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Ana Isabel Caiado Roseta Duarte

Codependency: can it be the path to a motivational change regarding drug abuse?

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ORIENTADOR

Professor Doutor Manuel Fernandez Esteves

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Codependency: can it be the path to a motivational change regarding drug abuse?

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Codependency: can it be the path to a motivational change regarding drug abuse?

Abstract

Nowadays, the consumption of psychoactive substances is becoming more and more important in scientific research, due to a bigger concern about the consequences of substance abuse disorders. These disorders affect not only the individual but also “the system” where he/she belongs (leading to something called “codependency” in several cases).

These addictive behaviours are tremendously prejudicial and the abuser needs to make a commitment to change it and, hence, improve quality of life of everyone affected by them. To engage in treatment, very often the individuals need the support of a loved one who is crucial during the motivational change, through all the stages and to maintain abstinence.

Several approaches include family members/concerned significant others of substance abusers in the rehabilitation process so as to make the reluctant patients engage in treatment and help them throughout the motivational stages, toward a complete control over the dependence. This way, they might be able to positively influence the prognosis associated with substance use disorders.

Keywords: codependency; substance use disorders; motivational change; the Transtheoretical Model

1. Introduction

We live in a world of changes and high velocity updates to our knowledge. Codependency is not a recent term but the importance given to it in the process of change of a drug user (DU) is definitely a new scenario in mental health. A “paradigm shift” can be the expression used when speaking about the new approaches regarding drug abuse and its treatment.[1]

The context of family interactions and the social environment is the most important contributor to the growth of an individual, who can mature into healthy individuals when they grow up in well-functioning families or, oppositely, into problematic adults when there are weak emotional bonds and a stressful environment at home.[2]

Historically, substance use disorders (SUDs) were viewed as individual-based problems, most effectively treated by focusing on the diagnosed individual. However, after several clinical trials showing the efficacy (and often superiority) of couple/family treatments for these addictive behaviours, the previous emphasis on the individual changed and has slowly given rise to a greater awareness of family members’ crucial roles in the aetiology, maintenance and long-term course of addictions – an upbeat discover about a more global community based approach which is more likely to induce not only patients but also their families to engage in and adhere to treatment.[1, 3, 4]

According to the United Nations Office on Drugs and Crime (UNODC), substance abuse is one of the most important concerns in our world, with the 2017 World Drug Report stating that approximately a quarter of a billion people (5.3% of the global adult population aged 15-64 years) used drugs at least once in 2015. Even more alarming is the fact that about 29.5 million of those drug users (0.6% of the global adult population aged 15-64 years) were suffering from drug use disorders. Another worrisome rate is an estimated number of 190,900 premature drug related deaths (mostly due to overdose).[5]

Compared to men, overall drug use remains lower among women – globally, men are three times more likely to use cannabis, cocaine or amphetamines. On the other hand, women are more likely to misuse prescription drugs, particularly opioids and tranquillizers.[5]

The World Health Organization defines substance abuse as “the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs” which “can lead to dependence syndrome - a cluster of behavioural, cognitive and physiological phenomena that develops after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance and sometimes a physical withdrawal state”.[6]

Seen as a chronic multifactorial disease, which causes considerable individual, family and social disruptions, a SUD can lead to misery of thousands of people. It is considered as a “bio-psycho-social problem”, affecting all aspects of life and its quality, with a huge impact not only in psychological (depression, anxiety, hopelessness, isolation) and physical health, but also economic, cultural and social effects. It becomes the priority over all the activities the individual used to do, sometimes representing an unhealthy attempt to manage problems. Its treatment (a difficult route with high numbers of dropouts and relapse episodes) should consist of an interdisciplinary approach from psychotherapeutic and social interventions aimed at rehabilitation and social reintegration of drug addicts.[3, 7-9]

Having all this in consideration, some questions came up: How does substance abuse affect the individual and the family? How can the family be an important part of the diagnosed individual’s treatment and abstinence? Are there any possible barriers to the implementation of this new family/relatives approach? What can be done in the future?

