# Women and Addiction (Alcohol and Opiates): Comparative Analysis of Psychosocial Aspects

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#### SUMMARY

**Introduction** Nowadays women constitute one third of all addicts. In the last decade, there has been a remarkable growth in scientific interest in biochemical and psychosocial aspects of women's addiction. Many researches point out the specific character of women's addiction.

**Objective** The aim of the study was to assess and compare psychosocial aspects, including the sociodemographic characteristics as well as the specific aspects of functioning of family and interpersonal relationships of the subjects addicted to opiates and alcohol.

**Methods** There were two substance addict groups (32 and 30 subjects addicted to drugs and alcohol, respectively) and the control group, consisting of 30 subjects (no substance addiction). A socio-demographic data questionnaire and semi-structured Addiction Severity Index (ASI) interview were used.

**Results** The results of the research indicated that there were statistically significant differences between the compared groups in respect to the age of the subjects, family history of addiction disorders, education, parenthood, employment work status, and marital status. The subjects addicted to opiates differed significantly in respect to manifestation of aggressive, delinquent behaviour, infectious diseases, presence of addicts-partnerships, but there were no significant differences in relation to physical abuse, sexual abuse and self-assessment of depression.

**Conclusion** The results of this research suggest that subjects addicted to opiates differed largely from the subjects addicted to alcohol in terms of the age of the subjects, education level, family relationships, partnerships and social relationships, which all have to be taken into consideration when designing a therapy protocol and planning activities for prevention.

Keywords: women; alcoholism; opiate addiction

#### INTRODUCTION

According to the latest reports of the World Health Organization (WHO), there are around 20 million of addicts nowadays in the world, out of which 15.6 million opiate addicts [1]. Results of epidemiological studies consistently confirm that both the prevalence of the alcohol and opiate addiction is more frequent in men, being tree to five times lower in women [2, 3, 4]. This gender difference was ignored until 1970. In the last decade, there was a remarkable growth of interest in biomedical and psychosocial aspects of addiction in women [5-8]. Many researches show that women develop addiction faster, even if they consume smaller quantities of psychoactive substances (PAS), and the consequences appear sooner, being more devastating [9].

Historical findings reveal that women have been consuming alcohol since ancient times and have often been condemned for that. History of the use and abuse of alcohol in women is interwoven with their ever-changing role in social and family life. Documents of opiate addiction history in women date back from the beginning of 19<sup>th</sup> century. It is hard to imagine that women were more prevalent among addicts in the 19<sup>th</sup> century; prototype of an addict was a woman, and opiate use was less proscribed than alcohol use [10, 11]. Addiction in women was mostly iatrogenic, unwanted effect of benevolent treatment approaches.

Addiction is a medical disorder with complex etiology, multiple manifestations and varying clinical course, a disorder composed of a number of physiological, behavioral and cognitive phenomena, where use of the certain substance or group of substances becomes more important for such a person than other previously more important behavioral patterns. The importance of compulsion to take the substance is more and more recognized in the dynamics of addiction, making this criterion important in definition of addiction [12, 13]. Other behavioral and cognitive phenomena, such as loss of control and continuation of harmful use, regardless of consequences, are tightly associated with the compulsion phenomenon or derive from it.

### OBJECTIVE

The goal of the research was to analyze and compare similarities and differences in sociodemographic, psychosocial and interpersonal aspects of subjects addicted to alcohol and to opiates, in order to obtain additional information useful for

Diana RAKETIĆ Special Hospital for Addiction Teodora Drajzera 44 11000 Belgrade Serbia **dianar@open.telekom.rs**  assessment of possibilities of psychotherapeutic work in the integrative treatment process for opiate and alcohol addicts, as well as for planning of preventive measures. Inclusion of the control group was attempted.

#### **METHODS**

The study comprised 92 subjects divided into three groups. The first and the second group were recruited among inpatients or outpatients treated in the Special Hospital for Addiction, Belgrade, Serbia, during 2006-2008. The first group consisted of 30 subjects with the alcohol addiction, as defined by ICD-10 criteria (a definite diagnosis of dependence should usually be made only if three or more of the following were present together at any time point during the previous year: a strong desire or sense of compulsion to take the substance; difficulties in controlling the substance-taking behaviour in terms of its onset, termination, or levels of use; a physiological withdrawal state when substance use was discontinued or reduced; evidence of tolerance, such that increased doses of the psychoactive substance were required in order to achieve effects originally produced by lower doses; progressive neglect of alternative pleasures or interests because of psychoactive substance use, increased amount of time necessary to obtain or take the substance or to recover from its effects; persisting with substance use despite clear evidence of overtly harmful consequences). The second group consisted of 32 subjects with opiate (heroin) addiction, as defined by ICD-10 criteria.

