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### **Research Article**

# Resistance, Ambivalence and Change: People with Drug and Alcohol Addiction

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#### **Abstract**

When people with drug and alcohol addiction drop out of treatment, they may experience impaired psychological, physical, and mental functioning, emotional distress, and return to intense drug use. Some of the reasons for dropping out of treatment are related to the personal characteristics of the clients, their family background, and the therapeutic intervention that may not be well suited to the client's needs. The purpose of the current article is to present data and research about the phenomenon of dropping out of treatment for people with an addiction problem. The study also checks the perceptions of therapists who treat individuals with addiction about the reasons for dropping out of treatment and effective ways to deal with this phenomenon. The findings of the various studies and the interviews revealed that the ambivalence of individuals with addiction toward participating in treatment, resistance to making changes in their lives, difficulty in trusting and establishing interpersonal contact with the therapists, and pessimism about the outcome of treatment were among the main reasons for dropping out. The article recommends several measures to reduce dropout from treatment and improve therapeutic results: building therapeutic relationships that promote the client's self-efficacy, implementing emotional interpersonal therapy, activating the motivational approach, conducting systemic family intervention, and implementing problem-solving programs.

**Keywords:** Addiction disorder; Ambivalence; Dilemma of change; Dropout from treatment; Self-efficacy

#### Introduction

There are two main viewpoints regarding the dropout of patients from treatment. The first regards dropout as a characteristic of treatment, based on the assumption that most patients will later reintegrate into treatment and may achieve the set goals. The second considers dropping out as a serious setback in one's effort to change one's life

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[1]. The dropout from treatment may contribute to the experience of frustration and self-disappointment, especially for populations with an addiction disorder [2]. Dropout from treatment is defined as the cessation of treatment due to the patient's lack of adaptation to the treatment setting [3]. The dropout may occur of the patient's free will or because of a decision of the treatment setting. One of the possible results of patients with drug addictions dropping out of treatment is relapse, which means an intermittent return to drug use [1]. The fact that people with addictions drop out of treatment is considered to be one of the reasons for the moderate effectiveness in achieving treatment goals in the treatment of addiction. Studies analyzing the characteristics of people with addiction dropping out of treatment indicate that the largest dropout occurs in the first three months of treatment; about 40% of patients may drop out during this period [4,5]. Dropout from treatment makes it difficult to build an interpersonal relationship between the therapist and the patient and therefore to achieve the goals of the treatment [1]. The research literature indicates that lack of support from the family and reasons related to the inadequacy of the therapeutic intervention plan for the patient's needs are among the reasons for dropping out of treatment [6]. The reasons related to the patient include low self-efficacy and low motivation to participate in treatment. Bandura pointed out that the patients' lack of self-confidence in their ability to make a change in their lives and low self-efficacy were often the main reasons for abandoning treatment [7]. Many therapists accept this concept and consider people's low level of motivation and their passivity to be key factors in dropping out of treatment [8]. In view of the above, questions arise about how the therapeutic system should deal with the issue of patients' low motivation. The present study attempted to answer these questions.

According to the ecological approach, dropping out of treatment may occur when there are conflicts, dysfunction, and difficulty in supporting the treatment process by the patient's family [9,10]. Low pressure from family members or the law enforcement system on individuals with addiction to participate in treatment reduces the chance that the patient will persist in treatment [11]. Therefore, the question arises whether the implementation of family interventions from the early stages of treatment may contribute to the patients' persistence in treatment. Brackaert described the beneficial effect of family support networks on patients' persistence in treatment and noted that the presence of such support networks may often help reduce dropout [3]. Studies examining the systemic aspect of treatment indicate that low access by people with addiction to treatment centers and failure to adapt the treatment plan to the patient's needs may be additional factors for dropping out [6,12].

