# FAMILY ATMOSPHERE AND RELATIONSHIPS AS PREDICTORS OF HEROIN ADDICTION

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#### **SUMMARY**

**Introduction:** Studies show that dysfunctional family relationships are important predictors of addictions to all psychoactive substances.

**Objective:** To establish if there is a connection between family relations and heroin addiction and if found to exist, what is the quality of this connection.

Subjects and methods: This research was conducted on the sample comprised of 160 subjects divided into two groups. The first group consisted of 61 heroin addicts treated at the Tuzla University Clinical Centre Psychiatric Hospital. The second group consisted of 99 subjects who were students at the Tuzla University Faculties of Philosophy and Electrical Engineering and who were not using any psychoactive substances. The subjects were tested with the Quality of Family Interactions Scale (KOBI) which measures the interactions between children and parents in two dimensions, described in literature as 'acceptance' and 'rejection'.

**Results:** The research team established statistically significant differences between the heroin addicts and the students, the nonusers, in terms of their family relationships. The results show that the addicts families were characterized by lack of understanding, by conflicts, rejection, non-acceptance by parents, while the non-users families were characterized by understanding, acceptance by parents and good communication.

**Conclusions:** There is a connection between inter-family relationships and addiction. Namely, rejection and non-acceptance of children/persons by their families and parents, bad communication and dysfunctional family relationships are significant predictors of heroin addiction.

Key words: heroin addiction - family relationships - acceptance - rejection

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#### **INTRODUCTION**

Family milieu and relationships within a family are very important, if not decisive factors in spreading of addictions to narcotics (Hasanović 2011). It is not rare to find that an addict's parents are too ambitious and superior, are having high demands, are not offering enough emotional support, that family relationships are usually bad, and that lack of emotions is present (Cerić 1986). The children from broken marriages and children who rarely see their parents are especially prone to drug addictions (Buljan 2010). According to Kozarić-Kovačić (2005), disturbances within family relationships have a negative impact on adolescent's development and adolescents, by way of using drugs, try to find a way out of the unbearable family situation. Sakoman (2002) emphasizes that educating children to choose healthy behaviour and avoid unnecessary risk has to start in the family, during the early childhood. According to Sakoman (2011), the risk of "making a detour!" towards drug addiction, in each individual case, is determined by several factors: family functionality, bio-psychological predisposition, personality traits and the impact of the environment in which a child is being raised. Families

in which one of the parents died early or in which parents divorced, families characterised by tense atmosphere, conflicts, parents' emotional lability, inclination towards conflicting and violent behaviour and disturbance of a normal family harmony are ideal grounds for driving people towards drug use (Rathold 1970). A dysfunctional family, according to Marić (2005), is characterised by cold, affected, adverse and inauthentic emotional relations, aggression, ill behaviour and conflict resolution patterns. Even though most families consist of blood relatives with legally regulated relations between family members (marriage), there are also many families that exist on the grounds of mutual commitment (common law families) and consist of persons who are not blood relations (adoptive and foster families). A modern family, more than ever, questions earlier, comprehensive definitions of a family. The increase of common law families, divorces which lead to creations of single parent families, decisions to create single parenthood (with or without inclusion of the other parent), the increasing the number of "other families" in which partners raise their own or the children of them both. Additionally, homosexual families inevitably lead to changes and expansion of the definition and,

consequently, to psychological, social, political and legal measures related to a family (Both 2001). We find the beginnings of studies related to the influence of family mechanisms on an individual in Sigmund Freud's psychoanalysis (Krstić 1991). Freud placed most of the basic theoretical concepts into the context of a family. Personality structure and the patterns of a person's later behaviour and adjustment mechanisms, stem, in most part, from the parent – child relationship. The infantparent attachment is not only an external manifestation or a learned behaviour pattern; it is an innate mechanism which directs a child to bond with a person who nurtures it, with whom it regulates its need to survive, if survival does not only understands provision of food and protection, but also close social contacts, safety, love, attention, satisfaction of interests, communication, physical contact, etc. (Pašalić-Kreso 2004). According to Berk (2008), an emotionally warm and supportive family atmosphere is a prerequisite for physical and psychological health of children throughout their lives, while isolation and family alienation are, often, associated with developmental problems. Grgin-Lacković (Efendić-Spahić 2009) indicates that interpersonal family relationships are significantly better predictors of adolescents' adjustment than a family structure alone. Studies of parental behaviour gave evidence for the existence of three independent dimensions: parental acceptance-rejection (dimension of warmth), possessiveness-neglect (dimension of protection) and democracy-authoritarianism (Stojaković 2002). Acceptance is defined as emotional warmth, approval, understanding, interest for a child, use of dialogue instead of punishment, rare use of corporal punishment. Rejection is defined by the opposite attributes, while the dimension of control is defined as parents' efforts to make a child stick to behaviour rules. Parents control the behaviour of a child with their actions and, in that way, prevent the development of a child's individuality and autonomy and, also, create dependence on parents, low selfesteem, anxiety, depression and antisocial behaviour (Efendić-Spahić 2009). During the entire period of adolescence, the most consistent predictor of the quality of mental health is the relationship between parents and adolescents (Efendić-Spahić 2009).

