older age or the curriculum plan. Ardahan, Bay and Demirtaş also examined the school year variable in the research they conducted on nursing students. According to the results, in later school years, their knowledge and accurate hygiene practices increase (Ardağan and Bay, 2009; Demirtaş., 2006). However, there has been no research looking into the correlation between the variables of school year and genital hygiene practices. When the regression between school year variable and *Hamam* herb use is examined, *Hamam* herb use increases by 0.23 times as the school year decreases.

It has been found that the girls unaware of genital hygiene use more hamam herb rather than depilatory creams. As for the source of information,

it has been observed that the sources are mostly their parents and friends. When the percentages are examined, the family seems to be an important source of information for young people. According to the research by Tartaç and Özkan, 68.9% of the students said that they were informed by their family about genital and menstrual hygiene (Tartaç and Özkan, 2011). The research by Turan and Ceylan has nearly the same results. According to the research by Ünsal on college students, 49.2% of them would like to be informed about genital hygiene (Turan and Ceylan, 2007). According to the same study, the majority of the students (90.4%) would like to learn about genital hygiene from health professionals. The most demanded training is on genital cleaning. The results of the study related to these variables are similar to the results of the early research.

According to the data obtained, adolescents get information about genital hygiene from their mother, sister or other female relatives. 35.3% of the girls of illiterate mothers use *Hamam* herb while the percentage of depilatory cream user is lower. According to the research by Ardahan and Bay on first-year and fourth-year nursing students, the education level of mothers affects the genital health of young people. According to the research by Koştu and Beydağı, The more educated women are and the better environmental conditions are, the healthier practices in genital hygiene are observed ($p > 0.005$). (Koştu and Beydağ, 2009). These results are similar to the results of this study. According to the variables observed, education levels of mothers can affect the genital hygiene practices and knowledge of the girls. Hence, it can be said that mothers play an active role in adolescents' genital area hygiene by assisting them. Mothers can be considered to pass wrong or traditional knowledge unwittingly on their daughters as well as accurate knowledge, in other cases. The more educated mothers get, the easier it gets for girls to receive correct information and to practise better genital hygiene. There has been research showing that mothers are the most important people training their daughters on genital and menstrual hygiene. A high level education of mothers is of important to the genital health of the adolescents.

Colourless, odourless, itchiness-causing and acidic (pH = 3.5-4.5) vaginal discharge plays an important role in natural defence. If vaginal discharge is white and chunky in consistency, greenish-yellow and with a foul odour, foamy and profuse, and fishy-smelling, there may be a vaginal infection. (Hacialioğlu, 2000, Koştu and Beydağ, 2009). According to the studies conducted in various sections of Turkish society, the prevalence of abnormal vaginal discharge is reported to be 12.1-30% (Özdemir et al, 2012, Tartaş and Özkan, 2011, Karatay and Özvariş, 2006). The frequency of abnormal vaginal discharge experienced by women living in slum areas is 28.7% (Özcebe and Dam, 2007), 30% (Ege and Eryilmaz, 2006) in women prisoners and 26.1% (Özdemir et al, 2012) in women between the ages of 15-49 who attend health centres. Inadequate genital cleaning may cause abnormal vaginal discharge, itching and infection. Some genital cleaning practices may cause the deterioration of the natural flora and hence an increase in susceptibility to vaginal infections. In this study, *Hamam* herb-using group have less healthy vaginal discharge than the depilatory cream users ($p > 0.05$, Table 2). Accordingly, adolescent girls using *Hamam* herb can be considered to suffer more from abnormal vaginal discharge.

Changing underwear every day and using a healthy method to clean the genital area are of great importance to preventing infection and ensuring perineal hygiene (Şimsek et al, 2010). According to studies conducted in different sections of society in our country, the "back to front genital cleaning" prevalence is the following: 23.7% for primary school students (Şimsek et al, 2010), 28.5% for high school students (Ege and Eryilmaz, 2006), 26.1% for women aged 15-49 (Özdemir et al, 2012). Here, however, it is quite high for both groups (41.2% for *Hamam* herb-using group, 55.2% for the depilatory cream-using group). In the literature, the frequency of changing underwear in various sections of society in Turkey is reported to be 12.9-54.2% (Ege and Eryilmaz, 2006; Şimsek et al, 2010; Özdemir et al, 2012). According to the study by Güler and colleagues on primary school girls, 12.9% of them change their underwear every day. According to the study of Ardahan and Bay, 33% of the first-year female students change underwear every day. According to the research by Karatay and Özvariş on women, the majority of whom are between the ages of 25-

44, 35.8% of them change underwear every day. Every day underwear-changing frequency is too low for both groups in this study. It is lower for *Hamam* herb using group ($p<0.05$). Changing underwear every day is very important to ensure vaginal hygiene. The results of these studies, conducted in various sections of society in our country, are in line with this fact.

Conclusions

Hamam herb-using girls have been observed to be poorly informed about genital hygiene, and thus they have more genital itching and also suffer from abnormal vaginal discharge more frequently *Hamam* herb use has an adverse effect on women's health.

Recommendation

Evidence-based studies on the harmful effects of *Hamam* herb on health should be conducted and traditional practices adversely affecting the health of women should be avoided.

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Application of cognitive behavioral therapy and eye movement desensitization and reprocessing (EMDR) method in panic disorder with agoraphobia treatment: case study

Primjena kognitivno-bihevioralne terapije i EMDR metode u tretmanu paničnog poremećaja s agorafobijom: prikaz slučaja

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Abstract

This paper presents the case study on application of cognitive-behavioral therapy and EMDR method in the treatment of panic disorder with agoraphobia. The client is a twenty-eight years old woman who came into treatment complaining that for several years she has suffered from intense symptoms of anxiety, constant tension, inability to engage in any activity independently due to fear of panic attacks, avoidance of social interaction, fear of being negatively judged by others, compulsive checking.

The goals of treatment have been supplemented in the course of the treatment including interventions aiming at strengthening the client's independence by exposure to frightening situations, change in thinking patterns and belief system, enhancing social adaptability and eliminating the compulsive need to check things.

Behavioral and cognitive techniques were used in the therapeutic work with the client. EMDR method was used as an additional psychotherapeutic intervention (Eye Movement Reprocessing and Desensitization).

Therapeutic goals achieved in the work with the client resulted in significant and manifest changes in behavior and thinking, which was reflected in increased overall level of functionality and motivation for further exposures to frightening situations.

In cases of panic disorders with agoraphobia and other comorbid disorders, the standard CBT treatment ought to be adapted to the client's needs and should include complementary psychotherapeutic techniques.

Key words: panic disorder, agoraphobia, cognitive-behavioral therapy, EMDR

Sažetak

Rad prikazuje primjenu kognitivno – bihevioralne terapije i EMDR metode u tretmanu paničnog poremećaja s agorafobijom, kroz prikaz slučaja. Radi se o dvadesetosmogodišnjoj klijentici koja se javlja na tretman s pritužbom na višegodišnje intenzivne simptome anksioznosti, konstantnu napetost, nemogućnost da bilo šta obavlja sama zbog straha od paničnih napada, izbjegavnje socijalnih aktivnosti, strah od negativne procjene drugih ljudi, kompulzivno provjeravanje. Ciljevi tretmana su dopunjavani tokom terapije, a uključivali su postepeno povećavanje samostalnosti klijentice kroz izlaganje zastrašujućim situacijama i promjenu u mišljenju i sistemu vjerovanja, povećavanje socijalne adaptibilnosti i eliminacija kompulzije provjeravanja.

U radu s klijenticom korištene su bihevioralne i kognitivne tehnike. Kao dodatna psihoterapijska intervencija korištena je EMDR metoda (Desenzitizacija i reprocesiranje pokretima očiju).

Postignuti ciljevi u radu s klijenticom doveli su do značajnih i vidljivih promjena u ponašanju i mišljenju koje se odražavaju u poboljšanju opšteg nivoa funkcionalnosti i motivisanosti za dalja izlaganja zastrašujućim situacijama. U slučaju paničnog poremećaja s agorafobijom i komorbidnih stanja standardni tretman KBT-e treba biti prilagođen klijentu i uključiti dodatne psihoterapijske tehnike.

Ključne riječi: panični poremećaj, agorafobija, kognitivno-bihevioralna terapija, EMDR

Uvod

Anksioznost je neprijatno stanje strepnje, uznemirenosti, isčekivanja da će se nešto loše desiti.

Osoba očekuje neku opasnost i ima doživljaj da neće moći da se zaštiti od te opasnosti ili da će teško podnositi njene posljedice. Problemi sa anksioznošću uzrokovani su mnogobrojnim činiocima koji djeluju na mnogo različitih nivoa. Ovi nivoi uključuju naslijeđe, neurofiziologiju, porodičnu biografiju i vaspitanje, uslovljavanje, nedavnu izloženost stresorima, traumatske događaje, unutrašnji govor osobe i lični sistem uvjerenja, način na koji osoba izražava emocije, itd.