Based on their goals, intervention programs for individuals with addiction are usually of two types: programs that promote complete abstinence from drugs and alcohol and those that emphasize harm reduction. Patients who received treatment that emphasized complete abstinence from psychoactive substances [5] are forced to stop their participation in psychosocial treatment and integrate into physical rehabilitation if it is discovered that they have returned to using drugs. Some of these patients do not return to treatment. The concept

underlying complete abstinence from drugs [13] reflects the difficulty of providing effective treatment when the population is under the influence of psychoactive substances [5]. Yet, this concept does not help the population seeking to gradually reduce drug use and improve functioning in various areas of life [14]. The research literature reveals differences in perceptions between therapists and patients with regard to the treatment characteristics that may contribute to dropout [1]. Often, therapists consider the personal characteristics of the patients, such as immaturity, lack of motivation, and passivity, to be the main reasons why difficulties persist in treatment [1]. Patients, by contrast, point to the inadequacy of the intervention plan, inaccessibility of the treatment centers, and difficulty developing a relationship with the therapist as reasons that made it difficult for them to persevere [1]. There is consensus among researchers that dropping out of treatment harms people with addiction psychologically, behaviorally, and functionally and has many additional negative consequences [2]. Dropout is often the first step toward returning to the cycle of addiction. Sakab noted that dropping out of treatment continues to be a common problem for people with addiction that limits the effectiveness of treatment [11]. Studies indicate that the length of time that a patient spends in supportive and inclusive treatment affects the achievement of favorable treatment results [15].

### Methods of Literature Search and Interview Findings

The process of reviewing and locating studies and literature dealing with the issue of dropping out of treatment among people with addiction is done according to search engines of databases such as Google Scholar, and PsycInfo electronic databases of the keywords: dropout from treatment; addiction disorder; ambivalence; dilemma of change; self-efficacy. The search encompassed articles published from 1990 to 2020. Limited to articles published in the English language. After examining titles, abstracts, and full articles, reference is made to 27 articles, surveys, and literature dealing with treatment processes, reduction and prevention of dropping out of treatment among a population with addiction and a population in need. The findings of interviews with reference to the phenomenon of addicts dropping out of treatment conducted in 2022 in Israel with 14 addiction therapists.

### Behavioral change, promoting self-efficacy and reducing dropout from treatment

The findings from interviews conducted with therapists of people dealing with addiction in Israel revealed a number of challenges related to patient dropout. Three main topics emerged: (a) treatment processes and patient ambivalence, (b) dilemma concerning behavioral change and dropout prediction, and (c) promoting self-efficacy and reducing dropout from treatment.

### Treatment processes and patient ambivalence

Therapeutic intervention involving individuals with addiction includes the diagnosis of the patient's condition regarding drug and alcohol use, daily functioning, characteristics of family relationships, and level of occupational functioning. The ability to initiate high-quality contact between the therapists and the client may greatly affect the ability to provide care in the long term.

The Interviewees with the therapists noted the importance of building a relationship at the beginning of the process. They assumed that such an action would contribute to understanding the patients' psychosocial condition and make possible an understanding of their level of motivation to participate in treatment. The process of diagnosing the patients revealed that many of them were ambivalent about stopping drug use. Some of the patients lacked internal motivation to make a change in their lives, and their request to participate in treatment was often the result of external pressure from the court or family members. The diagnostic phase by the therapists included observing the patients' emotional state, their subjective sense of distress, and the meaning of drug use for them. The therapists described the patients' lack of interest in the learning processes that were offered to them in individual or group therapy, some clients covertly expressing pessimism about their ability to change.

The attempts to involve the family members to strengthen the patients' commitment to the treatment and to reduce the labeling attitude of family members toward the clients were met with reservations of the patients and even family members. The therapists' attempts to build a therapeutic alliance with the patients were only partially successful. Often the patients' language was one of resistance to change. The therapist hoped to motivate the patients to actively deal with the problem of addiction. The patients, for their part, did not believe that they had the ability to do this. Many of them were pessimistic about their own ability to change their behavior.

### Dilemma concerning behavioral change and dropout prediction

The therapists noted that although some patients attended the therapy sessions regularly, most of them were not emotionally involved in the treatment and had difficulty bringing out their "true self". The therapists felt that there was a difficulty authentically understanding the patients' condition. Some patients avoided performing the drug monitoring tests and denied incidents of occasional drug use (relapse). The therapists stated that the therapeutic methods they used did not always help in reducing the gap between the difficulty the patients experienced here and now and their ability to express it. The attempt to help patients persevere in treatment by reaching out and supporting them was not successful, some of the patients held the position that the drugs helped them take care of themselves (pseudo-addiction).

