Psychiatria Danubina, 2021; Vol. 33, Suppl. 1, pp 29-32 *Conference paper*

PRELIMINARY RESULTS OF DOCTORAL DISSERTATION: EMPIRICAL REVIEW OF EMDR IN THE PROCESS OF HOSPITAL TREATMENT OF OPIATES ADDICTS

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SUMMARY

Introduction: *Use of EMDR in work with addicts is described mainly through case studies, and Hase, Schallmayer and Sack (2008) examined experimentally effect of EMDR in the treatment of alcohol addicts and found a significant decrease of cravings for addicts who had , next to the standard treatment, also EMDR therapy, compared to a group that had only standard treatment. To examine efficiency of EMDR therapy in the treatment of opiates addicts*

Subjects and methods: *In research is applied group experimental scheme with a control group and measurement before and after treatment and six months after treatment. The control group had standard treatment, and the experimental group had a standard treatment plus EMDR treatment, ie, four sessions of EMDR treatment. The session lasts 60 minutes. In the research following instruments were applied: Pompidou, DUDIT-E, LDQ, OCDS, DASS 21 Rosenberg's Self-Esteem Scale. In the processing of preliminary results, descriptive statistics is used.*

Results*: The research began on September 8, 2017. Until October 2018, 24 participants were included. Results of measurements for 20 participants were presented (10 from the control and 10 from the experimental group). In abstract is used CravEx Michal Hase protocol. The results indicate a higher number of visits to the therapeutic community in the experimental group, increase of self-esteem in both groups but a larger range in the experimental group, a higher self-evaluation of addiction in an experimental group, decrease in PAS attractiveness for both groups but slightly better results in the experimental group, especially in the self-assessment of the negative effects of PAS, as well as a larger increase in the motivational index of the experimental group at another measurement.*

Conclusion: *Preliminary results indicate the effects of EMDR use, but since measures of descriptive statistics were used and as a small sample, there should be caution with the results.*

Key words: *EMDR - addiction - CravEx*

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INTRODUCTION

In the Zenica-Doboj Canton, addicts are treated at the Public Health Institution - Institute for Addiction Diseases as outpatient and inpatient (the Detox Unit with ten beds). The average time that addicts spend at Detox in Zenica is 24 days. In the Zenica-Doboj Canton, the percentage of registered opiate addicts is 83% of the total registered (Bjelošević & Habibović 2017).

EMDR has been confirmed by numerous studies as a choice therapy for PTSD with traumatic events are also often found in addicts. Studies indicate a connection between addiction and trauma and it is determined that addicts who were involved in treatment have comorbidity with PTSD between 12% and 34%, while in women this ratio is higher and ranges between 33% and 59% (Najavits 2006, according to Marich 2009).

EMDR therapy consists of a structured protocol of eight phases, such as: anamnesis, preparation, assessment, desensitization, installation, body scan, closure, and reevaluation (Shapiro 2007). EMDR has found usage in the treatment of addiction, and next to the basic trauma protocol, five specific protocols for the treatment of addiction have been developed: DeTUR, CRAVEX, Affect Tolerance Protocol, Resource Development Installation Protocol, and The Feeling State Addiction Protocol (O'Brien & Abel 2011). Among the first studies of the effects of EMDR in the treatment of the 34 patients with chronic alcohol addiction is the work of Hase, Schallmayer & Sacc (2008). The results showed a significantly higher reduction in drug craving in the group that had standard treatment plus EMDR (measurement after treatment and one month after treatment). Markus and Hornsveld (2018) report about the study of the effects of EMDRs conducted at the institution for addictions. Results of EMDR with 109 alcohol addicts are described as disappointing. Research on the effectiveness of EMDR in working with opiate addicts are generally published as case studies.

In Bosnia and Herzegovina (BH) after the war (1992-1995) there were needs for implementation of new and modern psychotherapy skills, due to need of mental health workers to help highly traumatized BH citizens. EMDR as very modern psychotherapeutic tool was introduced in 1998 just three years this severe after, but the first training was organized in 2009, and in 2014 Association of EMDR Therapists in Bosnia and Herzegovina was established (Hasanović et al. 2018, 2021).

The research aim was to determine changes in the personality of the addicts during the usual hospital treatment of the detox, the sustainability of the changes, and will patients who received EMDR with the usual hospital treatment, have greater and longer-lasting changes compared to the usual hospital treatment of detox.

SUBJECTS AND METHODS

Methods

The research uses a group experimental scheme with a control group and measurement before, immediately after treatment, and six months after treatment (Milas 2005). The control group receives a standard treatment and the experimental group standard treatment plus EMDR treatment i.e. four sessions of EMDR treatment or one per week.

Participants

The sample will consist of 35 participants in the experimental and 35 in the control group. The research sample includes opiate addicts who are in process of hospital detoxification.

