
Extended Abstract

Predictive Factors for Treatment Success in the Early Period of Buprenorphine/Naloxone Maintenance Treatment for Opiate Addiction^{*}

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Abstract

The aim of this study is to determine the factors that influence the treatment response and to contribute to the development of treatment protocols that are specific to our society. This study was conducted on 50 patients who were diagnosed with opiate addiction in the İstanbul Faculty of Medicine, Department of Psychiatry, İstanbul University. They were first interviewed at the inpatient ward during detoxification and were followed up monthly at the Addiction Outpatient Unit after discharge. During the first and the forth interview (at the end of the third month) the Addiction Severity Index (ASI), the Zuckerman-Kuhlman Personality Questionnaire, the Levenson Psychopathy Scale, the Addiction Treatment Success Factors Predicting Scale, the Visual Analog Scale, and the Perceived Stress Scale were administered. During the interviews at the first, second, and third months after discharge, the Visual Analog Scale was administered. At each visit, a urine sample was collected from the patients in order to screen for opiates, cocaine, cannabis, benzodiazepines, and amphetamines. The patients with a positive urine test result for any substance were excluded from the follow up. A total of 50 opiate addicted patients were included in the study, 82% (n = 41) of them were males, 18% (n = 9) were females, and their ages were between 20 and 69 years. We found that age, educational level, gender, type of substance use, perceived stress, medical condition, business-support status, drug and alcohol use, legal status, family and social relationships, psychiatric condition, craving, personality traits, psychopathy, and social and environmental factors did not have predictive value for short term treatment success among patients with opiate addiction.

Keywords: Opiate addiction • Heroin • Treatment • Buprenorphine/Naloxone • Opioid replacement

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Opiate addiction is a chronic, recurrent disease that affects many people globally (Tellioglu, 2010). Opiate maintenance treatments have been proven to be the most effective approach for opiate addiction. Opiate maintenance treatment with buprenorphine increases treatment attendance, decreases the use of illegal drugs, prevents HIV transmission, and improves social well-being (Gowing & Ali, 2006). However, dropping out of addiction treatment and abusing opiate or other addictive substances during and after opiate addiction treatment are very common (Petty & Bickel, 1999). Predictive factors for treatment success in substance addiction treatment have been classified as personal, interpersonal, environmental, and demographical factors (Turan, 2010). High education level, presence of job opportunities, motivation at the beginning of the treatment, having good relation with treatment staff, psychological and physical wellbeing, old age, and high socio-economic status have been reported to influence treatment outcome (Howard & McCaughrin, 1996; Vogt, 2000). Developing new strategies for improving treatment outcomes is crucial. The aim of this study is to determine the factors that influence the treatment response and to contribute to the development of treatment protocols that are specific to our society.

The study was conducted on 50 patients who were diagnosed with opiate addiction in the, İstanbul Faculty of Medicine, Department of Psychiatry, İstanbul University. They were first seen as an inpatient during detoxification period and they were followed at the Addiction Outpatient Unit after discharge. During the first interview and the interview which was done at the end of the third month after discharge, the Turkish version of the Addiction Severity Index (ASI) (Demirbaş, 2003; McLellan, 1980), the Zuckerman-Kuhlman Personality Questionnaire (Zuckerman, 2002; Zuckerman, Kuhlman, Joireman, Teta & Kraft, 1993), the Levenson Psychopathy Scale (Engeler & Yargıç, 2004; Levenson, Kiehl, Kent & Fitzpatrick, 1995), the Addiction Treatment Success Factors Predicting Scale (Turan, 2010), the Visual Analog Scale (Assadi, Radgoodarzi, & Ahmadi-Abhari, 2003; Price, McGrath, Rafii, & Buckingham, 1983; Wewers & Lowe, 1990) and the Perceived Stress Scale (PSS) (Cohen & Williamson, 1988) with an adapted version of PSS in Turkish (Yerlikaya & İnanç, 2007) were provided to the participants. During the interviews at the first, second, and third months after discharge, the Visual Analog Scale was administered. At each visit, a urine sample was collected from the patients in

order to screen for opiates, cocaine, cannabis, benzodiazepines and amphetamines. The patients with a positive urine test result for any substance were excluded from the follow up.