The objective of this research was to examine family relations as predictors of heroin addiction.

## **SUBJECTS AND METHODS:**

A cross-sectional study was conducted on a sample comprised of 160 subjects, divided into two groups; test group and control group. The test group consisted of 61 subjects, heroin addicts, who were part of the addiction treatment program at the Psychiatric Hospital of the Tuzla University Clinical Centre. The control group consisted of 99 subjects who were students at the University of Tuzla. The average age of the control group subjects was  $21.46\pm1.95$ , while the average age of the experimental group subjects was  $27.66\pm2.48$ . The

sample structure by gender was 107 male (41 in the experimental and 66 in the control group) and 53 female (20 in the experimental and 33 in the control group) subjects. The eliminatory factors for the experimental group subjects were: the existence of psychotic comorbidity, consumption or presence of addiction to some other psychoactive substances or alcohol, presence of somatic diseases, ages below 18 and over 30 and more than 5 unanswered items in the questionnaire. subjects underwent urine tests on other The psychoactive substances, while psychological tests have been used to establish the absence of psychotic comorbidity. The general clinical tests established the absence of somatic diseases. We selected 61 addicts among those subjects who fulfilled the criteria. The eliminatory factors for the control group subjects were: presence of addictions to alcohol or psychoactive substances, ages below 18 and over 30, more than 5 unanswered items in the questionnaire. In accordance with the required attributes the sample was appropriate. The subjects were tested with the Quality of Family Relationships Scale (KOBI) which measures interactions between a child and its parents in two dimensions, described in literature as 'acceptance' and 'rejection'. 'Acceptance' is related to positive emotional aspects of the parent-child relationship. 'Rejection' is related to various experiences of parents' behaviour, in the range between lack of understanding and excessive demands to neglect and punishment. The KOBI scale is comprised of 55 items, 22 of which describe the mother - child relationship, 22 items describe the father - child relationship while 11 items are related to the overall atmosphere in the family. The scale is also comprised of 5 sub-scales: satisfaction with one's family, acceptance by mother, acceptance by father, rejection by mother and rejection by father. On the Lickert type scale (from 0 to 5; 0 meaning 'not at all', 5 meaning 'absolutely yes'), the subjects evaluate their relationships with their mothers, fathers or their family as a whole. The overall result is established by addition of points for each subscale separately. A higher result on the 'rejection' subscale means that a child experiences more prohibitions, harshness and neglect by its mother or father. The subscale 'satisfaction with family' examines subjects' satisfaction with their family lives. High internal reliability was established for all 5 sub-scales (Cronbach alpha 0.85-0.89), therefore, they are the instruments for measuring the quality of family relationships with satisfactory metric characteristics. The KOBI scale has been used in most studies, in which the researchers have found that father's rejection, is the aspect of family behaviour which is the most associated with various forms of aggressive, delinquent and addiction related behaviour, depression, anxiety and somatisation as well as adjustment to school and peers and a person's attitude towards abuse. Children who feel rejected by their parents are significantly more anxious, depressed and have lower self-esteem than the children who feel accepted (Proroković et al. 2004).

#### Statistical data processing

The results were processed and analyzed with the use of statistics software SPSS 17.0. We applied the discriminative analysis, a multivariate statistical procedure, in order to determine, based on discriminative variables, which of the two or more groups the subjects belong.