74 **The influence of SUDs to the family/concerned significant others (CSOs)**

75 Over the past few years, it has become clearly evident SUDs and family
76 problems very often coexist and a loved one's alcohol/drug abuse can seriously affect
77 the lives of family and friends – creating a burden for the whole environment that
78 surrounds the user. These adverse effects include [3, 4, 8, 10-18]:

79 - Emotional load (wide range of feelings like anger, sadness, helplessness,
80 frustration, denial, fear, worry, anxiety, depression, shame, guilt);
81 - Economic problems (money diverts to buy substances, unemployment);
82 - Social burden (medical conditions, homelessness, criminality);
83 - Relationship dissatisfaction and distress (leads to isolation);
84 - Family conflicts and instability (verbal assaults, physical violence);
85 - Deleterious consequences on children (risk for neglect/abuse, poor
86 academic performance, future substance abuse).

87

88 Therefore, it is crucial to give the family/CSOs coping skills training and
89 alternatives to arguing with or nagging the consumer - actions usually related to an
90 increase of aggression. Also, the way relatives answer to consuming and non-
91 consuming behaviours is something worth examining.[11, 18]

92 However, the link between SUD and relationship problems (such as poor
93 communication, arguing, financial and other stressors) is not unidirectional but rather a
94 “reciprocal causality” where each can be a precursor to the other, creating a “vicious
95 cycle” and one of the main reasons for bad outcomes and relapses after treatment.[3]

96

97 It is estimated that, in 2015, around 17 million "healthy" years of life were lost
98 (disability-adjusted life years or DALYs) due to SUDs – an increase of 24% when

99 compared to 2005 – showing the huge need for a change regarding treatment. There
100 continues to be a large "treatment gap" worldwide - only one out of six people with drug
101 use disorders is provided with treatment each year, making it clear that the accessibility
102 of services for such conditions is limited on a global level.[5]

103 The chronic nature of this addictive behaviour makes the relapse not only
104 possible but likely to occur. As a consequence, the treatment is not believed to be
105 effective since the prevalence of relapse is high, ranging from 60% to more than 85%
106 within one year.[19-23]

107 Unfortunately, it is usual for individuals with SUDs to be opposed to getting
108 treatment leading their loved-ones to difficult situations when they have to choose
109 between staying with them or detaching – with the purpose of encouraging the user to
110 seek treatment. This influence of CSOs have shown great results and it is now
111 considered essential in the (usually difficult) process of change.[4, 11, 24, 25]

112 Several factors influence the demand for treatment and its adherence. Among
113 them, there is one whose importance is huge: the addict's motivation. This can be
114 characterized as "a state of readiness or willingness to change the problematic
115 behaviour". Being motivated to change is critical to an individual's performance,
116 whether he is recognizing the need for change, seeking treatment, recovering or
117 maintaining the abstinence and it will influence the outcome – it has the potential to
118 enhance engagement and commitment, leading to a better prognosis.[7, 21, 26]

119 The CSO often has the unique ability to encourage/discourage the substance
120 use with just a modest change in his own behaviour (if well applied, reinforcements are
121 considered very useful). It is essential to know how to use positive reinforcement –
122 providing support. This positive reinforcement (used only when the user is sober) has
123 to be as seen as a "reward", something powerful enough to be chosen over
124 consuming.[11, 21]

In addition to this positive reinforcement, the CSO should also be taught how not to enable or reward any behaviour related to the SUD and to avoid contact whenever he/she is consuming. Any action that could unintentionally be a support for the abuse should be stopped, such as pay bills related to the substance and clean the mess made.[11]

Nowadays, there is a great emphasis on the role the family plays as it is considered a predictive factor for the drug addict's behavioural change and adherence to treatment, favouring the commitment to modify the prejudicial habits previously adopted by the DU. Sometimes being the principal source of support, they are in an excellent position to prompt the DU to enter treatment. Since the use of drugs and its consequences significantly impact not only the individual's health, but also the well-being of the family as a whole, interventions targeting both have been identified as a public health priority.[4, 7, 12, 15, 27, 28]

Unfortunately, as the individual's substance problem progresses, he/she may become increasingly isolated from the family; consequently, it may be difficult to engage them later in the treatment process.[3]

Specific family-involved approaches have been developed to help addicted individuals recognize one's problem and seek help [3, 4, 8, 11, 12, 16, 18, 24, 28-32]:

- **Community Reinforcement Approach**: reinforcement should be used to alter the problematic behaviour; teaches behaviour-change skills to the CSO;
- **Community Reinforcement and Family Training**: believes the family can play a powerful role to persuade a loved one who is resistant to treatment; it goals to teach family members how to (a) encourage the substance abuser to evaluate whether or not the behaviour is problematic, (b) support