The patients' dilemma regarding behavioral change was thus due to a low sense of self-efficacy, lack of sufficient maturity to participate in the treatment, and pessimism regarding its results. The therapists felt that the many emotional barriers that the patients faced made it difficult for them to persist in the treatment.

### Promoting self-efficacy and reducing dropout from treatment

Attempts to promote the patients' self-sufficiency helped some patients over short periods of time to deal with the challenges they faced. The therapists referred to several paths that may reduce dropout from treatment, like building an early strategy to prevent dropout, strengthening patient support networks, and making the rules of treatment more flexible. Promoting the involvement of the patient's family in the treatment process, which could include creating a family therapeutic space, and encouraging cooperation between family members, were perceived as steps that may reduce dropout from treatment.

The therapists pointed out several paths by which it is possible to prevent dropping out of treatment: activating an emotional interpersonal relationship, providing security, empathy, and inclusion, building support networks, and direct counseling. According to the therapists these interpersonal interventions may expand commitment to change, increase self-efficacy, and allow persistence in treatment.

### **Conclusion**

The conclusion that emerges from the research field and the interviews with therapists presented on the one hand the difficulties in promoting change in the lives of people dealing with addiction and on the other hand the therapeutic paths that can lead to developing self-efficacy among this population which may reduce dropout from treatment. In the opinion of the therapist and the research findings, the development of self-efficacy of people with addiction may depend on the quality of the interpersonal emotional therapeutic relationship and on the overall strategy to reduce dropout from treatment [16]. Building a relationship of trust perceived as an opportunity to effectively diagnose the patients' condition and understand the sources of their reluctance to receive treatment [17]. It was estimated that the resistance of some of the patients to the proposed roadmap for change was due to a lack of confidence in their ability to change [17]. Most of the patients remained passive and lacked confidence in their abilities [15]. The therapists stated that they often felt that they had nothing to hold on to in trying to develop a relationship with the patients, among others because of the patients' feeling that the treatment was forced on them [8]. Recent studies have shown the positive contribution of external pressure on persistence in treatment [18]. This conclusion was not reflected in the findings of the interviews that presented in this article. Changing the ineffective emotional and thinking patterns of the patients was seen as a possibility for creating a high-quality interpersonal relationship [11,18]. Referral of the patients to group therapy, which is intended to reduce the social isolation in which patients find themselves, was met with resistance and doubts [6]. From the findings of the interviews it emerged that an emotional interpersonal activity that includes processing the patients' anxieties through group processes and flexibility in the rules regarding the obligation to perform drug monitoring tests could have helped promote change in many cases. As noted, the attempt to harness the patients' family members to support participation in the treatment encountered difficulties [15]. The few family members who came to therapeutic meetings themselves faced difficulties, distress, and addiction. In most cases, family members sought to reduce the problems in the family and those of the patients. These findings are consistent with the research literature [2], which states that dropping out of treatment may be due to the patients' feeling of loneliness and the lack of support from family members for their participation [3,9]. This item was a significant predictor of the patients' adjustment difficulties. Activating family intervention at the beginning of treatment may yield fruit reflected in strengthening the family as a system, and resolving family conflicts could lead to support for the patient [2].

Many patients were pessimistic about the results of treatment and their ability to persist in abstaining from drug use [2]. The perception in the treatment room was that the continued use of drugs contributed to their healing process [2,10,19]. The dilemma of behavioral change was therefore the result of the fear of some patients that they would not succeed in the long term in abstaining from drug use [6-8,20]. At times, the therapeutic process oscillates between two parallel lines: on one hand, the therapists' attempts to expand the patients' emotional awareness of the reasons for their condition and to examine ways to effect a change, and on the other, the patients' raising barriers to this discourse and their preoccupation with procedures [2]. Then how is