Among the 50 opiate addicted patients were included in the study, 82% ($n = 41$) of them were males, 18% ($n = 9$) were females, and their ages were between 20 and 69 years. The average age of the patients was 38.28 ($SD \pm 12.96$). Forty-four percent of these patients ($n = 22$) were never married, 42% ($n = 21$) were married, 10% ($n = 5$) were divorced, and 4% ($n = 2$) were widowed. Fifty-four percent of patients ($n = 27$) had 11 years or more of education, 26% ($n = 13$) had 5 years, 20% ($n = 10$) had 8–10 years of education. We found that age, educational level, gender, type of substance use, perceived stress, medical condition, business-support status, drug and alcohol use, legal status, family and social relationships, psychiatric condition, craving, personality traits, psychopathy, and social and environmental factors did not have predictive value for short term treatment success among patients with opiate addiction.

Among the patients who continued the treatment and did not use any illegal substance, we found a decrease in impulsivity, excitement seeking, craving and anxiety, also better family and social relationships, and improvement in psychiatric conditions.

Our treatment success was comparable with previous studies. It has been reported that most of the patients in opioid maintenance treatment relapse in the first three months (Hubbard & Marsden, 1986; Hunt & Belpalec, 1974). However, some studies have reported higher success rates (Stancliff et al., 2012).

Studies for determining the predictive factors in opiate treatment are scarce (Ziedonis et al., 2009). Among inpatients, their age, gender, duration of substance use, education, psychopathology, and occupational status did not predict the outcome (San, Cami, Peri, Mata, & Porta, 1989). Craving for opiates was not found to be related to early treatment drop-outs (Scherbaum, Heppekausen, & Rist, 2004). The results of these studies are compatible with ours. However, some studies reported poorer results among patients who are of younger age (Backmund, Meyer, Eichenlaub, & Schütz, 2001; Ghodse et al., 2002; Gössling, Gunkel, Schneider, & Melles, 2001), have a lower education status (Backmund et al., 2001), more severe substance dependence, medical problems (Franken &

Hendriks, 1999), and being unmarried (Pérez de los Cobos, Trujols, Ribalta, & Casas, 1997). Also the finding that history of intravenous drug use influences treatment results contradicts with our finding (McCann et al., 1997).

We did not find a relation between opiate craving at the beginning of the treatment and treatment completion. However, some studies suggest that craving may affect treatment outcome (Ilgen, Jain, Kim, & Trafton, 2008).

In this study, the ASI scores did not predict the treatment outcome. Poirier et al. (2004) reported that the patients who had higher scores on the ASI did better with buprenorphine maintenance treatment. Several studies reported that various subscales were related with treatment outcome. Lang and Belenko (2000) reported that employment status and criminal history were important. Vogt (2000) reported psychological and physical wellbeing was effective on outcome.

The data about the relationship between psychiatric history and treatment outcome is also contradictory. Teesson et al. (2008) reported that depression was the most common psychiatric comorbid disorder among patients with opiate addiction and depressed patients had a worse treatment outcome for addiction. While VanVoorhis (2000) claims that depression effects treatment compliance, Hubbard (2006) reports no relationship between depression and treatment completion. A meta-analysis (Brooner, Kidorf, King, & Stoller, 1998) reported a weak correlation between depression and substance abuse during and after addiction treatment.

We did not find any significant difference between subjects who completed the treatment and treatment drop-outs on the subscales of the Zuckerman-Kuhlman Personality Test. Poirier et al. (2004) reported that low scores on impulsivity and intolerance to loneliness subscales of the same test increased the treatment success. In another study with methadone, there was a positive relationship between neuroticism subscale score and addiction severity (Brooner, Schmidt, & Herbst, 1994).

Many studies report that patients with antisocial personality traits do not complete addiction treatment (Carroll, Ball, & Rounsaville, 1993; Haro et al., 2004; Verheul, Van den Bosch, & Ball, 2005). We did not find a significant relation between treatment completion and Levenson Psychopathy Scale scores. There are also other studies reporting that patients with antisocial persona-

lity disorder have similar outcomes in treatment compared to other patients (Brooner et al., 1998; Marlowe, Patapis, & DeMatteo, 2003). The discrepancy between these findings can be explained by the severity of antisocial traits as the key factor (Marlowe et al., 2003).

Contrary to our findings, Brooner et al. (1998) reported a relationship between stress level and opiate abuse during and after the completion of treatment. As a result of this study, we can conclude that the addiction treatment may be beneficial for any opiate dependent patient who can adhere to the treatment.

Kaynakça/References

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