Aknsioznost se manifestuje na fiziološkom, bihevioralnom i psihičkom nivou. Stoga, sveobuhvatan tretman oporavka od anksioznih poremećaja treba djelovati na sva tri nivoa: 1. ublažavanje pojačane fiziološke pobuđenosti; 2. eliminacije izbjegavajućeg ponašanja; 3. promjene subjektivnih interpretacija (anksiozan unutrašnji govor) koje održavaju stanje strahovanja i brige. (1)

Panični poremećaj

Panični poremećaj odlikuje se iznenadnim napadima intenzivne strepnje ili intenzivnog straha koji se pojavljuju niotkuda, bez ikakvog očiglednog razloga. Intenzivna panika obično ne traje više od nekoliko minuta (vrhunac anksioznosti se dostiže nakon 10 minuta ili kraće), ali u rijetkim slučajevima, ona se može vraćati u vidu „talasa" tokom perioda od dva sata. Tokom napada panike mogu se pojaviti sljedeći simptomi: ubrzan rad srca, osjećaj nedostatka vazduha, vrtoglavica, nestabilnost, depersonalizacija, prekomjerno znojenje, utrnulost ili peckanje u nogama i rukama, strah od ludila ili gubljenja kontrole, strah od umiranja, tremor ili drhtavica, osjećaj mučnine ili nelagodnosti u stomaku. Panični poremećaj obično se razvija u kasnoj adolescenciji ili dvadesetim godinama života. U najvećem broju slučajeva, kao komplikacija paničnog poremećaja, javlja se agorafobija. Između 1 i 2% populacije ima čist panični poremećaj, dok je kod 5%, ili kod 1 od 20 osoba, napad panike praćen i agorafobijom. (1)

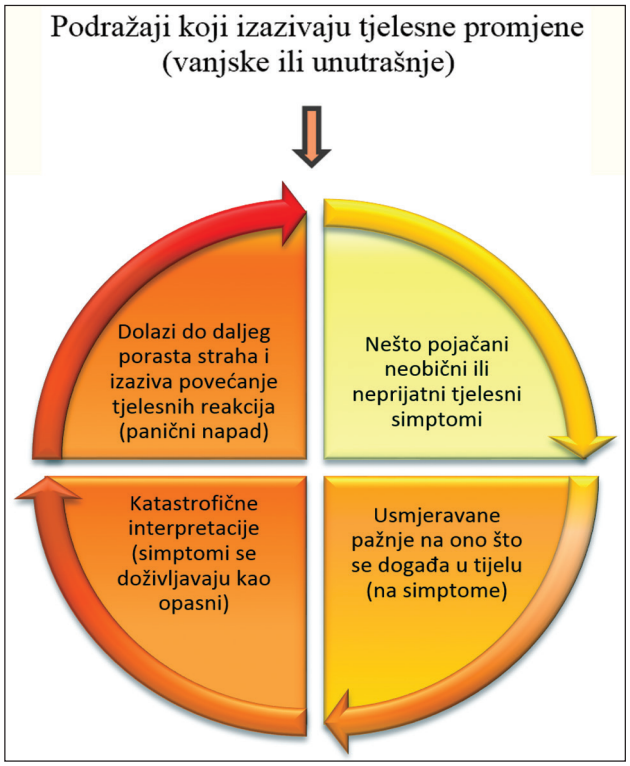
Agorafobija

U većini slučajeva, agorafobija je prouzrokovana paničnim poremećajem (određen broj osoba razviju samo agorafobiju bez i jednog napada panike). Od trenutka kada osoba počne da izbjegava situacije iz kojih je teško pobjeći ili kada je sama zbog napada panike, počinje da razvija agorafobiju koja se može razviti u lakši, umjeren ili težak oblik. Težak oblik agorafobije karakteriše potpuno ograničavanje aktivnosti i nesamostalnost pri funkcionisanju. Iako riječ agorafobija znači strah od otvorenog prostora, suština agorafobije je u strahu od napada panike. Osoba koja pati od agorafobije je uplašena da će se naći u situacijama iz kojih može biti teško pobjeći ili u kojima, ako iznenada doživi napad panike, pomoć može biti nedostupna. Za agorafobičare je uobičajeno da izbjegavaju javna mjesta na kojima je gužva (npr. marketi, tržni centri), zatvorena ili uzana mjesta (kao što su mostovi ili stolica kod frizera), sredstva javnog prevoza, boravak kod kuće bez članova porodice ili prijatelja. Najčešća karakteristika agorafobije je anksioznost izazvana provođenjem vremena daleko od kuće ili „sigurne osobe" (obično emotivnog partnera, roditelja). Osoba koja pati od agorafobije je većinu vremena anksiozna, a anksioznost proizilazi iz predviđanja, očekivanja da će se možda naći u situaciji u kojoj će se uspaničiti. Zbog poteškoća u opštem funkcionisanju, tj. velikih ograničenja u svakodnevnom životu i aktivnostima, osobe sa aforafobijom se često osjećaju depresivno. Depresija proizilazi iz osjećaja zarobljenosti u stanju nad kojim osoba nema kontrole ili je nemoćna da ga promijeni. Agorafobija je uzrokovana kombinacijom nasljednih faktora i faktora sredine. Agorafobičari mogu imati jednog roditelja, brata ili sestru, ili nekog od rođaka ko ima isti problem. Određene okolnosti u djetinjstvu mogu predisponirati osobu za razvoj agorafobije, što uključuje odrastanje uz roditelje koji su: 1. perfekcionisti i pretjerano kritični, 2. previše zaštitnički nastrojeni i/ili 3. izrazito anksiozni, toliko da dijete nauče da je svijet „opasno mjesto za život". (1)

Kognitivni model panike

Prema kognitivnom modelu panike, osobe doživljavaju napade panike zbog svoje relativno trajne sklonosti da širok raspon tjelesnih promjena interpretiraju na katastrofičan način. Katastrofične pogrešne interpretacije uključuje percipiranje tjelesnih reakcija kao indikativnih za neposrednu fizičku ili mentalnu katastrofu (npr. percepcija ubrzanog lupanja srca smatra se indikatorom da će doći do srčanog napada). Podražaji koji mogu izazvati napad panike mogu biti vanjski (slični situaciji u kojoj je osoba već ranije doživjela napad panike), ali su češće unutrašnji (misli, mentalne slike ili tjelesni osjeti). Kada se osjeti koji izazivaju anksioznost, interpretiraju na

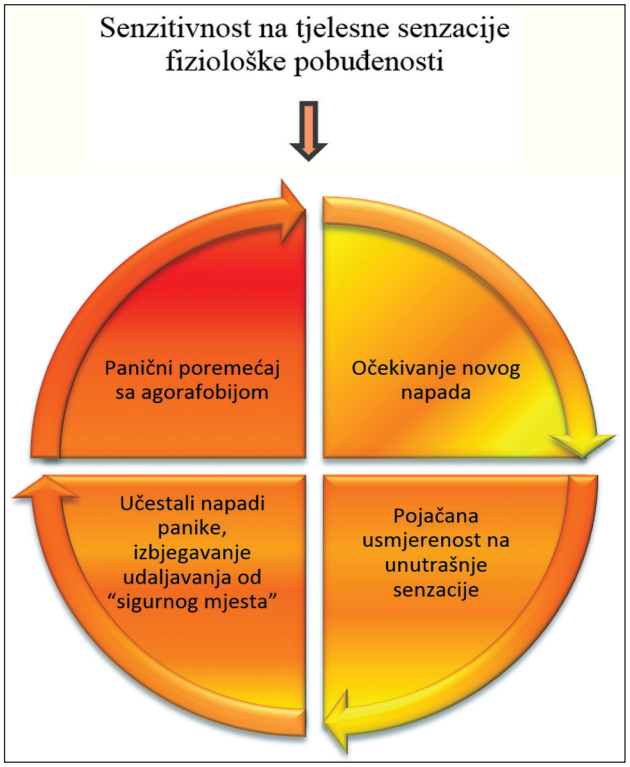
katastrofičan način, dolazi do daljeg porasta straha. (2) Osjećaj straha izaziva povećanje tjelesnih reakcija, što dalje dovodi do napada panike (prikazano na slici 1.). U kasnijim situacijama, osoba pogrešno tumači tjelesne senzacije fiziološke pobuđenosti kao indikatore da će se katastrofične posljedice dogoditi. Kao rezultat toga, osoba razvija anticipirajuću anksioznost i izbjegava druge situacije koje povezuje s rizikom od anksioznosti, što dovodi do razvoja agorafobije (prikazano na slici 2.).



Slika 1. Faze razvoja napada panike

Kognitivno-bihevioralna terapija

U savremenoj stručnoj literaturi, kao i na internetu, mogu se pronaći istraživanja koja pokazuju učinkovitost kognitivno-bihevioralne terapije u tretiranju paničnog poremećaja i agorafobije (efikasnost 75-90%). Zbog toga se kognitivno-bihevioralna terapija smatra terapijom izbora za osobe s paničnim poremećajem. Pokazalo se da kognitivno-bihevioralni tretman smanjuje simptome panike i agorafobije, poboljšava kvalitet života i ima bolje dugoročne rezultate od lijekova. Iako osobe s umjerenom do teškom agorafobijom slabije reaguju na kognitivno-bihevioralnu terapiju nego osobe s blagom agorafobijom (Williams i Falbo, 1996), njihovo se stanje poboljšava tokom vremena, posebno kada su članovi porodice ili prijatelji uključeni u tretman (Cerny, Barlow, Craske i Himadi, 1987). Istraživanje mehanizma promjene koja se događa tokom kognitivno-bihevioralnog tretmana pokazalo je da se automatske misli mijenjaju tokom terapije i da su promjene u kognicijama u korelaciji sa smanjivanjem simptoma (Teachman, Marker i Smith-Janik, 2008). (3)



Slika 2. Faze razvoja agorafobije

Kognitivno-bihevioralni tretman uključuje edukaciju klijenta (detaljna objašnjenja na koji način je razvila panični poremećaj i fiziološku osnovu anksioznosti), trening relaksacije (ako je prisutna stalna tjelesna napetost), konstruisanje hijerarhije straha, postepeno izlaganje zastrašujućim i/ili izbjegavajućim situacijama, uvježbavanje abdominalnog disanja, bihevioralne eksperimente za testiranje o strahu i panici, identifikaciju i promjenu negativnih automatskih misli, zajednom s disfunkcionalnim shemama (kako bi se prevenirało vraćanje simptoma panike). Tokom tretmana klijent dobija jasne i detaljne upute i objašnjenja s ciljem učenja klijenta tehnikama za upravljanje vlastitim emocijama i ponašanjem. Prilikom izlaganja određenim situacijama terapeut može modelirati određena ponašanja kako bi ohrabrio klijenta za izvođenje istih. Kada se značajno smanje simptomi anksioznosti i postignu specifični bihevioralni ciljevi tretman se prorjeđuje.