### RESULTS

Table 1 shows descriptive indicators for the variables related to the quality of family interactions measured with the KOBI questionnaire, broken down by age groups. We established that there is significant difference, in terms of family relationships and parenting style, between the heroin addicts and the group of students, on multivariate level, using the discriminative analysis (Table 2). We established the existence of one discriminative function which explains 100% of the total inter-group variance. Squared canonical correlation (rc) shows that discriminative function explains 20.25% of the variance within the grouping variable, or that the subjects belong to either the experimental or control group.

Wilks'  $\lambda$  of the discriminatory function is high (Wilks'  $\lambda$ =0.798) and indicates that variables are not exceptionally good predictors for the differentiation of groups, that discriminative power of discriminative functions is low.  $\chi^2$  test for function 1 is statistically

significant,  $\chi^2$ =31.63, p<0.01. Based on the results in Table 3, we conclude that, in terms of family relations and parenting style, the biggest difference between the groups is related to rejection by family (0.978) and that the smallest difference between the groups is related to acceptance by mother (0.441), in terms of family relationships and parenting styles. Based on the results given in Table 3, it is concluded that the largest differentiation between the groups lies in rejection by the family (0.978), while the least difference is in acceptance of the mother (0.441) in the family relations and method of upbringing. The average value of the discriminative dimension of the experimental group is closer to the positive pole, while the average value of the control group responses is more shifted towards the negative pole of the discriminative factor. The results indicate that the largest difference between the subjects is on the subscales - rejection by family, rejection by father and rejection by mother; on the subscales acceptance by family, acceptance by father, and acceptance by mother. The subjects in the tested groups differ the most in terms of perception of their families as unhappy (0.496), while they differ the least in terms of communication with their mothers about everything (-0.006) (Table 4). Table 5 shows the results of classification of the two mentioned groups, using the predictors. Based on those indicators, we can conclude that the mentioned predictors enable precise classification of the subjects and that the two mentioned groups, at the multivariate level, differ in terms of test characteristics.

		М	S.D.	Zskew.	Zkurt.	Minimum	Maximum
Acceptance by family	E.G.	22.66	5.21	-5.38	1.07	9	30
F F F F F	K.G.	25.95	3.95			13	30
Rejection by family	E.G.	11.34	5.28	6.43	1.43	5	24
Rejection by fulling	K.G.	7.39	3.55	0.15		5	22
Acceptance by mother	E.G.	39.89	7.74	-6.92	5.34	14	50
Acceptance by mother	K.G.	42.97	6.12			20	50
Rejection by mother	E.G.	25.80	10.63	6.62	2.61	12	56
Rejection by mother	K.G.	20.24	8.40	0.02	2.01	12	50
Acceptance by father	E.G.	33.75	10.42	-3.47	-1.25	14	50
Acceptance by father	K.G.	39.30	8.70	-3.47		10	48
Dejection by father	E.G.	28.95	12.05	4.52	-0.11	12	56
Rejection by father	K.G.	21.02	8.93			12	54

Table 2. Results of discriminative analysis								
F	Λ	Λ Variance % Cumulative variance %		rc	Wilks $\lambda$	$\chi^2$	df	Р
1	0.254	100	100	0.450	0.798	31.63	6	0.0001

Table 3. Matrix of structure of discriminative factor and projection of centroids on discriminative function
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Predictor	Correlation with DF	Group	Projection of centroids
Rejection by family	0.978	Heroin addicts	0.640
Acceptance by family	-0.851	ficioni addicts	0.040
Rejection by father	0.752	Students	-0.391
Rejection by mother	0.634	Students	-0.391
Acceptance by father	-0.574		
Acceptance by mother	-0.506		

Table 4. The most important factors of the matrix of structure of discriminative factor and projection of centroids on
discriminative function

Predictor	Correlation with DF	Group	Projection of centroids
My family is an unhappy family	0.496	Heroin addicts	1.582
My mother would be happier without me	0.416	neroin addicts	1.382
I feel as a stranger in my family	0.321	Ctudanta	0.067
Nobody understands me in my family	0.312	Students	-0.967
My father gives my everything I need	-0.309		
Family is, for me, the source of comfort and satisfaction	-0.307		