it possible to expand patients' awareness of the reasons for their situation and to promote change? Therapists indicated that the way was to identify and emphasize the patients' strengths and provide a safe environment that allows patients to change these maladaptive patterns of thinking and feeling [2,17]. Meier pointed out that a strategy for dealing with patients who may abandon treatment includes emphasizing the building of interpersonal processes in the first treatment sessions and only later using a "traditional" therapeutic intervention [21]. Providing a "basket of services" for solving the patients' practical problems simultaneously with processes for creating an emotional interpersonal relationship may effectively deal with significant dayto-day issues that occupy the patients and make it difficult for them to seek treatment [16,22]. Such a basket should include instrumental assistance, referral to the mental health system, and solving problems in the areas of housing and employment [11]. The difficulty in accomplishing behavioral change that includes stopping drug use, which ultimately contributed to dropping out of treatment, is explained by the motivational approach by Miller and Rollnick [17]. The therapists pointed out that the language of change and the language of resistance to change are two sides of the same coin. Patients evaluate the advantages and disadvantages of participating in a therapeutic process and stopping drug use in light of the complexity and changes they are required to make in their lives [22]. Therapists must be aware of this dilemma and help patients acquire the language of emotional and behavioral change [17]. The therapists presented several paths to promote the self-efficacy of their clients aiming to help them persevere in treatment. The first path was creating an emotional interpersonal relationship that includes exercising active empathy and providing emotional guidance, which in turn can help convert the negative emotions of patients affected by addiction into feelings of value and security [16]. These humanistic emotional therapeutic actions have the potential to develop positive feelings in the patients toward the therapeutic relationship [23]. The second path involved instilling confidence in the patients' ability to change, providing unconditional support that would allow them to move from a pessimistic state to an active one regarding changing their lives [21]. Greenberg pointed out that an effective interpersonal process should address the reservations of the patients, including those with addiction disorder, to making an emotional change by helping them regulate their feelings of anger and sadness [17]. This course of action, which may also help reduce dropout from treatment, involves the therapists strengthening the patients' motivation for behavioral change [17]. Preliminary actions may consist of encouraging an internal discussion about the barriers the patients experience in changing their lives, identifying changes they have made in the past in dealing with the disease of addiction and in the current process of rebuilding [17]. The third path included implementing a comprehensive strategy to prevent dropping out of treatment, which included plans for solving problems, taking full advantage of rights and services, and integrating patients into normative frameworks in the community [8,22]. It remains to be answered whether the activation of strategies aimed at getting patients to solve problems on their own will help them persist in the treatment. The research literature recommends that these instrumental actions be used simultaneously with emotional interpersonal therapeutic intervention, thus providing an answer to patients' difficulties here and now [21,22]. In addition, integrating the patients into therapeutic educational groups and strengthening the family support networks may help build internal motivation for emotional change and develop self-efficacy that will contribute in the short term to reducing dropout from treatment [17].

Several insights emerge from the findings of this article. Preparing patients already in the initial stages of acquaintance for the possibility of dropping out and activating the motivational method [17] may be an important step in addressing the phenomenon. Promoting an emotional and personal therapeutic activity that includes active empathy, inclusion, and unreserved support for the patient [23] constitutes another layer that may strengthen the patient's commitment to treatment [16]. Strengthening the patient's family support networks and processing experiences related to trauma and physical and sexual injuries as part of the therapy may allow many patients to feel that the therapeutic setting is a safe place for them [24]. The joint therapist-patient journey in promoting the patient's ability to persevere in treatment is based on the ability to identify the patient's hidden strengths. Providing a sense of value [25,26], cooperation in setting goals for change, and reducing the day-to-day pressures experienced by the client [19,27] are complementary actions that may encourage persistence in treatment.

According to the present findings of the literature review and the interviews with the therapists, dealing effectively with the phenomenon of people with addiction dropping out of treatment involves implementing a comprehensive strategy that includes emotional interpersonal intervention [16], problem solving, and increasing motivation for change in patients [17]. It is estimated that this active course may moderate the dropout from treatment and improve its results.