151 abstinence, (c) encourage the engagement in treatment, (d) improve mood,
152 functioning and, therefore, quality of life of both – significantly more
153 successful in engaging the users in treatment;

154 - **Johnson Institute Intervention**: trains for a confrontation of the user to
155 show the need for a change; a request that he/she seeks treatment and
156 consequences for not doing so (the majority of the families do not complete
157 the program);

158 - **Unilateral Family Therapy**: helps family members develop or strengthen
159 coping skills, improve family functioning and create an environment
160 conducive to sobriety;

161 - **Multisystemic Family Therapy**: assumes substance abuse is influenced by
162 multiple systems; one of its purposes is to examine each system and their
163 relationship to the presenting problem;

164 - **Behavioural Couples therapy**: teaches how to reward abstinence,
165 decrease triggers for consuming, decrease behaviours that protect the DU
166 from adverse consequences and improve their relationship. Better
167 communication and more cohesive relationships are believed to be a
168 protective factor for relapse;

169 - **Al-Anon/Nar-Anon Family Groups**: the most widely used source of
170 support for CSOs; not designed to directly make the DU engage in
171 treatment; it provides support for the family and defends the detachment
172 and acceptance of one's inability to control the user behaviour and to reduce
173 emotional distress.

174

175 These family/multisystem therapies, believed to be more successful comparing
176 to the individual ones, share some main goals: (a) improve family coping; (b)
177 empowerment of the CSOs to positively support the patient's efforts to eradicate any

substance abuse and (c) restructure their interaction patterns to promote a better environment and more cohesive relationships – conducive to long-term stable abstinence and less probability of relapse.[3, 9, 31]

Having in consideration the importance of the family system in one's SUD, it becomes clear that family and friends should be invited to become part of the treatment and should be able to cope effectively with the user which can lead to better results. Families can benefit from expressing their own emotional burden and changing behaviours that can interfere with the recovery of the member with the SUD. Learning about potential relapse warning signs and how to intervene early if a relapse occurs can empower family members. To sum up, it is expected that the family members' change may promote changes in the attitudes of the drug users.[10, 12, 14]

The new approaches focus not only on the drug user as the previous ones, but also on the family members and CSOs who deal with the stress and substance related problems on a daily basis. These mechanisms can help them to become more aware of their own needs and strengths which can be of great importance to a successful recovery. Members are taught to increase social behaviours incompatible with substance use, improve problem solving, enhance communication skills and learn how to cope and support.[3, 4, 10, 12]

196 ## 2. Defining Codependency

197 Despite its growing importance, codependency stills represents a controversial and
198 broad concept, without a universal consensus about its definition which difficult its
199 generalization and patient's examination.[3, 15, 33-37] These ambiguous and multiple
200 meanings suggest that the phenomenon is largely a social construct.[38] Nevertheless,
201 prefrontal cortex failure to inhibit empathic behaviours can play a role in
202 codependence.[36]

203 Codependency (whose prevalence is not well studied) is related to
204 pathologically excessive involvement and preoccupation - characterized by extreme
205 dependency - regarding the life of the other, leading to an unhealthy and dysfunctional
206 relationship; over-zealous helping tending to put other people's needs ahead of one's
207 own, minimizing personal demands.[15, 33-36, 38, 39]

208 This phenomena can happen to anyone – initially associated with substance abuse,
209 now related to any problematic behaviours – although it is usually expected with some
210 specific personality traits (like neuroticism) and environments/backgrounds such as
211 having alcoholic parents/partners, physical violence in the family, childhood abuse, a
212 dysfunctional/stressful family environment or gaining responsibilities towards others in
213 a very young age.[10, 15, 34, 35, 37, 39]

214 Considered to be a "disease", this disputed term gained some popularity as
215 "addictive love" or "pathological altruism" – the aim and motivation of the behaviour is
216 to promote the welfare of another, but it results in negative consequences to the self
217 and to the other.[17, 34, 36] The ones suffering from it are believed to perceive
218 problems in a more stressful way and use less effective coping strategies leading to
219 vulnerability to experience codependency.[15]

220 Other articles refer it as an emotional, psychological and behavioural condition with
221 interpersonal reactivity and obsession that creates self-neglect behaviours and,