The third, control group, consisted of 30 subjects, without mental disorders, not fulfilling criteria for any disorder. Subjects in this group were residents of Belgrade, neighbours or acquaintances of medical staff in the Special Hospital for Addiction, without history of any substance abuse.

Inclusion criteria for addicts were: a) age between 19 and 45 years; b) duration of addiction up to five years, c) abstinence from alcohol and opiates for at least 10 days (after detoxification and alleviation of abstinence syndrome, with achieved psychophysiological stabilization of health, d) residents of Belgrade, Serbia.

Exclusion criteria were: a) abuse or addiction to other psychoactive substances (PAS), b) psychiatric comorbidity (AXIS I disorders), c) serious somatic and neurological disorders, d) subjects with IQ less than 90.

Research instruments were:

1. Questionnaire with sociodemographic data – created for this research, for all three groups, with 6 items (year of birth, education level, employment status, marital status, parenthood, family history of addiction disorders);

2. Semi structured interview for assessment of addiction severity, clinical version (T. McLellan, J. Cacciola, 1982), consisting of seven potential fields of problematic functioning in addicts: general somatic health, employment, alcohol, drugs, legal status, family-social relations and psychiatric status. It consists of 161 items. This instrument provides information on premorbid state, assessment of progress in treatment and evaluation of outcome. The research was performed as a cross-sectional study, in accordance with the requirements of the School of Medicine, University of Belgrade, as a part of the Master's Thesis of the first author.

Statistical analysis was performed using SPSS 15.0 (Chicago, Illinois, USA). Data were presented as numbers and percents or means  $\pm$  standard deviations. For group comparisons,  $\chi^2$  test and univariate analysis of variance (ANOVA) were used. All p values less than 0.05 were considered significant.

#### RESULTS

The study included 92 subjects, 32 subjects with opiate addiction, 30 with alcohol addiction, and 30 in the control group. The results, obtained from the sociodemographic questionnaire applied in all three groups, showed statistically significant difference regarding the age (F=57.4, df=3, p<0.001). The youngest subjects were opiate addicts, and the oldest subjects were alcohol addicts. An average age of alcohol addicts was  $39.97\pm5.12$  years, opiate addicts  $26.47\pm4.17$  and control group  $32.07\pm5.61$  years.

Regarding the number of children, there was a significant difference between the compared groups ( $\chi^2$ =21.02, df=6, p=0.002). Opiate addict group had no children in 78.1% of cases, alcohol addicts in 26.7% of the time, while control group subjects had no children in 60% of cases.

Education level differed significantly between three compared groups ( $\chi^2$ =9.26, df=4, p=0.05). Primary education was recorded in 15.6% of opiate addicts, 10.0% of alcohol addicts and 0% in the control group. Secondary education in opiate, alcohol and control group was 78.1%, 66.7% and 90.0%, respectively. College education in opiate, alcohol and control group was 6.1%, 23.3% and 10.0%, respectively.

Regarding employment status, the highest percentage of unemployment (65.7%) was found in opiate addicts, while 33.3% of the control group was unemployed; 76.7% of alcohol addicts were employed. There was a significant difference of the employment status in our subjects ( $\chi^2$ =12.5, df=2, p=0.002).

There was also a significant difference in marital status. The highest percentage of single subjects (65.6%) was found in opiate addicts. There was 46.7% of married in the control group. The highest percentage of divorced (20%), widowed (10%) and separated (6.7%) was found in the group of alcohol addicts, as shown in Table 1.

The results related to family history of addiction disorders showed significant differences between the compared groups ( $\chi^2$ =16.38, df=2, p=0.001). In the group of opiate addicts, positive family history was present in 62.5%. In alcohol addicts, it was evident in 50.0% of cases, while it was present in 13.3% in the control group.

The Addiction Severity Index (ASI) – semi structured interview for evaluation of addiction level was used for the first two groups. None of the opiate addicted subjects was HIV positive, and 43.7% were HCV positive. In the opiate addiction group, intranasal and intravenous opiates were

Variable			Group			
			Opiate addicts	Alcohol addicts	Control group	Total
Marital status	Married	n	10	12	14	36
		%	31.3	40.0	46.7	39.1
	Remarried	n	0	2	0	2
		%	0.0	6.7	0.0	2.2
	Widowed	n	0	3	0	3
		%	0.0	10.0	0.0	3.3
	Separated	n	1	2	0	3
		%	3.1	6.7	0.0	3.3
	Divorced	n	0	6	2	8
		%	0.0	20.0	6.7	8.7
	Single	n	21	5	14	40
		%	65.6	16.7	46.7	43.5
Total		n	32	30	30	92
		%	100.0	100.0	100.0	100.0

Table 1. D	ifference of r	narital status
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n – number of women