Eye Movement Desensitization and Reprocessing (EMDR)

EMDR - Eye Movement Desensitization and Reprocessing (u prevodu Desenzitizacija i reprocesiranje uz pomoć pokreta očiju) predstavlja integrativni psihoterapijski pristup koji polazi od pretpostavke postojanja urođene sposobnosti nervnog sistema za funkcionalnu, adaptivnu obradu informacija pohranjenih u mrežama memorije. Dr. Francine Shapiro utemeljila je metodu desenzitizacije i reprocesiranja pokretima očiju (EMDR) 1987. godine, a zatim je dugi niz godina rafinirala i razvijala proceduru primjene metode, potvrđujući njenu efikasnost u tretmanu osoba koje su doživjele traumu. (4)

Osim inicijalno potvrđene efikasnosti EMDR metode u liječenju posttraumatskog stresnog poremećaja (PTSP) u kontrolisanim kliničkim studijama (5,6), objavljene su i brojne studije o pozitivnim rezultatima primjene EMDR-a u slučajevima fobija (7,8), paničnih poremećaja (9,10), poremećaja zavisnosti i patološkog kockanja (11,12), traume kod dece (13) i sl.

Aktuelni psihološki simptomi u sklopu psihijatrijskih poremećaja su u EMDR pristupu viđeni kao aktivacija neadekvatno obrađene i maladaptivno pohranjene memorije vezane za uznemirujuće ili nepovoljne životne događaje. Pretpostavlja se da se u toku primjene EMDR-a potpomaže proces rekonsolidacije memorije stimulacijom prirodnih tendencija obrade podataka u mozgu.

EMDR metoda podrazumeva upotrebu specifičnih procedura i protokola. Standardni protokol EMDR-a je strukturisan u osam faza tretmana, a tokom određenih faza primjenjuje se bilateralna stimulacija u uslovima dualne pažnje ("dual attention processing").

Primjena protokola EMDR-a uz pomoć izabranog tipa bilateralne stimulacije (očni pokreti, auditivna stimulacija ili taktilna stimulacije - tapkanje) dovodi do povezivanja izolovanog memorisanog negativnog iskustva sa adaptivnim mrežama memorije, što ima za posljedicu desenzibilizaciju i spontanu kognitivnu restrukturaciju. Sa ponovljenim setovima bilateralne stimulacije, sjećanje se mijenja na takav način da se gubi njegov bolni intenzitet i jednostavno postaje neutralno sjećanje događaja u prošlosti. Istraživanja su ukazala na značajnost bilateralne stimulacije kao integralnog dijela proceduralnog rada sa EMDR-om, što utiče na aktivaciju procesa adaptivne, funkcionalne obrade informacija i na neurofiziološkom nivou.

S ciljem postizanja maksimalnih efekata, tretman EMDR ne obrađuje samo daleka sjećanja već i skorije događaje i situacije za koje klijent može da zamisli da će u njih biti upleten u budućnosti. To se radi zbog kompleksnosti asocijativne mreže memorije, a nastoji se doprijeti do što je moguće više aspekata problema tako da osoba može na slične situacije početi da reaguje pozitivno. (4) S obzirom da mehanizmi djelovanja EMDR-a putem kojih se ostvaruju pozitivne promjene nisu dovoljno poznati, pretpostavke su sljedeće:

1. ostvarenje interhemisferične koherentnosti;
2. potenciranje holinergičnog, parasimpatičkog relaksirajućeg odgovora;
3. analogija sa REM fazama sna;
4. aktivacija refleksa orijentacije preko očnih pokreta. (14)

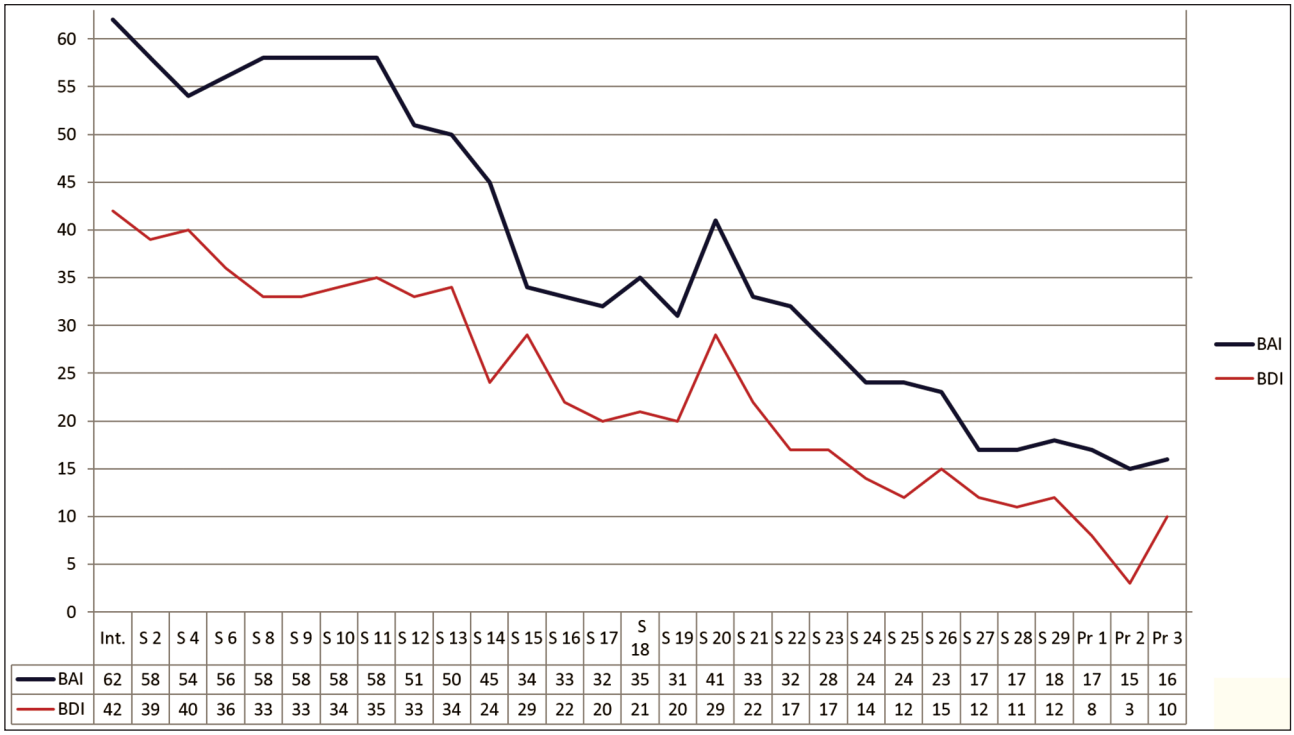
Prikaz KBT tretmana

U nastavku rada prikazan je KBT tretman paničnog poremećaja s agorafobijom u kombinaciji s EMDR metodom u prvom dijelu tretmana. Prikazan je grafikon intenziteta manifestacije anksioznosti i depresivnosti tokom tretmana i tri seanse praćenja.

Podaci o klijentici

Klijentica ima 28 godina, u braku je četiri i po godine, nema djece. Ostao joj je jedan ispit do završetka fakulteta. Ima roditelje i godinu i po dana starijeg brata koji živi u drugom gradu.

Prije nešto više od 6 godina počela je osjećati umor, iscrpljenost, pospanost. Nedugo nakon toga počela joj je smetati gužva u trolejbusu, a zatim je imala vrtoglavice. Prvi panični napad imala je prije 5 godina u kući (roditelji su bili u kući i svađali su se). Tada je mislila da će umrijeti, doživjeti infarkt, čemu je doprinijela i mamina panična reakcija. Nakon toga, uvijek je neko morao biti sa njom. Počela je izbjegavati situacije u kojima bi bila sama ili bi otac bio s njom. Na početku bi je otac ostavljao samu najviše pola sata, a poslije je tražila da je nikako ne ostavlja samu. Sa suprugom je zajedno šest godina i u skladnom je braku. Suprug je ranije podržavao u izbjegavanju izlaganja zastrašujućim situacijama, ali sada je uvidio da to nije rješenje.



	Int.	S 2	S 4	S 6	S 8	S 9	S 10	S 11	S 12	S 13	S 14	S 15	S 16	S 17	S 18	S 19	S 20	S 21	S 22	S 23	S 24	S 25	S 26	S 27	S 28	S 29	Pr 1	Pr 2	Pr 3
BAI	62	58	54	56	58	58	58	58	51	50	45	34	33	32	35	31	41	33	32	28	24	24	23	17	17	18	17	15	16
BDI	42	39	40	36	33	33	34	35	33	34	24	29	22	20	21	20	29	22	17	17	14	12	15	12	11	12	8	3	10

Napomena: BAI – Bekova skala anksioznosti; BDI – Bekova skala depresivnosti; Int. – Intervju; S – seansa; Pr – sesija praćenja

Grafikon 1. Efekat KBT tretmana na intenzitet manifestacije anksioznosti i depresivnosti

Željela bi imati dijete, ali smatra da sada nije u stanju, jer se ne bi mogla adekvatno brinuti o njemu.

Klijentica se žali na intenzivne simptome anksioznosti (napetost, ubrzan rad srca, ubrzano disanje, nemogućnost opuštanja, vrtoglavica, dezorijentisanost, strah od umiranja, strah od gubitka kontrole, nesigurnost, drhtanje, stalno znojenje, stegnutost mišića, nelagodu u trbuhu, nervozu), nemir, razdražljivost, često plakanje, teškoće u koncentraciji, osjećaj krivice i bespomoćnosti, nedostatak energije. Navodi da se osjeća kao u zatvoru zbog velikih ograničenja u životu. Plaši se da bilo šta uradi sama, jer je veoma nesigurna. Mama se i dalje ophodni prema njoj kao prema djetetu (i njenom suprugu) i šta god da radi prigovara joj i govori da to nije dovoljno dobro.