Instruments

Pompidou Questionnaire is a socio-demographic questionnaire; SUDS - Subjective Units of Distress Scale, VoC or Validity of Cognition Scale; DUDIT-E with four sub-scales: Use of substances (10 items), Positive aspects of drug usage (17 items), negative aspects of drug usage (17 items), and Readiness for treatment (10 items); LDQ – Scale of addiction, OCDS Craving scale, Rosenberg's self-esteem scale and DASS – Depression Anxiety Stress Scale.

Procedure

The first test is applied at the beginning of the Detox. Then, four hours of EMDR with the following structure is applied: two hours are focused on the processing of recidivism and craving, one hour to process the trigger, and one hour to the future. After that, the last day on detox is used for testing again, re-test.

RESULTS

The addict during the treatment goes through several stages: registration for treatment, psychophysical stabilization, stabilization with medicaments, and work on motivation for treatment, outpatient or inpatient detoxification until the rehabilitation process. Participants involved in this study are at the stage of a hospital Detox, and for the continuation of the treatment it is important to go to the Therapeutic community. Preliminary results indicate a higher number of participants that go to the Therapeutic community from the experimental group compared to the control group. This ratio is visible in the table 1.

Due to the small number of cellular frequencies, the hypothesis for significance check via chi-square is not significant.

One of the hypotheses in the research is self-esteem and assumes that hospital treatment will generally lead to an increase in self-esteem and the increase will be higher in patients who have a combination of the usual hospital treatment and EMDR. Descriptive results show the difference but it is not statistically significant inside of the groups. After completion of the research, more complex statistical calculations will be applied using parametric statistics that will be able to compare both groups. In Figure 1, we can see that both groups, the control and the experimental one, had an increase in the level of self-esteem measured by Rosenberg's self-esteem scale, but also that the increase is higher in the experimental group. At the first measurement, the experimental group had a lower score than the control one and on the other higher.

Table 1. Frequency of going to the Therapeutic community

Group	Frequency	Percent
Control		
Yes	1	10.0
No	9	90.0
Total	10	100.0
Experimental		
Yes	6	60.0
No	4	40.0
Total	10	100.0

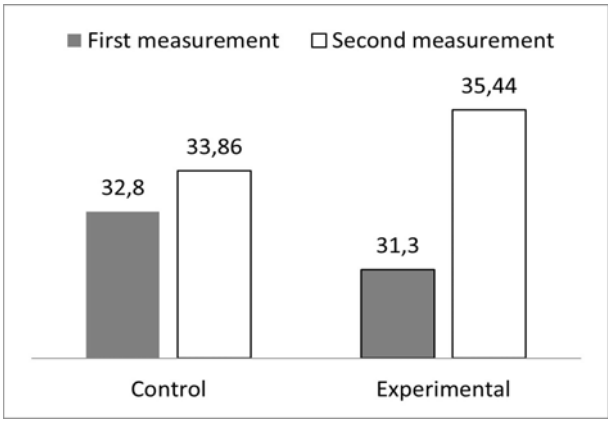

Figure 1. The level of self-esteem

For this work, the Wilcoxon rank test was used to check the significance of the change in both groups separately. A statistically significant difference was not found (control group: z=-0.631, p=0.528, experimental: z=-1.332, p=0.183).

The battery of instruments also has a scale that measures the level of addiction (the criterias in this scale are based on DSM IV). The results of the first and second measurements are presented in the figure 2.

Both groups evaluate their addiction in the other measure as lower, but a significant decrease was noticeable in the control group. The importance of change in both groups was checked by a Wilcoxon rank test and a statistically significant difference was discovered in the control group (control group: z=-2.207, p=0.027, experimental: z=-1.404, p=0.160). So, the control group estimates statistically significantly lower its own addiction after three weeks of treatment. Experiences of the author working with addicts in detoxification indicate a frequent

occurrence of high self-esteem of addicts in maintaining abstinence. Such patients have difficulty to decide for a rehabilitation program and therefore is frequent relapse. Such results can be interpreted in the direction that the examinees who had the EMDR were more careful about their addiction and were more prepared for the further phase, i.e. rehabilitation.

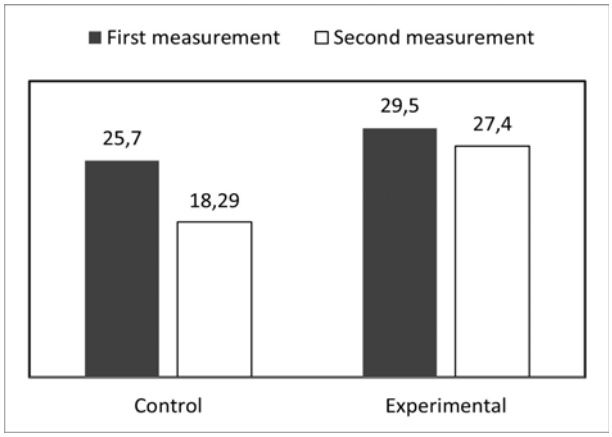

Figure 2. Self-assessment of the level of addiction

And the data on the evaluation of the positivity of the usage of PAS (Psychoactive substances) confirm this thesis. Namely, in the second measurement, the control group at the descriptive level, less on average assesses the positive effects of using the PAS in relation to the same decline in estimates in the experimental group, and for reducing the level of attractiveness of PAS it takes a longer time.