		Group	Anticip	Total	
		Gloup	Experimental	Control	Total
Number	Experimental	46	9	55	
Perceived	Number	Control	4	86	90
	%	Experimental	83.6	16.4	100.0
		Control	4.4	95.6	100.0

### DISCUSSION

The results of this study are consistent with the results of other similar studies focusing on the impact of the family situation on the emergence of socially unacceptable and maladaptive behaviour of children. The Rochester longitudinal study of the impact of a mother's psychopathology on a child (Vulić-Prtorić 2001) showed that family and social circumstances make a stronger risk factor for the emergence of maladaptive behaviour than parents' mental disorders. Gavrić, in his study (2005), also emphasizes that cohesion and good relationship between family members, with clear competencies, as well as nurturing a healthy life style, are inhibiting the interest for the use of psychoactive substances. Efendić-Spahić (2009), in her study, refers to a number of Grgin-Lacković's studies, in which it had been established that adolescents of both sexes prefer fathers' understanding, trust, patience and fairness, but that they experience less intimacy and tenderness in the relationship with their fathers than in the relationship with their mothers. According to the same studies, the adolescents whose fathers express less warmth and intimacy, in their mutual relationships, have more problems in the area of their personality and in relationships with other people. The results of Vulić-Prtorić's study (Efendić-Spahić 2009) indicate that adolescents' self-respect is directly, positively influenced by the experienced warmth in the relationship with their mothers and fathers. Also, the study shows that joint effects of exceptional parents' warmth are in the interaction with moderate control (contrary to the extreme compliance or restrictive control). The parental relationships are the most important predictor of a certain form of adjusted or unadjusted behaviour of children and adolescents. It has been established that children with some psychological problems, more often than others, live in families with more interpersonal conflicts, problems with communication, less emotional expression and mutual support and more frequent rejection, neglect and abuse. Levitt's

study (Ramić et al. 2010) and Oetting and Donnermeyer's studies (Ramić et al. 2010) indicate that a negative parental model has a direct impact on addictive behaviour of children. The inter-family relationships in the families of opiate addicts are, to a great extent, disrupted, partly due to the very structure of the family and due to the presence of the addiction problem in the family (Hasanović et al. 2012). The study on socially unacceptable behaviours of youth in Republic of Srpska, conducted by Lovrić (Radetić Lovrić 2013), shows that young people who have a higher score on the socially unacceptable behaviour scale also have significantly lower degree of trust and communication with their parents. In her later studies, Lovrić (Radetić Lovrić 2013) got to the similar conclusion - amicable, warm relationships in family as well as building trust between children and their parents are favourable grounds for the kind of socialization that can reduce the risk of entering the world of drugs. Lack of parental warmth and close relationships represent weak social connections, loss of acceptable social control a parent should have over a child. According to Radetić Lovrić's study from 2013, weak or non existent social control can lead to socially unacceptable behaviours. All the mentioned studies support the understanding how close social, psychological and affective relationships between parents and their children are of great importance. The importance of healthy, warm family interactions, two way communication and trust between children and parents, as well as good family atmosphere can be perceived as protective factors in the prevention of drug addictions (Tomaš & Vučina 2013).

### CONCLUSIONS

In dysfunctional families, parents' tendency to behave in a risky and deviant manner becomes their children learned behaviour pattern. An individual's learned helplessness is the result of unfavourable socialization conditions characterized by aversive stimuli and uncontrollable events such as bad or insufficient communication between children and their parents, family atmosphere which lacks warmth, acceptance, and heartiness as well as by presence of socially pathological phenomena in the family. It has been also established that rejection and non-acceptance of children/persons by their families and parents, bad communication and dysfunctional family relationships are significant predictors for the emergence of heroin addiction.

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### Contribution of individual authors:

- Mitra Mirković-Hajdukov: Participated in the design of study, in patient enroliment end questionnaire distribution, literature searches, interpretation and analyses of data;
- Tamara Efendić Spahić: Participated in the design of study, in student enroliment end questionnaire distribution, interpretation and formating of data;
- Rusmir Softić: Participated in the design of study, interpretation and formating of data;
- Elvir Bećirović: Participated in literature searches, statistical analyses and interpretation of data; Josip Šimić: Participated in interpretation and formating of data.