Na psihoterapiju dolazi na preporuku tetke koju veoma voli. Psihološku pomoć je zatražila i ranije, ali je odustala nakon prvih nekoliko odlazaka. U prethodnim godina bila je kod nekoliko psihijatara koji su joj propisivali medikamentnu terapiju, a takođe je išla i na šest seansi hipnoterapije. Homeopatske lijekove je prestala piti nakon nekoliko seansi KBT tretmana. Tokom trajanja psihoterapije otišla je kod novog psihijatra koji joj je propisao Xanax 0,50mg tri puta na dan (ona je pila najviše dva puta po 0,50mg) i Zoloft 50mg ujutro.

Klijentica je od početka tretmana bila saradljiva i vrlo brzo je stekla povjerenje u psihoterapeutkinju. Tokom svake seanse klijentica je zapisivala objašnjenja, upute i zaključke.

Procjena problema

Detaljnom analizom utvrđene su poteškoće u opštem funkcionisanju klijentice: konstantna napetost, nikad ne ostaje sama u kući niti bilo šta obavlja sama zbog straha od paničnih napada, ne javlja se na telefon, interfon, izbjegava otključavanje vrata, izbjegava socijalne aktivnosti, izbjegava odlazak sa suprugom u supermarkete, izbjegava da sjedi u kafiću sa suprugom ukoliko ima ljudi, obuzetost paničnim strahom od gubitka kontrole, strah od negativne procjene drugih ljudi (da će se osramotiti i ispasti luda pred drugima), kompulzivno provjeravanje (vrata, vode, šporeta), perfekcionizam.

Klijentica stalno usmjerava pažnju na tjelesne senzacije da provjeri koliko je anksioznost obuzima, i traži znakove opasnosti oko sebe. Uvijek pokušava sve predvidjeti i pripremiti se za sve što bi se moglo desiti u nekoj situaciji. Smatra da je anksioznost znak slabosti i da je neprihvatljiva. Tipične misli koje klijentica ima kada osjeti intenzivne simptome anksioznosti su: „uhvatiće me panika“, „izgubiću kontrolu“, „onesvijestiću se“, „noge mi neće izdrža-

ti“, „nešto će mi se loše desiti“, „neću moći pobjeći“, „drugi će vidjeti da sam čudna“, „poludiću“, „ukočiću se“, „osramotiću se“. Značenje koje imaju negativne misli je: „Nemam kontrolu.“, „Slaba sam.“.

Urađena je procjena mentalnog statusa prilikom dolaska klijentice na tretman: BAI = 62 (Bekova skala anksioznosti), BDI= 42 (Bekova skala depresivnosti), RSS = 11 (Rosenbergova skala samopoštovanja), ček lista simptoma SCL – 90 - R: umjereno prisustvo simptoma na skali somatizacije i hostilnosti; umjereno do znatno na skali opsesivno-kompulzivni simptomi i skali depresivnosti; znatno prisustvo simptoma na skali anksioznosti, fobične anksioznosti, interpersonalni senzitivi i paranoidne ideacije.

Radna hipoteza

Klijentica je odrastala uz roditelje koji su postavljali visoke zahtjeve prema njoj. Majka je bila pretjerano kritična, ali i zaštitnički nastrojena što je uzrokovalo osjećaj nesigurnosti i vjerovanje da nije dovoljno vrijedna. Često je poredila sa drugom djecom i govorila kako su druga djeca bolja od nje. Zbog toga se klijentica uvijek trudila da zadovolji očekivanja roditelja (prvenstveno majke) i zadobije njihovo odobravanje. Majka je, prema riječima klijentice, uvijek izrazito anksiozna u socijalnim sizuacijama, tako da je klijentica naučila da je „svijet opasno mjesto za život“. Kao dijete bila je prekorijevana kada bi plakala ili se naljutila, zbog čega je naučila da ne izražava svoja osjećanja i svoju ličnost. Potiskivanje osjećanja ljutnje i tuge tokom dugog vremenskog perioda, uz pretjeranu potrebu za kontrolom, perfekcionizam, samokritičnost i pretjeranu potrebu za odobravanjem od drugih na štetu sopstvenih osjećanja i potreba, doveli su do nagomilavanja stresa što je uzrokovalo anksioznost i napad panike. Nakon prvog paničnog napada klijentica je razvila strah od ponovnog napada panike, strah da joj pomoć neće biti dostupna, i strah da će se osramotiti ako je drugi vide tokom napada panike. Odrastanje sa stalnim osjećajem nesigurnosti, i nedovoljne vrijednosti, uticalo je na to da postane veoma zavisna od „sigurne osobe“ (supruga i roditelja), da razvije kompulzivna ponašanja, kao i da izbjegava situacije u kojima postoji rizik da će se osramotiti. Depresija se razvila kao posljedica agorafobije koja je potpuno ograničila u svim aktivnostima, uzrokujući osjećaj zarobljenosti i nemoći da se suprotstavi i oslobodi svojih strahova.

Razvila je disfunkcionalna pravila - „Nije u redu da pokažem emocije.“, „Uvijek se moram lijepo ponašati.“; „Uvijek moram sve savršeno uraditi.“; „Moram uvijek biti raspoložena.“; „Moram imati potpunu kontrolu.“; pretpostavke - „Ako drugi primjete da sam anksiozna ismijaće me.“, „Ako sam anksiozna neko se mora pobrinuti za mene.“; „Ako ne provjerim desiće se nešto loše i biću kriva.“; „Ako imam kontrolu nad svim što se dešava neće se ništa loše desiti.“; stav „Anksioznost je neprihvatljiva i znak je slabosti.“. Pravila služe kako bi se nosila sa bazičnim vjerovanjem da nije dovoljno vrijedna, da nema kontrolu, da je slaba. Stoga je razvila strategije koje joj pomažu da se nosi s bazičnim vjerovanjem: izbjegavanje da bude sama ili da ide bilo gdje sama, traženje odobravanja od drugih, izbjegavanje udaljenosti od „sigurne osobe“, izrazita samokritičnost, perfekcionizam, korištenje lijekova, konstantno usmjeravanje na tjelesne senzacije, izbjegavanje situacija u kojima bi je drugi mogli negativno procijeniti, pretjerana odgovornost, pretjerana potreba za odobravanjem i podrškom, socijalna izolacija. Nemogućnost ispunjavanja disfunkcionalnih pravila i pretpostavki dovodi do anksioznosti i paničih napada.

Plan tretmana

Primjenjivane terapijske intervencije su kognitivne (psihoedukacija, indentifikacija i preispitivanje iskrivljenih automatskih misli, preispitivanje disfunkcionalnih pretpostavki i shema, preispitivanje samokritičnih misli, distrakcije, usredotočena svjesnost, kartice za suočavanje, kreiranje i upotreba pozitivnih afirmacija), bihevioralne (abdominalno disanje, progresivna mišićna relaksacija, indukcija simptoma, izrada hijerarhije zastrašujućih i izbjegavajućih situacija, modeliranje, postepeno izlaganje *in* vivo, bihevioralni eksperiment, samomotrenje anksioznosti, bihevioralna aktivacija, prevencija odgovora i izlaganje, planiranje ugodnih aktivnosti, trening asertivnosti, samonagrađivanje) i EMDR metoda.

Prvobitno postavljeni *ciljevi tretmana* su bili: 1. Smanjiti tjelesne simptome panike na nivo koji može tolerisati; 2. Otići sa suprugom u kafić u kojem joj je „neugodno“ i popiti čaj; 3. Ostati sama u stanu duže od 2 sata; 4. Izaći sama iz stana i izbaciti smeće; 5. Ostati sama u stanu sa drugaricom (bez supruga) najmanje pola sata; 6. Otići u prodavnicu i kupiti nešto dok je suprug čeka ispred prodavnice; 7. Otići sama do roditelja u drugoj zgradi.

Nakon uspješno postignutih prvobitnih ciljeva, sa klijenticom su postavljeni dodatni ciljevi tretmana: 1. Platiti račune; 2. Otići sama iz kuće i kupiti dva ili više proizvoda u prodavnici bez supruga; 3. Redovno zaključavati i otključavati vrata; 4. Otići sama sa drugaricom na kafu; 5. Voziti se u trolejbusu dvije ili više stanica; 6. Prošetati sama; 7. Otići kod frizera; 8. Ostati kod kuće sama dok je suprug na poslu; 9. Doći sama na terapiju trolejbusom (nešto više od pola sata vožnje trolejbusom).

Klijentica je redovno dolazila na zakazane susrete i redovno izvršavala dogovorene domaće zadaće. Sa klijenticom je bilo manjih poteškoća tokom tretmana u periodu kada joj je kasnio menstrualni ciklus, jer je u tom periodu bila napetija i nervoznija zbog čega se manje izlagala. Podsticana je da toleriše anksioznost u vrijeme kašnjenja menstrualog ciuklusa i da ne prekida izlaganja koja je do tada radila. Promjenila je vjerovanje da zbog nervoze i intenzivnijih simptoma anksioznosti tokom kašnjenja menstrualog ciklusa ne može obavljati vježbe izlaganja. Na pregledu kod ginekologa rečeno joj je da joj je lijevi jajnik blago policističan. Osim toga, na ultrazvučnom pregledu dojki rečeno joj je da ima veliku cistu u desnoj dojci i dvije manje ciste u lijevoj. Klijentica je bila veoma zabrinuta zbog ovih nalaza, te je na preporuku psihoterapeuta otišla na pregled kod specijaliste radiologije koji je uvjerio da nije ništa opasno.