However, statistically significant differences within the groups were not found by using the Vickson's rank test (control group: z=-1.572, p=0.116, experimental: z=-0.715, p=0.475) (Figure 3).

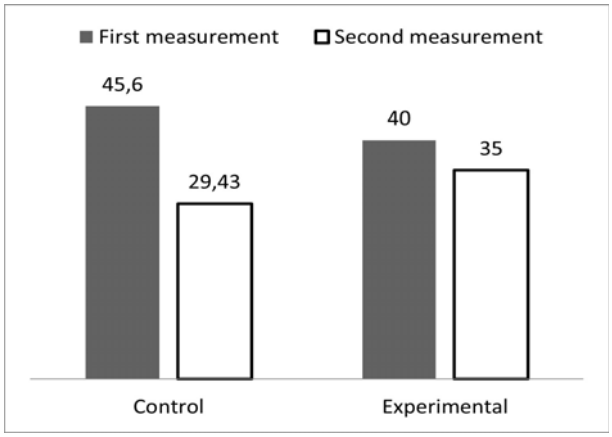

Figure 3. Assessment of positive effects of PAS usage

The control group has the reduction and assessment of the negative aspects of the use of PAS while in the experimental group there is a higher score in this assessment. Understandably, the use of PAS is more negatively perceived as the addict is longer in abstinence which is seen as a higher score on the scale of negative aspects. Such an expected result is found in the experimental group while in the control group we have the opposite effect. Statistical analysis shows that this difference in estimates in the control group is statistically significant and measured by the Wilcoxon rank test (control group: z=-2.207, p=0.027, experimental: z=-1.586, p=0.113).Therefore, examinees who had standard treatment consider usage of PAS less negative (Figure 4).

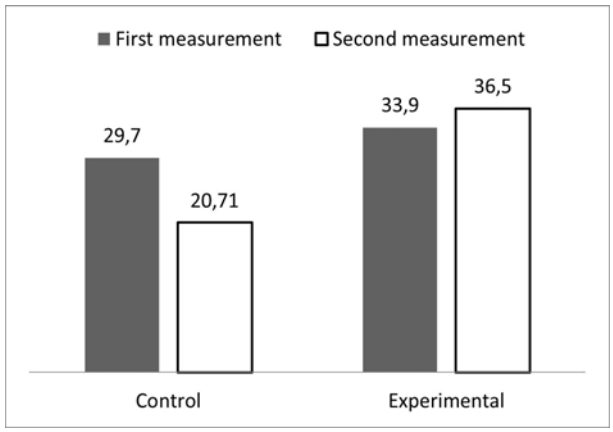

Figure 4. Assessment of negative effects of PAS usage

We also compared differences in the Readiness Scale for change and motivation for treatment. The maximum score on this scale is 10. At the first measurement, the experimental group had an arithmetic mean of 5.2 compared to the control group 6.7. According to the results of this scale, the readiness of the experimental group was 1.5 less than in the control group. At the second measurement, the experimental group recorded higher growth while the control group growth is slightly smaller. With the Wilcoxon rank test, the significance of the change in both groups was checked and statistically significant difference was not detected (control group: z=-0.213, p=0.832; experimental: z=-1.063, p=0.288) (Figure 5).

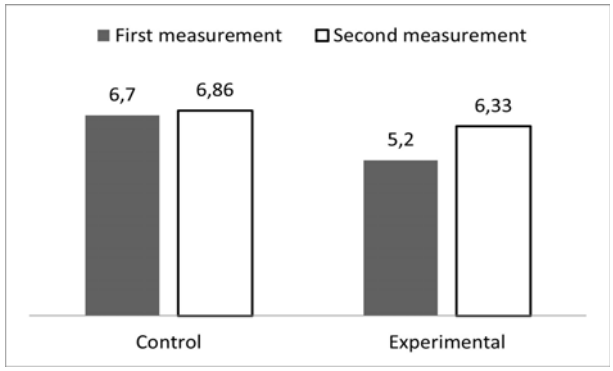

Figure 5. Readiness for change and motivation for treatment

Finally, on the potential impact of EMDR, we can set the motivation index for this review which includes the ratio between the assessment of positive and negative effects of the use of PAS and readiness for change. The increase in the motivational index in the experimental group is almost 100%. With the Wilcoxon rank

test, the significance of the change in both groups was verified and a statistically significant difference was found in the experimental group (control group: z=-0.405, p=0.686, experimental: z=-1.955, p=0.051). So, at the end of the hospital detox, the experimental group had a statistically significant increase of the motivational index (for a preliminary review and a smaller number of examinees, we can accept the result p=0.051 statistically significant) (Figure 6).