### References

- 1. Aronson E, Wilson TD, Akert RM: Socijalna psihologija. Mate doo, Zagreb, 2005.
- 2. Berk LE: Psychology of lifelong development (translation of the third edition). Print Slap, Jastrebarsko, 2008.
- 3. Both A: Conteporary Families: Looking forward, looking back. MN: National Council on family relations, Minneapolis, 2001.
- 4. Buljan D: Prevention, recognition and treatment of addiction: effects of addictive substances on the brain and behavior. Center for the Study and combat alcoholism and other addictions, University Hospital "Sisters of Mercy", Department of Psychiatry, Zagreb, 2010.
- 5. Cerić I: Drug addiction. In: Kecmanović D: Psychiatry, (p.724). Medical books, Belgrade-Zagreb, 1986.
- 6. Efendić Spahić-T: Personality traits of parents as determinants of perception of quality of family interactions by their children and adolescents. Doctoral dissertation, Sarajevo, 2009.
- 7. Gavrić M: Psychological determinants of substance abuse in high school students in the Brcko District. Master Thesis, University of Sarajevo, postgraduate studies in child and adolescent psychiatry and psychology, Sarajevo, 2005.

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- 8. Grgin Lacković-K: The Psychology of adolescence. Print Slap, Jastrebarsko, 2006.
- 9. Hasanović M, Pajević I, Kuldija A, Delić A, Sutović A: Silence in the family about the abuse of heroin and its effect on the initiation of treatment. European Psychiatry, The Journal of the association of European psychiatrists: 19th European Congress of Psychiatry. Abstracts on CD-ROM 2011; 26:49.
- 10. Hasanović M, Pajević I, Kuldija A, Delić A: Medically assisted treatment for opiate addiction - suboxonemethod as prevention of social exclusion of youth – Tuzla model. Psychiatr Danub 2012; 24:394-404.
- 11. Hasanović M, Pajević I, Kuldija A, Delić A, Sutović A: Quality of Life of Heroin Addicts and their Family Members improved during Medical Assisted Treatment of Opiate Dependence with Buprenorphine/Naloxone (Suboxone). British Journal of Medical and Health Sciences 2012; 1:55-62.
- 12. Kozarić-Kovačić D, Grubišić-Ilić M, Grozdanić V: Forensic psychiatry. Medical Biochemists, Zagreb, 2005.
- 13. Krstić D: Psychological Dictionary. Modern administration, Belgrade, 1991.
- 14. Marić J: Clinical Psychiatry, Megraf, Belgrade, 2005.
- 15. Milić A: The birth of the modern family. Institute on textbooks and teaching aids, Belgrade, 1988.
- 16. Pašalić-Kreso A: Coordinates of family education. JEZ, Sarajevo, 2004.
- Proroković A, Lacković-Grgin K, Ćubela Adorić V, Penezić Z: Collection of psychological scales and questionnaires second volume, University of Zadar, Zadar, 2004
- Radetić Lovrić S: The role of social psychological constructs in explaining the phenomena of drug addiction. Conference proceedings from the biennial Congress of Psychologists of Bosnia and Herzegovina. Proceedings of the Congress of Psychologists of Bosnia and Herzegovina, 2013; 3:20,723.
- 19. Ramić L, Mehić-Basara N, Grabovica M, Štimjanin I: Parents alcoholism as a risk factor for substance abuse among young people. Modern approaches in the treatment of disorders caused by alcohol. Proceedings of the First Alchoholism Symposium in Bosnia and Herzegovina with international participation, 156-162. Department of Psychiatry, University Clinical Centre Tuzla, Tuzla, 2010.
- 20. Rathold NH: Early expirience in the life of narcotic user. Int. Council on Alcohol and Addiction, Lausanne, in 1970.
- 21. Sakoman S: Family and prevention of addiction. SysPrint, Zagreb, 2002.
- 22. Sakoman S: Treatment of opiate addiction-the importance of pharmacotherapy. Alcoholism-Journal on alcoholism and related addictions 2011; 47:51-101.
- 23. Stojaković P: Educational Psychology I, Faculty of Philosophy, Banja Luka, 2002.
- 24. Tomas M & Vučina T: The importance of family and peer factors in explaining the consumption of addictive substances. Mostar: Conference Proceedings from the biennial Congress of Psychologists of Bosnia and Herzegovina, Proceedings of the Congress of Psychologists of Bosnia and Herzegovina, 2013; 30,325.