#### References

- Brorson HH, Ajo Arnevik E, Rand-Hendriksen K, Duckert F (2013) Dropout from addiction treatment: A systematic review of risk factors. Clin Psychol Rev 33: 1010-1024.
- Cournoyer LG, Brochu S, Landry M, Bergeron J (2007) Therapeutic alliance, patient behaviour and dropout in a drug rehabilitation programme: the moderating effect of clinical subpopulations. Addiction 102: 1960-1970
- Broekaert E, Kooyman M, Ottenberg DJ (1998) The "new" drug-free therapeutic community. Challenging encounter of classic and open therapeutic communities. J Subst Abuse Treat 15: 595-597.
- Ronal N, Chen G, Timur A, Elisha A (2011) Returno: A Jewish therapeutic community for addiction treatment. Bar Ilan University, Ramat Gan, Israel
- Annual report (2020) The addiction treatment service. Ministry of Labor and Welfare, Jerusalem, Israel.
- Gerstein DR, Lewin LS (1990) Treating Drug Problems. New England Journal of Medicine 323: 844-848.
- Bandura A (1997) Self-efficacy: The exercise of control. W. H. Freeman and Company, New York, USA.
- López-Goñi JJ, Fernández-Montalvo J, Arteaga A (2011) Addiction Treatment Dropout: Exploring Patients' Characteristics. Am J Addict 21: 78-85.
- 9. Sanders MR (2000) Community-based parenting and family support interventions and the prevention of drug abuse. Addict Behav 25: 929-942.

- Toombs DL (2005) Introduction to Addictive Behaviors. Brother, Kiryat Bialik, Israel.
- Schaub M, Stevens A, Haug S, Berto D, Hunt N, et al. (2011) Predictors of retention in the 'voluntary' and 'quasi-compulsory' treatment of substance dependence in europe. Eur Addict Res 17: 97-105.
- Che Y, Assanangkornchai S, McNeil E, Chongsuvivatwong V, Li J, et al. (2010) Predictors of early dropout in methadone maintenance treatment program in Yunnan province, China. Drug Alcohol Rev 29: 263-270.
- Social Work Regulations (2013) Guidelines for the treatment of addiction victims in the community. Instruction. 11.3. Ministry of Welfare and Social Services. Israel.
- Lev-Ran S, Nitzan U, Fennig S (2014) Examining the ethical boundaries of harm reduction: from addictions to general psychiatry. Isr J Psychiatry Relat Sci 51: 175-180.
- 15. Odenwald M, Semrau P (2013) Dropout among patients in qualified alcohol detoxification treatment: The effect of treatment motivation is moderated by Trauma Load. Subst Abuse Treat Prev Policy 8: 14.
- 16. Gu J, Xu H, Lau JT, Hao Y, Zhong Y, et al. (2012) Misconceptions predict dropout and poor adherence prospectively among newly admitted firsttime methadone maintenance treatment clients in Guangzhou, China. Addiction 107: 1641-1649.
- 17. Miller WR, Rollnick S (2013) Motivational interviewing: Helping people change (3rdedn). Guilford, New-York, USA.
- Ward T, Maruna S (2007) Rehabilitation: Beyond the Risk Paradigm. Routledge, England, UK.
- Bernstein P, Vozvelensi M (2011) Dependence on addictive substances. In: Marom C, Gilboa-Shechtman A, Mor N, Myers J (eds.). Cognitive-behavioral therapy in adults. Dynon, Tel Aviv, Israel.
- Meier PS, Donmall MC, Barrowclough C, McElduff P, Heller RF (2005) Predicting the early therapeutic alliance in the treatment of drug misuse. Addiction 100: 500-511.
- Greenberg L (2015) Emotion-Focused therapy. American Psychological Association. Massachusetts. USA.
- Rogers CR (1995) On Becoming a Person: A Therapist's View of Psychotherapy. Houghton Mifflin, Massachusetts, USA.
- Kathleen MC (2004) The treatment of cocaine addiction, the cognitive behavioral approach. National Institute on Drug Abuse, USA.
- Shaver PR, Schachner DA, Mikulincer M (2005) Attachment style, excessive reassurance seeking, relationship processes, and depression. Pers Soc Psychol Bull 31: 343-359.
- 25. Jacobs TJ (2013) The Possible Profession: The Analytic Process of Change (1stedn). Routledge, New York, USA.
- Rozin P, Lowery L, Imada S, Haidt J (1999) The CAD triad hypothesis: a mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). J Pers Soc Psychol 76: 574-586.
- Walker P (2013) Complex PTSD: From surviving to thriving (1stedn).
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