Table 2. \	Way of	life during	the last	three	vears

Variable			Gro		
			Opiate addicts	Alcohol addicts	Total
	Partner and children	n	5	12	17
		%	15.6	40.0	27.4
	Only partner	n	6	4	10
		%	18.8	13.3	16.1
	Only with children	n	0	8	8
		%	0.0	26.7	12.9
Way of life	With parents	n	14	4	18
Way of life		%	43.7	13.3	29.0
	With family	n	4	1	5
		%	12.5	3.3	8.1
	Single	n	2	1	3
		%	6.3	3.3	4.8
	Controlled environment	n	1	0	1
		%	3.1	0.0	1.6
Total		n	32	30	62
		%	100.0	100.0	100.0

used in 50.0% each. None of the alcohol addicted subjects was HIV or HCV positive.

Positive criminogenic status and illegal activities were present only in the opiate addicted group, in 56% of cases; 22% were involved in prostitution, 25% in theft, and 9% in dealing drugs.

Alcohol and opiate addicts differed significantly in terms of their marital status satisfaction ( $\chi^2$ =8.31, df=2, p=0.01). Opiate addicts were mostly dissatisfied (50.0%), while the alcohol addicts were mostly indifferent (66.7%).

Asked if they lived with someone who had alcohol abuse problem, the alcohol and opiate addicts did not give significantly different answers (16.7% vs. 28.1%) ( $\chi^2$ =1.16, df=1, p=0.28). The question about living with someone

who had drug abuse problem produced answers that differed significantly. Opiate and alcohol addicts lived with such persons in 62.5% and 13.3% of cases, respectively ( $\chi^2$ =15.77, df=1, p=0.001).

There was no significant difference regarding physical ( $\chi^2$ =2, df=1, p=0.15) and sexual abuse ( $\chi^2$ =0.04, df=1, p=0.83) between these two groups. Opiate addicts were physically abused in 40.6% and sexually abused in 18.8% of cases; alcohol addicts were physically and sexually abused in 23.3% and 16.7% of cases, respectively.

Since more than 20% of cells in this analysis had expected count less than 5, Fisher's exact test was used. Significant difference of the way of life during the last three years was found between the compared groups ( $\chi$ 2=19.93; p=0.001). Alcohol addicts lived in secondary family (partner and children) in 40% of cases, and opiate addicts lived in primary family (with parents) in 43.8% of cases (Table 2).

Opiate addicts spent their leisure time with friends in 50.0%, with family in 37.5%, and alone in 12.5% of cases, while alcohol addicts spent their time with family in 63.3%, with friends in 6.7%, and alone in 30% of cases ( $\chi^2$ =14.34, df=2, p=0.001).

This research included manifestation of serious problems with close family members (mother, father, brother, sister, partner, children) during a lifetime. A statistically significant difference was established only regarding the relationship with father; opiate addicts had problems in this relationship during their lifetime in 65% of cases ( $\chi^2$ =6.45, df=1, p=0.01).

Self-assessment related to emotional excesses (not alcohol or opiate-related) showed that depression was reported by opiate and alcohol addicts in 56.3% and 73.3%, respectively ( $\chi^2$ =1.97, df=1, p=0.16). However, opiate (84.4%) and alcohol addicts (100.0%) differed significantly in terms of anxiety ( $\chi^2$ =5.09, df=1, p=0.02). In 50.0% of cases, opiate addicts reported violent behaviour compared to only 20.0% of alcohol addicts ( $\chi^2$ =6.09, df=1, p=0.014). There was no significant difference in suicidal ideation ( $\chi^2$ =1.23, df=1, p=0.29), which was reported by opiate and alcohol addicts in 15.65 % and 26.7%, respectively.

#### DISCUSSION

The research hypothesis, supported by our results, was that there were significant differences between opiate and alcohol addicted subjects in different domains of functioning. Inclusion of healthy women made these differences even more obvious. Women develop addiction during their best, most productive, reproductive period of life, with the consequences at all levels of functioning (family, profession, social functioning), due to infiltrating and destructive power of addiction [14]. Our research reveals significant differences regarding the age, because opiate addiction develops during adolescence, while alcohol addiction develops later in life. Alcohol addicts are mainly married or divorced, live with a partner and children, have completed education, are employed, mostly indifferent to their marital status and way of life, and they spend leisure time alone or with family. Opiate addicts include more subjects with non-completed secondary school, unemployed, single, living with parents, and spending leisure time with their friends. These data are compatible with other studies [15].

Opiate addicts' families have a problem of separation. Drug use places addict with one foot at home and another on the street. This way of "pseudo-individuation" solves the separation problem [16]. To understand an incomplete separation, leaving school and unemployment, the fact that opiate addicts start using substance in early and mid-adolescence, develop complete addiction pattern early, causing the delay in individuation, must be taken into consideration. There is a wide spectrum of substances for "experimenting" in opiate addicts compared to alcohol addicts where there are only antianxiety drugs, apart from the alcohol.