222 consequently, suffering with an excessive reliance on others for approval and identity
223 (low self-esteem and sense of self-worth). The individuals are committed to problematic
224 relationships (besides all the severe social and emotional difficulties) and are incapable
225 to end them. Usually referring to the female gender, partly due to its cultural role as
226 caregivers and being inherently more empathic – believed to be more prevalent within
227 this group.[10, 17, 33-39]

228 Within these numerous definitions in the literature, there are several core elements
229 present in many of them [33, 35-37, 39-41]:

230 - **external focusing**: extreme focus of one's attention on the attitudes,
231 opinions and expectations of others and then fitting one's own behaviour to
232 those expectations to obtain approval and esteem;
233 - **self-sacrificing**: to put other people's needs before one's own (caretaking
234 and rescuing);
235 - **interpersonal control**: deeply believing in one's capacity to solve other
236 people's problems;
237 - **emotional suppression;**
238 - **belief in personal powerlessness and other's powerfulness.**

239

240 Research into codependency has been hampered by the lack of instruments to
241 measure its core components leading to scarce empirical basis.[34, 36]

242 Developed by Dear & Roberts, the Holyoake Codependency Index (HCI), one of
243 the scales available to assess codependency, measures codependent traits by asking
244 the individuals to self-analyse their own characteristics. It is divided in three subscales
245 "self-sacrifice", "external focus" and "reactivity" (a reactive stance toward the
246 problematic behaviour; the respondent perceives his/her quality of life to be contingent
247 upon the other's behaviour).[33, 36, 40]

248 In other studies, codependency is defined as “an interactional problem, a model
249 of relationship established early on between the family and the drug user”. A group of
250 maladaptive adjustments that creates negative emotions (as denial, anger, sadness
251 and hatred) for the individual experiencing it, who feels out of control and may
252 (inadvertently) enable the unhealthy and addictive behaviours – even though may
253 knowing it is not really in the other’s long-term best interest.[3, 10, 13, 34, 36, 37]
254 These *enabling* behaviours – a central component of this concept – consist of direct
255 (such as buying the object of addiction) and indirect (for example, preserving the
256 reputation, shielding the user from the associated negative consequences) actions
257 which support one’s drug problem, perpetuating the substance use and reinforcing the
258 belief in one’s worth.[3, 17, 35]

259 According to the literature, it is an issue that should be included in the treatment
260 of addiction in order to improve family functioning. There are three levels of
261 codependency in clinical practice which change throughout the treatment: low (usually
262 in the end when there is reconciliation with reality), moderate and high (mostly found in
263 the beginning). Also there might be a correlation between these levels and the level of
264 education – the lower the level of education, the higher the codependency.[35, 38, 39,
265 42]

266 It is crucial not to stigmatize the individuals who come looking for help regarding
267 a possible “codependency”, a word with some negative connotations and not the best
268 one to differentiate it from the normal caregiving, not pathological behaviour – reasons
269 why some would argue this term should be avoided.[34, 37, 41]

270 ## 3. Defining Motivational Change

271 According to the Transtheoretical Model [7, 10, 21, 26, 43-46], proposed by
272 Prochaska and DiClemente, in the 1980s, “health behaviour change involves progress
273 (over time) through six stages of change”, namely:

274 - Pre-contemplation;

275 - Contemplation;

276 - Preparation;

277 - Action;

278 - Maintenance;

279 - Termination.

280

281 During Pre-contemplation, drug addicts are not committed to cease drug use in
282 the “foreseeable future” (next 6 months), they are not aware of the dependence or are
283 dishearten regarding their abilities to change; they initiate treatment only due to family
284 pressure, court orders or clinical problems arising from the SUD.[7, 26, 43-45]

285 The Contemplation stage called “behavioural procrastination” is usually
286 accompanied by ambivalent feelings: users can make associations between their
287 problems and drug consumption, they start to contemplate the possibility of change
288 and its pros and cons, but there is still no commitment to engage in the treatment.
289 People can be stuck in this “decisional balance” for a long time. These first two stages
290 are the ones associated with the highest dropout rates and relapses.[7, 26, 43, 45]