Tok tretmana

Na početku tretmana klijentici je podučavana o kognitivnom modelu nastanka panike, simptomima anksioznosti, psihofiziologiji anksioznosti, kao i povezanosti misli, emocija i ponašanja, te racionali izlaganja. Takođe, klijentica je educirana o korištenju različitih tehnika za suočavanje prije, za vrijeme i nakon svakog izlaganja (distrakcije, usredsređivanje na stopala kad osjeti slabost u nogama, ponavljanje izjava za savladavanje panike sa kartice), kao i o primjeni tehnika relaksacije. Prvo izlaganje izbjegavajućoj situaciji, urađeno je tokom intervjua, kao i svakog narednog susreta, kada je klijentica, uz poticanje i objašnjenje, ohrabrena da pije čaj što je izbjegavala zbog drhtanja ruku. Poslije intervjua klijentica je ostala sama u stanu roditelja oko sat vremena, što ranije nije radila (bilo joj je lakše da se prvo izlaže u stanu roditelja, jer su njen stan nedavno obili). Dogovoreno je da tokom narednih dana produži vrijeme ostajanja u stanu roditelja za 15 min; nakon toga, kada se navikne, da stalno produžava vrijeme za 15min uz planiranje aktivnosti koje će obavljati. Kada je u stanu roditelja sama provela 4 sata, počela je da provodi vrijeme u svom stanu 30min tokom prve smjene supruga, a zatim da postepeno po 15 min duže. U zadnjoj trećini tretmana, klijentica je ostajala sama u stanu dok je suprug radio prvu ili drugu smjenu, a ubrzo nakon toga ostajala je sama i dok je suprug radio noćnu smjenu.

Sa klijenticom su urađene četiri EMDR seanse vezano za zamišljanje situacije u prodavnici kako bi se smanjio strah od izlaganja *in* vivo, budući da EMDR pomaže u onim stanjima kojima doprinose prethodna iskustva. Tokom prve dvije seanse klijentica je doživljavala veoma intenzivne fiziološke simptome anksioznosti. Nakon treće EMDR seanse klijentica je počela postepeno da se izlaže zastrašujućim situacijama i kroz izvršavanje domaćih zadataka. Prilikom procesiranja klijentica se prisjetila da je mama učila da nije u redu da pokaže emocije pred drugima, da bude uvijek raspoložena, savršena, da drugi ne bi nešto zamjerili. Nakon izrade hijerarhije zastrašujućih situacija planirana su postepena izlaganja počevši sa najmanje uznemirujućim situacijama na listi hijerarhije (bacanje smeća, zaključavanje vrata, pijenje iz male šoljice i odlazak u kafić u kojem je puno ljudi, postepeno povećavanje dužine samostalnog kretanja, povećavanje vremena zadržavanja u prodavnicama), a zatim postepenim izlaganjem najviše uznemirujućim situacijama (odlazak u poštu ili banku da plati račune, kod frizera i u veliku samoposlugu) uz ukidanje sigurnosnih ponašanja. Klijentica je svakodnevno izbacivala smeće, a poslije prve polovine tretmana smeće je izbacivala kada je bila sama kod kuće. U prvoj polovini tretmana, klijentica je bez ponavljanog provjeravanja zaključavala vrata. Takođe, prestala je da provjerava kada sipa vodu ili ugasi šporet. Poslije mjesec dana terapije, klijentica je sama platila jedan račun u banci. Sa suprugem je počela da odlazi u samoposluge u velike nabavke. Nakon određivanja dodatnih ciljeva, klijentica je odlazila da plaćala sama sve račune dok bi je suprug čekao ispred pošte ili banke, a poslije nekog vremena sama je odlazila i vraćala se kući nakon što bi platila račune.

Prva izlaganja u prodavnici, sjedenju u kafiću bez supruga i vožnji trolejbusom klijentica je obavila zajedno sa psihoterapeutkinjom. U drugoj polovini tretmana, klijentica je počela sama odlaziti u

prodavnice koje su udaljenije, čekati na kasi u redu, i sama se vraćati kući. Takođe, počela je sama odlaziti na kafu sa prijateljicom. U zadnjoj trećini tretmana klijentica se je sama odlazila na trolejbusku stanicu, vozila se nekoliko stanica i sama se vraćala kući.

Prilikom obavljanja domaćih zadataka klijentici su otežavali mamini komentari i ponašanja, jer joj je govorila kako nešto da uradi, savjetovala je da izađe iz prodavnice ako postane anksiozna, ispitivala da li je dobro, da li se obukla, davala joj pare da kupi ručak umjesto da sama kuva, itd. Klijentica je podsticana da u odnosu sa mamom primjenjuje vježbe asertivnosti. Shvatila je da je mamino ponašanje i dopuštanje mami da umjesto nje obavlja aktivnosti doprinosilo da bude nesigurna u sebe i da sebe smatra nesposobnom.

Završetak i rezultati tretmana

Psihoterapija je realizovana kroz 30 seansi (inicijalni intervju i 29 terapijskih seansi). Prvih mjesec dana klijentica je dolazila na psihoterapiju dva puta sedmično, nakon toga jednom sedmično, a pred kraj tretmana jednom u dvije sedmice. Prilikom jedne seanse bio je prisutan i suprug klijentice u svrhu davanja uputa suprugu o načinu rada sa klijenticom i važnosti nepodržavanja njenih izbjegavanja i sigurnosnih ponašanja. Rezultati na Bekovoj skali anksioznosti i depresivnosti na posljednjoj seansi iznosili su BAI= 18, BDI=12. Klijentica je postigla prosječan rezultat na skali samopoštovanja (RSS = 23).

Prvobitno postavljeni ciljevi su ostvareni nakon 17 seansi, a nakon toga urađena je evaluacija postignutog i sa klijenticom su postavljeni dodatni ciljevi terapije. Prije određivanja dodatnih ciljeva, klijentica je prestala izbjegavati porodična okupljanja i sa gostima je sjedila bez prisustva supruga. Tokom boravka u svom stanu bez prisustva druge osobe svakodnevno je samostalno obavljala poslove u kući (pravljenje ručka, raspremanje, kupovinu u prodavnici i po više proizvoda, iznošenja smeća). Naučila je kontrolisati simptome anksioznosti, umiriti sebe kada osjeti intenzivnije simptome anksioznosti, osporiti negativne automatske misli u situacijama kada je anksiozna i korisiti pozitivan unutrašnji govor.

Dodatni ciljevi su ostvareni tokom trajanja tretmana izuzev cilja da klijentica sama dođe trolejbusom na psihoterapiju (oko pola sata vožnje). Na drugu seansu praćenja (BAI=15, BDI=3) klijentica je došla sama trolejbusom i izvjestila da je veoma sretna zbog toga, toliko da je i zaplakala kada je stigla. Upisala je kurs za izradu nakita. Sama obavlja kupovinu u prehrambenim prodavnicama i prodavnicama odjeće ili obuće. Najmanje dva puta mjesečno odlazi odlazi na kafu sa drugaricom. Povremeno ode kod roditelja na kafu dok je suprug na poslu, ali ne svakodnevno. Pred kraj tretmana, klijentica je manje vremena provodila u stanu dok je suprug na poslu zbog čega se mnogo bolje osjećala. Sama odlazi kod frizera, stomatologa i ginekologa. Promjenila je frizuru onako kako je odavno željela, ali se nije usuđivala, jer je strahovala od komentara drugih.

Brat joj je rekao da je uočio veliku promjenu kod nje, jer je ranije primjećivao da je odsutna tokom razgovora, a da je sada skoncentrisana na razgovor i da se sama uključuje u razgovor. Sa suprugom je išla kod njegove rodbine da se upozna sa njima, jer je pet godina izbjegavala upoznavanje sa njima. Klijentica je izvjestila da mami i bratu smeta to što ona više ne ćuti na sve nego kaže kada je nezadovoljna nečim ili kada joj nešto smeta, ali joj je drago što je postala asertivnija. Psihijatrica joj je rekla da je ostvarila veliki napredak. Pije Xanax ujutro od 0,25mg i Zoloft 50mg (ujutro). Na prvoj seansi praćenja navela je da je dobila dva dana ranije menstruaciju što joj se nikad ranije nije desilo. Doktorica joj je propisala da pije konopljiku zbog problema sa menstrualnim ciklusom. Sa klijenticim su održane tri seanse praćenja. Treća seansa praćenja održana je poslije pet i po mjeseci od završetka tretmana (BAI=16, BDI=10). Postignuti napredak je održan.

Klijentica je izvjestila da je aktivnija i da je sada puno više stvari zanima. Svakodnevno dva sata pravi nakit i prodaje ga putem društvene mreže na internetu. Budući da joj je suprug ostao bez posla i da je pomalo depresivan, sada joj smeta što je stalno kod kuće. Klijentica samostalno obavlja kućne poslove i nastoji da više vremena provodi u aktivnostima van kuće (šetnja, kupovina, druženje sa drugaricama) bez supruga. Kao dio evaluacije uspješnosti tretmana prilikom treće seanse praćenja urađena je procjena nivoa nefunkcionalnih vjerovanja i procjena novih, funkcionalnijih vjerovanja:

Zaključak

Ciljevi tretmana postignuti primjenom kognitivno-biheviоralne terapije i EMDR metode, kao dodatne psihoterapijske intervencije, doveli su do značaj-

Stara vjerovanja	Prije	Sada	Nova vjerovanja	Sada
Moram imati potpunu kontrolu.	100%	40%	Ne moram imati potpunu kontrolu da bih bila sigurna. Učim da prihvatim stvari koje ne mogu da kontrolišem.	70%
Uvijek moram sve savršeno uraditi.	100%	40%	Zadovoljna sam time što radim najbolje što mogu.	90%
Uvijek se moram lijepo ponašati.	80%	20%	U redu je da ne ispunjavam očekivanja drugih ljudi. Ja sam dobra takva kakva jesam.	80%
Moram uvijek biti raspoložena.	90%	10%	U redu je da nisam uvijek raspoložena.	100%
Nije u redu da pokažem emocije	100%	10%	Učim da pokazujem svoje emocije. To nije sramota.	100%
Anksioznost je neprihvatljiva i znak slabosti.	100%	30%	Anksioznost je normalna i nije znak slabosti. Svako je nekad anksiozan.	90%
Nisam dovoljno vrijedna. Slaba sam.	100%	20%	Ja sam vrijedna i prihvatam sebe baš takvu kakva sam.	80%

nih i vidljivih promjena u ponašanju, raspoloženju i kognicijama klijentice, koje se odražavaju u poboljšanju opšteg nivoa funkcionalnosti i motivisanosti za dalja izlaganja izbjegavajućim situacijama. Tokom tretmana bilo je neophodno da klijentica konzumira propisanu farmakoterapiju zbog prisutnosti komorbidnih poremećaja i izrazito narušene opšte funkcionalnosti. Primjenom EMDR metode u prvom dijelu tretmana smanjena je početna anticipatorna anksioznost, čime je olakšano izlaganje klijentice zastrašujućim situacijama u drugom dijelu tretmana, u kojem su uspješno primjenjene i ostale navedene kognitivno-bihevioralne tehnike. Postignuti rezultati održali su se nakon pet i po mjeseci od završetka tretmana.