Emotional bonding is an important factor in women's addiction. Opiate addiction starts and exists within a relationship. Many women report that their initial experience with substances occurred with the sexual partner or a family member who also consumed drugs. Our research shows that 63% of opiate addicts live with someone who has drug-related problems, either a family member or a partner. This is in accordance with the international research [17, 18].

Numerous researches have demonstrated drastic increase in illegal activities by the opiate addicted women [19]. In the USA, in the period 1982 to 1991, there was an 89% increase in criminal offenses. Half of women were arrested under the influence of drugs, and 40% were addicts [20]. This research shows high percentage of opiate addicts with positive criminogenic status (around 40%), as an addiction reinforcer. Their involvement in criminal activities is mostly through partners.

In discussing infectious diseases, high percentage of the intravenous drug use in our sample, and all, mostly chronic and progressive, infectious diseases connected to this route of administration should be taken into account. They are mostly HIV infection and viral hepatic diseases, above all hepatitis C, present in our sample in 50% of opiate addicts. The leading cause of death among young women intravenous users, during the last decade, was HIV infection and other infectious diseases (hepatitis, endocarditic, TBC) [21, 22].

Our research shows significant differences in positive family history of addiction disorders. It is high in both

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groups, for opiate addicts in 62.5% and for alcohol addicts in 50.0% of cases. In addict's families, there is a multigenerational problem of chemical dependence, especially alcoholism. Numerous studies indicate importance of family history in formation and development of addiction disorders, implicating greater importance of genetic predisposition in alcohol addiction [23, 24].

Differences between studied groups implicate the need for different design of prevention and treatment programmes for opiate and alcohol addicted women. These programmes should not be oriented to deficiencies but to maintenance and development of the remaining skills and potentials [25]. Preventive programmes of opiate addictions should be provided for younger, more immature subjects. Treatment should be oriented to support independence and separation from the masochistic symbiotic relationships, and more attention should be paid to infectious diseases, both in preventive programmes and treatment protocols, keeping in mind the importance of successful therapy of chronic infectious diseases (e.g. HCV) in management of opiate addiction [26]. Both groups have similarly high levels of psychological distress, trauma experience and positive family history of addiction disorders, as reported by other studies as well [27, 28, 29]. Preventive and treatment measures should be created on the ground of these facts.

Bearing in mind the limitations in selection, we did not rely too much on the comparison with the control group.

#### CONCLUSION

In our study, opiate addicted women differed from the alcohol addicted women in many aspects, such as age at the onset of addiction, education level, rate of progression, specific interpersonal relationship (family, partnership and social relationships), delinquency manifestations and socially maladapted behaviour. Differences in other aspects, e.g. depression, anxiety, sexual and physical abuse, and positive family history were not found.

Both aspects have confirmed the importance of evaluation of the specific women's characteristics which have important therapeutic implications in treatment design and preventive activities as well as in early recognition of the risk factors.

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## Жене и зависност од алкохола и опијата: компаративна анализа психосоцијалних аспеката

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#### КРАТАК САДРЖАЈ

Увод Данас жене чине око трећине зависника. У последњој декади дошло је до развоја значајног научног интересовања о биомедицинским и психосоцијалним аспектима зависности код жена. Многа истраживања указују на специфичности ове зависности.

**Циљ рада** Циљ истраживања је био да се испитају и упореде психосоцијални аспекти, који укључују социодемографске одлике и специфичности функционисања породичних и других интерперсоналних релација, код испитаница зависних од алкохола и опијата.

**Методе рада** Испитане су укупно 92 жене које су сврстане у две експерименталне групе (32 испитанице зависне од опијата и 30 испитаница зависних од алкохола) и контролну групу (30 здравих жена). Коришћени су упитник са социодемографским подацима и полуструктурирани интервју с индексом тежине зависности (енгл. addiction severity index – ASI).

Резултати Истраживање је показало да постоје статистички значајне разлике између испитиваних група у односу на старост испитаница, наслеђе, образовање, материнство, радни статус и брачно стање. Испитанице зависне од опијата статистички се значајно разликују од осталих жена обухваћених студијом у погледу испољавања насилног и криминогеног понашања, оболевања од инфективних болести и постојања зависничких партнерских односа, док статистички значајна разлика није утврђена када су у питању физичко и сексуално злостављање и самопроцена депресивности. Закључак Резултати истраживања показују да се зависнице од опијата у много чему разликују од жена зависних од алкохола, као што су старосно доба почетка болести, степен образовања и породични, партнерски и социјални односи, што се све мора имати у виду приликом осмишљавања терапијског протокола, али и планирања превентивних активности.

Кључне речи: жене; алкохолизам; опијатска зависност

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