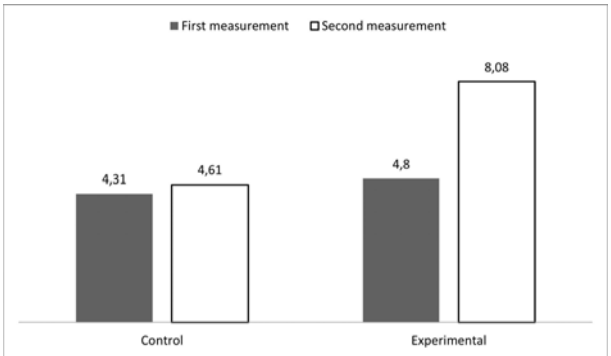

Figure 6. Motivation index

DISCUSSION

In this paper we presented the preliminary results of the doctoral dissertation "Empirical control of effects of EMDR in the process of hospital treatment of opiate addicts". The CravEx protocol is used and the work presents the results of 20 participants. As a small number of participants is used, measures of descriptive and non-parametric statistics were applied. Also, one part of the results is presented. These are exactly the limitations of this work and it is necessary to accept the results as information. According to the available research literature of the experimental group scheme, with opiate addicts and with a focus on addiction (AF-EMDR) have not been applied so far. Markus and Hornsveld (2017) give an overview of available research where anecdotal are dominant. In the review, we found one research with testing before and after treatment but with a small number of examinees (11) and a large giving up (7 out of 11 participants gave up). In that direction, the current results cannot be compared with other research. In the review we did not include results of measurement six months after the treatment and we hope that these measurements will provide data about the stability of the impact of EMDR. It is also important to note that during the processing patients had memories of the trauma but even without the intervention of the therapists they continued to process the memory of craving without retaining on trauma.

CONCLUSION

Preliminary results indicate that there is certain impact of EMDR psychotherapy in the observed variables amongst treated opiate addicts. Certainly, a larger sample will provide more comprehensive and more reliable statistical data.

Acknowledgements: None.

Conflict of interest: None to declare.

References

1. *Bjelošević E & Habibović S: Zloupotreba psihoaktivnih supstanci (Psychoactive substance abuse). Univerzitet u Zenici, 2017*
2. *Hasanović M, Morgan S, Oakley S, Richman S, Šabanović Š & Pajević I: Development of EMDR in Bosnia and Herzegovina – From an idea to the firts EMDR conference. Psychiatr Danub 2018; 30(Suppl. 5):243-248*
3. *Hasanović M, Morgan S, Oakley S, Richman S, Omeragić I, Siručić N, Kokanović I, Imširović F, Hrvić Dž, Stajić D & Oakley Z: Development of EMDR Therapy in Bosnia and Herzegovina – Education by Supervision to Accreditation. Psychiatr Danub 2021; 33(Suppl. 1):4-12*
4. *Hase M, Schallmayer S & Sack M: EMDR Reprocessing of the Addiction Memory: Pretreatment, Posttreatment, and 1-Month Follow-Up, Journal of EMDR Practice and Research 2008; 2:170-179*
5. *Hase M: CravEx: An EMDR Approach to Treat Substance Abuse and Addiction. In: Luber M (ed): Eye movement desensitization and reprocessing (EMDR) scripted protocols: special populations. Springer Publishing Company, 2010*
6. *Marich J: EMDR in the Addiction Continuing Care Process: Case Study of a Cross-Addiction Female's Treatment and Recovery. Journal of EMDR Practice and Research 2009; 3:98-106*
7. *Markus W, Horsveld H: EMDR inteventions in addiction. Journal of EMDR Practice and Research 2017; 11:98-106*
8. *Markus W & Horsveld H: Palette of EMDR Interventions in Addiction (PEIA), 2018; https://hornsveldpsychologen praktijk.com. Pristupljeno 08.11.2018*
9. *Milas G: Istraživačke metode u psihologiji i drugim društvenim znanostima (Research methods in psychology and other social sciences). Jasterbarsko: Naklada Slap, 2005*
10. *O'Brien JM and Abel NJ: EMDR, Addiction, and the Stages of Change: A Road Map for Intervention. Journal of EMDR Practice and Research 2011; 5:121-130*
11. *Shapiro F: Eye movement desensitization and reprocessing: Basic principles, protocols and procedures. New York: Guilford Press, 2001*
12. *Shapiro F: Training Manual. Watsonville: EMDR Institute Inc. 2007*

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