U slučaju paničnog poremećaja s agorafobijom i komorbidnih stanja standardni kognitivno-bihevioralni tretman treba biti prilagođen klijentu i uključiti dodatne psihoterapijske intervencije.

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Management Information Systems (MIS) role in Environment Protection

Menadžment informacioni sistemi (MIS) u zaštiti životne sredine

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Abstract

Information and Communication Technologies (ICT) have undoubtedly very high importance in the field of Environmental Protection and Ecological Management for monitoring conditions and collecting environmental data resources such as water, air and soil. This role is also very significant in education.

Bosnia and Herzegovina is the country that does not have the capacity to monitor conditions and collect environmental data of resources such as water, air and soil at the level of industrial facilities, local communities and the state.

It is evident that BiH does not have the capacity for environmentally friendly treatment of hazardous waste, nor has the economic power to build its own plant.

Current situation in regards to Environmental Management shows that the current approach to this matter has created a series of difficult problems.

In spite of significant efforts in this area, education in the field of environment is not enough organized and focused program. The education of professional staff is also unsatisfactory to be able to improve Environmental Management.

Environmental Management at the local level in Bosnia and Herzegovina is quite a complex issue, due to the high fragmentation of institutions.

The criteria for estimating and defining actual situation in the waste management sector at the level of cantons, municipalities and utility companies, as well as planning future activities are based on the general strategy for waste management:

Creating data base of organized (individual) collection and disposal of waste along with activities for the implementation of plans for selective waste collection and minimizing disposal in sanitary landfills. The emphasis is on creating data base of production and recycling of packaging waste as well as other types of waste and achievement of strategic objectives according to the Waste Management Plan in cantons. The emphasis is also on creating data base on uncontrolled disposal and recovery and rehabilitation needs.

Key words: panic disorder, agoraphobia, cognitive-behavioral therapy, EMDR

Sažetak

Ogroman je značaj koji informaciono komunikacione tehnologije (IKT) nesumnjivo imaju u oblasti zaštite životne sredine i ekološkog menadžmenta za praćenje stanja i prikupljanje ekoloških podataka o resursima kao što je voda, vazduh i tlo i u edukaciji.

Bosna i Hercegovina je država koja ne posjeduje kapacitete za praćenje stanja i prikupljanje ekoloških podataka o resursima kao što je voda, vazduh i tlo na nivou industrijskih objekata, lokalnih zajednica i države. Evidentno je da BiH nema kapacitete za ekološki prihvatljivo tretiranje, posebno opasnog otpada, niti ima ekonomsku moć da sama izgradi postrojenja.

Postojeće stanje u vezi sa okolinskim upravljanjem pokazuje kako je dosadašnji pristup ovoj materiji stvorio niz teško rješivih problema.

Pored značajnih napora u ovoj oblasti, ekološko obrazovanje nije dovoljno organizovano i programski usmjereno.

Također, nezadovoljavajuće je obrazovanje profesionalnog kadra u cilju unapređenja ekološkog menadžmenta.

Upravljanje okolišem na lokalnom nivou u Bosni i Hercegovini je dosta složeno pitanje, zbog velike fragmentacije institucija.

Kriteriji za definiranje stanja u sektoru upravljanja otpadom na nivou kantona, općina i komunalnih preduzeća, kao i planiranje daljih aktivnosti, baziraju se na generalnoj strategiji upravljanja otpadom:

- Formiranje baze podataka o organizovanom (individulanom) prikupljanju i zbrinjavanja komunalnog otpada sa aktivnostima vezanim za primjene planova selektivnog prikupljanja otpada i minimalnog odlaganja na sanitarne deponije.
- Akcent na stvaranje baze podataka o produkciji i reciklaži ambalažnog otpada uz postizanje strateških ciljeva, kao i nekih drugih vrsta otpada,
- Prema Planu upravljanja otpadom na kantonima, formiranje baze podataka o nekontroliranim odlagalištima kao i potrebama za sanacijom.

Ključne riječi: životna sredina, ekološki, kvalitet, menadžment, informacioni sistem, tehnologija.

Uvod

Popularno rečeno, svijet u kome živimo i radimo je svijet brzih promjena - kakve do sada nisu zabilježene u istoriji čovječanstva, a dominirajući fokus teorije menadžmenta je upravo menadžment promjena. Razvoj informaciono komunikacijskih tehnologija (IKT) u oblasti zaštite životne sredine u Evropskoj Uniji, Evropska Komisija (EK) je definisala kroz program eEurope Action Plan, koji predstavlja generalni plan za razvoj informacionih tehnologija u Evropi.

Zahtjevi za uspostavljanje rutine u organizacionim aktivnostima kao štu su dokumentovani sistemi menadžmenta su prisutni, ne samo u oblasti menadžmenta kvalitetom, već i u oblasti menadžmenta životnom sredinom, menadžmenta bezbjednošću, korporativnoj društvenoj odgovornosti i brojnim drugim oblastima. Zahtjevi koji se odnose na pomenute oblasti razvijeni su na međunarodnom nivou kroz standarde ISO 9000, ISO 14000, OHSAS 18000, ISO 22000 i druge.

S tim u vezi je i ogroman značaj koji IKT nesumnjivo imaju u oblasti zaštite životne sredine i ekološkog menadžmenta za praćenje stanja i prikupljanje ekoloških podataka o resursima kao što je voda, vazduh, tlo i u edukaciji.

Informacioni sistem mora biti izuzetno fleksibilan da registruje svaku takvu bitnu promjenu u okruženju i omogući menadžmentu da u novim okolnostima donese kvalitetnu i brzu odluku u cilju unapređenja interakcije čovjeka i prirode

Stanje kapaciteta za praćenje stanja i prikupljanje ekoloških podataka

Bosna i Hercegovinina je država koja ne posjeduje kapacitete za praćenje stanja i prikupljanje ekoloških podataka o resursima kao što je voda, vazduh i tlo na nivou industrijskih objekata, lokalnih zajednica i države. Evidentno je da BiH nema kapacitete za ekološki prihvatljivo tretiranje, posebno opasnog otpada, niti ima ekonomsku moć da sama izgradi postrojenja.

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Usljed klimatskih promjena elementarne nepogode naročito negativno utiču na životnu sredinu, tim više što se preduzimaju neadekvatne mere zaštite kojima se još više pogoršava stanje prirodnih resursa. Haotična i nekontrolisana ekspoatacija šljunka i pijeska iz vodenih tokova i sa obala rijeka dovela je do totalne degradacije riječnih obala, a naročito šumskog i močvarnog pojasa uz njih.

Bosna i Hercegovina (BiH) je sa svojih 2% teritorije pod formalnom zaštitom, na posljednjem mjestu u Evropi. Prijedlozi o zaštiti novih područja su skoro u potpunosti blokirani unutar entitetskih i kantonalnih parlamenata, dok se istovremeno i u postojećim zaštićenim područjima nastavlja nesmanjena eksploatacija prirodnih resursa (1).

Organizacija kapaciteta za praćenje stanja i prikupljanje ekoloških podataka

Ustavom Bosne i Hercegovine (BiH), koji je prilog Općem okvirnom sporazumu za mir u Bosni i Hercegovini (Dejtonski sporazum) i koji je usvojen 1995. godine, BiH je definirana kao

suverena država s decentraliziranom politikom i administrativnom strukturom, kao i s više nivoa političkog upravljanja, kako slijedi:

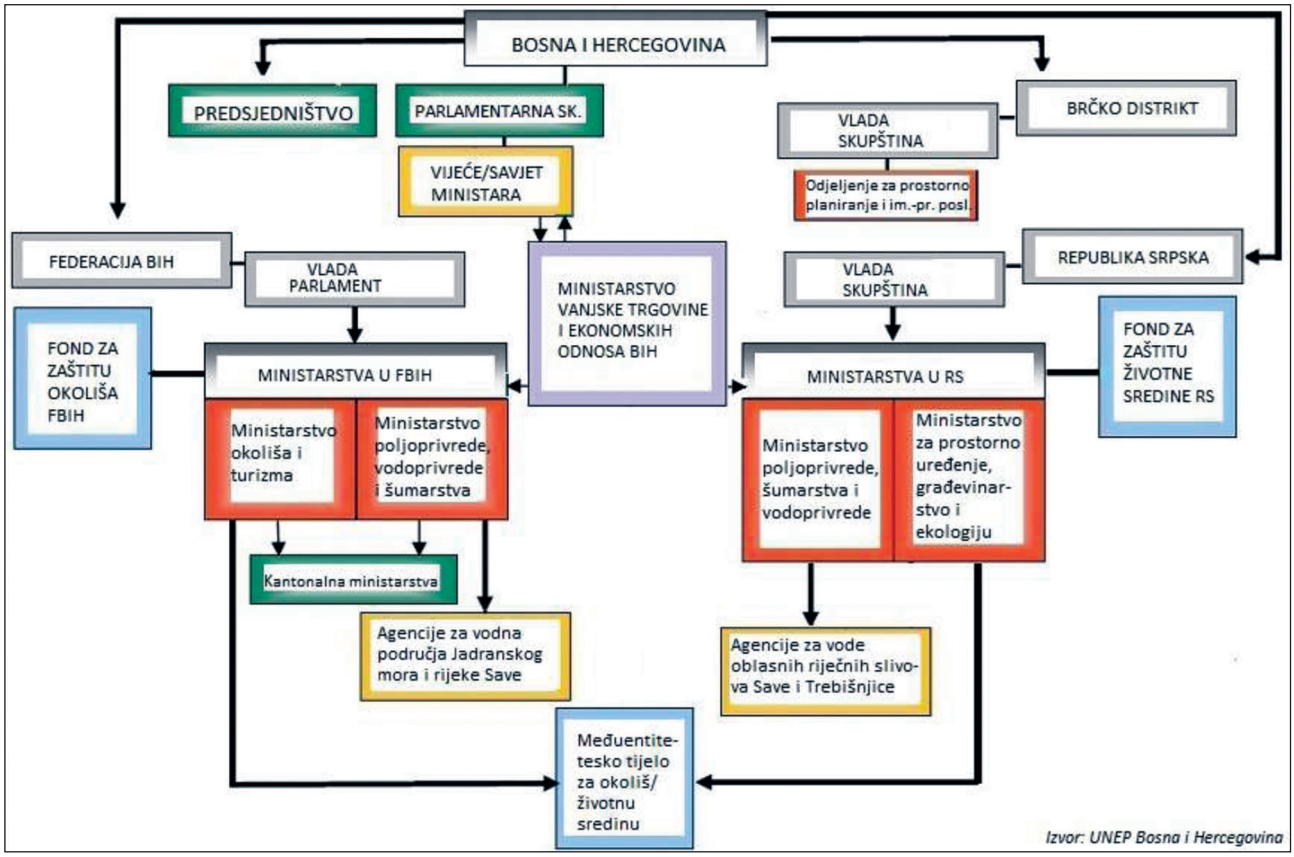
- Vlast na nivou države Bosne i Hercegovine (zakonodavna: Parlamentarna skupština BiH, izvršna: Predsjedništvo BiH i Vijeće ministara BiH, sudska: Ustavni sud BiH i Sud BiH);
- Federacija Bosne i Hercegovine (zakonodavna vlast: Parlament FBiH, izvršna: predsjednik FBiH i Vlada FBiH, sudska: Ustavni sud, Vrhovni sud). Federacija BiH je dalje decentralizirana u 10 kantona (koji imaju svoje vlade, parlamente i sudove).
- Republika Srpska (zakonodavna vlast: Narodna skupština RS, izvršna: predsjednik RS-a i Vlada RS-a, sudska: Ustavni sud, Vrhovni sud). Republika Srpska je centralizirana i ima dva nivoa vlasti: republički i lokalni-općinski.
- Brčko distrikt je samoupravna administrativna jedinica pod suverenitetom Bosne i Hercegovine, koja je službeno dio oba entiteta. Zakonodavnu vlast vrši Skupština Distrikta, izvršnu Vlada Distrikta, dok sudsku vlast vrše sudovi Distrikta.

Pitanja zaštite okoliša nisu uključena u deset tačaka u kojima su Ustavom Bosne i Hercegovine definirane nadležnosti državnih institucija, te stoga spadaju pod slijedeću odredbu: "Sve vladine funkcije i ovlaštenja koja nisu ovim Ustavom izričito povjerena institucijama Bosne i Hercegovine pripadaju entitetima." (Član III, stav 3.) (2)

Upravljanje okolišem na lokalnom nivou u Bosni i Hercegovini je dosta složeno pitanje. Federacija BiH se sastoji od deset kantona čije su nadležnosti definirane Ustavom FBiH. Svaki kanton ima svoju vladu koja usvaja kantonalne zakone (koji su usklađeni sa zakonodavstvom FBiH). Ne postoji jedinstven oblik organizacije ili politike za ministarstva koja se bave pitanjima okoliša na kantonalnom nivou.

Naziv kantona - Naziv nadležnog ministarstva

1. Unsko-sanski kanton - Ministarstvo za građevinarstvo, prostorno uređenje i zaštitu okoliša,
2. Posavski kanton - Ministarstvo za transport, komunikacije, turizam i zaštitu okoliša,
3. Tuzlanski kanton - Ministarstvo za urbanizam, prostorno uređenje i zaštitu okoliša,
4. Zeničko-dobojski kanton - Ministarstvo za prostorno uređenje, promet i komunikacije i zaštitu okoliša,



Slika 1. Opća šema upravljanja okolišem u Bosni i Hercegovini (2)

5. Bosansko-podrinjski kanton - Ministarstvo za urbanizam, prostorno uređenje i zaštitu okoliša,
6. Srednjobosanski kanton - Ministarstvo prostornog uređenja, obnove i povratka *(obuhvata i okoliš)*.
7. Hercegovačko-neretvanski kanton - Ministarstvo trgovine, turizma i zaštite okoliša,
8. Zapadno-hercegovački kanton - Ministarstvo prostornog uređenja, resursa i zaštite okoliša,
9. Sarajevski kanton - Ministarstvo prostornog uređenja i zaštite okoliša,
10. Kanton 10 - Ministarstvo graditeljstva, obnove, prostornog uređenja i zaštite okoliša (2).

Republika Srpska obuhvata 63 općine i njihove nadležnosti su regulirane Zakonom o lokalnoj samoupravi („Službeni glasnik RS“ br. 101/04). Prema članu 12 ovog Zakona, općine u RS-u imaju nezavisne nadležnosti nad javnim uslugama poput zaštite okoliša i upravljanja vodama. (2)

S obzirom na ovako značajnu fragmentaciju Bosne i Hercegovine, danas u BiH ne postoji integralni nacionalni ekološki informacioni sistem za monitoring i kompjuterizovano skladištenje i manipulacija ekološkim podacima.

Zaključci sa prijedlogom mjera za unapređenje kvaliteta životne sredine

Ne postoji uvezan sistem evidencije toka otpada (od izvora nastajanja, načina prikupljanja, transporta, metode reciklaže, spaljivanja, izvoza ili deponovanja), a ne postoje ni podaci niti detaljna evidencija na nivou Općina/Kantona.

Uvidom u postojeće stanje u oblasti zbrinjavanja otpada, predviđena su dva nivoa.

U prvom nivou bi se pripremili anketni obrasci za komunalna preduzeća, registrirane operatere i nadležne za sektor okoliša i prostornog uređenja u općinama. Zatim bi se podaci obradili i sistematizirali u tabelama, te izvukli preliminarni zaključci o stanju po općinama odnosno kantonima.

U drugom koraku, nedostajući podaci bi se dopunili, a obrađeni podaci bi poslužili za pripremu i izradu software-a za tehničko-ekonomsku analizu prikupljanja, transporta i konačnog zbrinjavanja na nivou općina/komunalnih preduzeća.

Takođe, predložila bi se organizacija i pohranjivanje podataka u jednu bazu (GIS) koja bi za početak bila dostupna centralnom uredu (Fond za zaštitu okoliša FBiH), a nakon ustrojstva programa, obuke po kantonima, podaci bi se dopunjavali i bili dostupni na različitim nivoima, svim korisnicima. I prvi i drugi nivoi bi pratili organizovanje obuke, edukacije, izradu vodiča i priručnika za korištenje software (3).

Razvoj digitalne i telekomunikacijske tehnologije bitno je uticao na pohranjivanje, prijenos i pristup znavstvenim informacijama. Razvoj računara i jednostavnost njegove upotrebe , povećanje opsega i brzine komunikacijskih veza, standardizacija programskih i komunikacijskih rješenja, (pravila, propisni), te povezivanje računara u područne i svjetske mreže promijenili su način organizacije informacija, povećali broj informacijskih izvora, te pristup informacijama učinili jednostavnim, bržim i jeftijim.(4)

Kvalitet je jedan od temeljnih filozofskih pojmova koji označava određenost nekog predmeta po kojoj se razlikuje od drugih predmeta ili pojava, odnosno po kojoj se specifično odnosi ili reagira prema drugim predmetima ili pojavama. Koncept kvaliteta uključuje najmanje tri dimenzije i prema tome ima tri različita značenja:

- komparativno značenje u smislu stepena kvaliteta,
- kvantitativno značenje u smislu dosegnutog nivoa,
- kvalitet podrazumijeva i podesnost nečega za određene svrhe.(%)

Menadžeri u oblasti zaštite životne sredine i ekološkog menadžmenta za praćenje stanja i prikupljanje ekoloških podataka o resursima kao što je voda, vazduh, tlo i u edukaciji, zahtjevaju informacije visokog kvaliteta, a ne velikog kvantiteta. One zbog toga moraju posjedovati nekoliko glavnih karakteristika u cilju efikasnog potpomaganja pri donošenju menadžerskih odluka. Informacije bi trebale da budu: dostupne, blagovremene, tačne, struktuirane, potpune, koncizne. Takve da se mogu lahko arhivirati / memorisati i obrađivati.

To znači da se menadžeri moraju osigurati sa informacijama koje im pomažu da uoče buduće trendove i ustanove njihov uticaj vezano za svoje odluke.

Menadžment mora biti obezbijedjen sa informacijama (i informacijskim tehnikama analize) u vezi sa internim aktivnostima jedne zdravstvene

organizacije kao i o razvoju u svome okruženju, pored informacije o prošlom i sadašnjem stanju, (što se ide ka višem nivou odlučivanja to je potrebnija informacija o budućem događaju).

Dizajneri sistema moraju znati da moderni kompjuterski bazirani ekološki informacioni sistemi mogu proizvesti informacije koje odgovaraju vremenskom planiranju i željenim formama kod većine menadžera. Npr. informacija se sada može obezbijediti u formi izvještaja ili u formi vizuelnog prikazivanja numeričkih podataka, tekstualnog materijala ili grafike.

Između ostalih, alternative vremenskog planiranja su: Periodično planirani izvještaji. Npr. sedmični izvještaji ili mjesečni finansijski izvještaji. Izvještaji za slučaj izuzetnosti. Izvještaji se proizvode samo kada se izuzetni uslovi pojave i oni samo sadrže informacije o time izuzetnim uslovima. Izvještaji po zahtjevu i reakcije. Informacija se obezbjeđuje kad god je menadžer zahtjeva. Npr. video terminali koji stalno rade opskrbljeni sa DBMS (DataBase Management Systems – sistemi za upravljane bazama podataka) upitnim jezicima (Query languages) i generatorima izvještaja omogućavaju menadžerima da dobiju neposredne reakcije ili izvještaje kao rezultat njihovih zahtjeva za informacijama. Interaktivno reagovanje - Informacija se obezbjeđuje putem interaktivne sesije između menadžera i kompjutera koji sadrži interaktivni program ili modelirani programski paket. Npr. korištenje softverskog paketa za unakrsne tabele (spreadsheet) rezultira u seriji odgovora kao reakcija na alternative ″šta ako?″ postavljene od strane menadžera. Zahtjevi za informacijama u mnogome zavise od nivoa menadžmenta, upravljačkog nivoa i vrste aktivnosti.

Menadžment ekološki informacioni sistemi (MEIS) moraju zadovoljiti slijedeće sistemske funkcije:

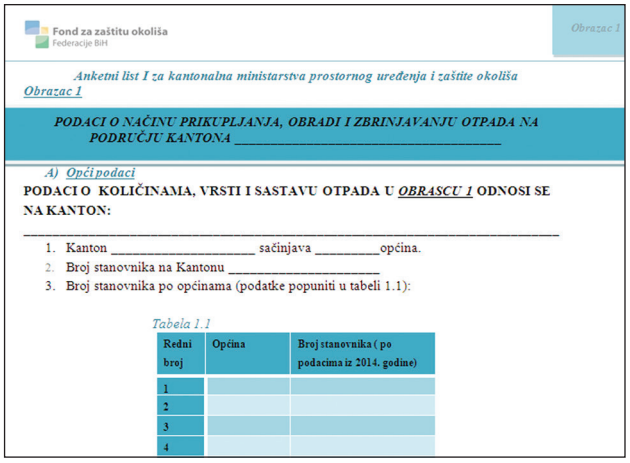
Ulaz. Prikuplja zdravstvene informacije koje je generisao operacioni informacioni sistem.

Obrada. Koristi informacione sisteme za procesiranje (obrađivanje) da bi transformisala podatke u zdravstvene informacijske proizvode koje mogu potpomoći menadžerskom donošenju odluka.

Smještanje. Održava interne, eksterne i lične baze podataka koje sadrže podatke i informacije u formi prošlih stanja (istorijskih) slogova, predviđanja, planova, standarda, pravila za donošenje odluka, modela, i ostalih upravljačkih i analitičkih tehnika.

Izlaz. Obezbjeđuje široki spektar zdravstvenih informacionih produkata potrebnih za podršku aktivnosti donošenja odluka u menadžmentu: na zahtjev, prema unaprijed utvrđenom planu, kada se pojave određeni izuzetni uslovi.

Kontrola. Koristi kontinuirani proces informacionog upravljanja resursima da bi kontrolisala performanse MEIS-a.


Fond za zaštitu okoliša
Federacije BiH

Obrazac 1

Anketni list I za kantonalna ministarstva prostornog uređenja i zaštite okoliša

Obrazac 1

PODACI O NAČINU PRIKUPLJANJA, OBRADI I ZBRINJAVANJU OTPADA NA PODRUČJU KANTONA _____

A) Opći podaci

PODACI O KOLIČINAMA, VRSTI I SASTAVU OTPADA U *OBRASCU 1* ODNOSI SE NA KANTON:

_____

1. Kanton _____ sačinjava _____općina.
2. Broj stanovnika na Kantonu _____
3. Broj stanovnika po općinama (podatke popuniti u tabeli 1.1):

Tabela 1.1

Redni broj	Općina	Broj stanovnika (po podacima iz 2014. godine)
1		
2		
3		
4		

Slika 2. Anketni list I za kantonalna ministarstva prostornog uređenja i zaštite okoliša (3)

Kriteriji za definiranje stanja u sektoru upravljanja otpadom na nivou kantona, općina i komunalnih preduzeća, kao i planiranje daljih aktivnosti, baziraju se na generalnoj strategiji upravljanja otpadom:

- formiranje baze podataka o organizovanom (individulanom) prikupljanju i zbrinjavanja komunalnog otpada sa aktivnostima vezanim za primjene planova selektivnog prikupljanja otpada i minimalnog odlaganja na sanitarne deponije,
- akcent na stvaranje baze podataka o produkciji i reciklaži ambalažnog otpada uz postizanje strateških ciljeva, kao i nekih drugih vrsta otpada prema Planu upravljanja otpadom na kantonima,
- formiranje baze podataka o nekontroliranim odlagalištima kao i potrebama za sanacijom istih.

Formirani su upitnici za nadležna ministarstva po kantonima, za nadležne službe po općinama kao i anketni listovi za javna i privatna komunalna preduzeća, kao i za vlasnike privatnih/društvenih deponija/transfer stanica ili drugih privremenih skladiša/odlagališta otpada. Ispunjavanje anketnog

listića po svim pitanjima potrebno je radi stvaranja kompletne slike stanja u domenu zbrinjavanja prije svega ambalažnog otpada, a potom i ostalih vrsta otpada u skladu sa važećim Pravilnikom i listom otpada te ostalim podzakonskim aktima koji su u procesu usvajanja i implementacije.

Upitnik je formuliran po temama i cjelinama vezanim za aktualana pitanja i aktivnosti koje provodi Fond za zaštitu okoliša FBiH. Prema viziji Fonda za zaštitu okoliša FBiH, na ovaj način bi se stvorili uvjeti za analizu stanja te forimiranje liste potrebnih ulaganja u sektoru upravljanja otpadom, po prioritetima, automatizacija informacionih procesa.

Obrazovanje informacionih kadrova i obuka korisnika informacija, koordinacija ovog IS sa drugim relevantnim sistemima - vodoprivreda, privreda, poljoprivreda, zdravstvo i dr., što bi značajno unaprijedilo kvalitet življenja u Bosni i Hercegovini. (6)

Postojeće stanje u vezi sa okolinskim upravljanjem pokazuje kako je dosadašnji pristup ovoj materiji stvorio niz teško rješivih problema.

I pored značajnih napora u ovoj oblasti, ekološko obrazovanje nije dovoljno organizovano i programski usmjereno.

Također, nezadovoljavajuće je obrazovanje profesionalnog kadra u cilju unapređenja ekološkog menadžmenta.

Upravljanje okolišem na lokalnom nivou u Bosni i Hercegovini je dosta složeno pitanje, zbog velike fragmentacije institucija.

Menadžeri u oblasti zaštite životne sredine i ekološkog menadžmenta za praćenje stanja i prikupljanje ekoloških podataka o resursima kao što je voda, vazduh i tlo i u edukaciji, zahtjevaju informacije visokog kvaliteta, a ne velikog kvantiteta. One zbog toga moraju posjedovati nekoliko glavnih karakteristika u cilju efikasnog potpomaganja pri donošenju menadžerskih odluka.

Dizajneri sistema moraju znati da moderni kompjuterski bazirani ekološki informacioni sistemi mogu proizvesti informacije koje odgovaraju vremenskom planiranju i željenim formama kod većine menadžera. (7)

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Abstract

In this paper the instructions for preparing camera ready paper for the Journal are given. The recommended, but not limited text processor is Microsoft Word. Insert an abstract of 50-100 words, giving a brief account of the most relevant aspects of the paper. It is recommended to use up to 5 keywords.

Key words: Camera ready paper, Journal.

Introduction

In order to effect high quality of Papers, the authors are requested to follow instructions given in this sample paper. Regular length of the papers is 5 to 12 pages. Articles must be proofread by an expert native speaker of English language. Can't be accepted articles with grammatical and spelling errors.

Instructions for the authors

Times New Roman 12 points font should be used for normal text. Manuscript have to be prepared in a two column separated by 5 mm. The margins for A4 (210×297 mm2) paper are given in Table 1.

Table 1. Page layout description

Paper size	A4
Top and Bottom margin	20 mm
Left margin	20 mm
Right margin	18 mm
Column Spacing	5 mm

Regular paper may be divided in a number of sections. Section titles (including references and acknowledge-ment) should be typed using 12 pt fonts with **bold** option.

For numbering use Times New Roman number. Sections can be split in subsection, which should be typed 12 pt *Italic* option.

Figures should be one column wide. If it is impossible to place figure in one column, two column wide figures is allowed. Each figure must have a caption under the figure. For the figure captions 12 pt *Italic* font should be used. (1)

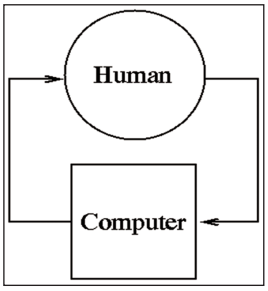

Figure 1. Text here

Conclusion

Be brief and give most important conclusion from your paper. Do not use equations and figures here.

Acknowledgements (If any)

These and the Reference headings are in bold but have no numbers.

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