291 In the third stage, Preparation, the addict is determined and committed to a
292 behavioural change in the near future (meaning the following month); however, there is
293 no real action. Contrary to the previous one, in the fourth stage (Action), drug users,

aware of their dependence, engage in actions and situations to achieve behavioural change, such as seeking treatment through their own initiative and showing intentions to change their lifestyle.[7, 21, 26, 43, 45]

The Maintenance stage is characterized by the persistence of successful actions in the change direction, towards the end of the process – the new behaviour becomes normative. During this time, the need to consume drugs gradually decreases and the challenge is to stay abstinent and avoid everything that could trigger a recurrence of drug use – preventing a relapse. The most difficult part of this process is believed to be staying abstinent, not achieving it, and the first three to six months seem to be the most dangerous time for relapse.[7, 21, 26, 43-45]

In Termination, the last stage, the individuals have complete control over the dependence - “zero temptation”. The stage of change the individual is at the start of the intervention is the best predictor of premature dropout and outcome.[43-45]

However, due to an illusory belief of healing, it is common to experience several relapses throughout the process and return to earlier stages. This process is not linear, it is rather cyclic so the user can go backwards and exit the treatment at any stage and several times before achieving the complete remission of a bad habit – usually when action is taken just because of health problems, without confidence.[21, 24, 26, 43-46]

In order to progress through these stages, patients need to put in action several mechanisms called “processes of change” which need to be emphasised on specific stages.[21, 43-45] They are defined by ten experiences which require effort and energy from the DU:

- Consciousness Raising (awareness about the situation);
- Dramatic Relief (emotional arousal);
- Self-reevaluation (cognitive/affective self-image);

320 - Environmental Reevaluation (assessment of how one's habit affects others);
321 - Self-liberation (belief and commitment to change);
322 - Social Liberation (social opportunities);
323 - Counterconditioning (learning healthier behaviours able to supplant the
324 problematic ones);
325 - Stimulus Control;
326 - Contingency Management (reinforcements – rewards/punishments –
327 according to the attitudes taken);
328 - Helping Relationships.

329

330 To sum up: the stages of change are related to when people change; the
331 processes to how this change happens. Usually, the processes associated with the
332 insight or awareness (for example, consciousness raising and self-reevaluation) are
333 present in the early stages and the ones associated with the action (like
334 counterconditioning and stimulus control) in the later stages.[43, 45]

3.1 The Family and the Transtheoretical model

When family members are at the Pre-contemplation stage, change is seen as an issue only needed for the user. In the Contemplation stage, the family starts considering their involvement in the member's drug use and, therefore, their need to change. In Preparation, the family acknowledges its crucial role and begins the process of preparing for change - when guidance and help are sought. The Action stage of change means the family is already involved in actions aimed at changing behaviours. In the Maintenance stage, the focus is to sustain the healthy behavioural change already adopted by the family. This approach can lead families to make positive changes happen through their interactions with the user.[10]

Sometimes treatment is only entered by the families and concerned people because they want the drug user to engage in it too.[17]

4. Defining the "system"

One can argue that a SUD can be usually best understood in the entire friends and family's functioning context.[3] The DU is sometimes surrounded by a "system" – composed by family, partner, friends and co-workers – who suffer with the difficulties in leading with him/her when the SUD is installed.

This network is of great importance to the success of the rehabilitation which is the reason why many treatment programs also focus in the social recovery (a crucial part in the treatment but also in relapse and quality of life). This involves several attitudes such as avoiding contact with high-risk people or events (which might compromise the recovery), solving relationship problems, developing a new network of sober and supportive people, resisting social pressures to use substances, engaging in substance-free activities and mutual support programs, building a new lifestyle and making amends to those harmed by the disorder.[3, 7, 14]

Social consequences pointed out by family/concerned others are the most important motivators for a change regarding drug abuse. This "system" can be a helpful source of support to the person undergoing rehab to reach the goal of a stable, balanced and substance-free environment.[3, 28]

5. Final considerations

Worldwide, a substance use disorder is seen as a public health problem. Hence, it is needed to develop effective techniques to motivate and engage drug users in treatment. As a familial disease, addiction affects not only the diagnosed individual but also all intimate relationships and relatives of the addicted person in a chronic but reversible way; it creates chaos and causes anxiety, disturbance and fear.[24, 28]

According to the codependency model, all members of a family in which one member has an alcohol or other drug use problem will be affected by it and exhibit its signs and symptoms. It is further defended that improved family functioning requires not only the resolution of the affected member’s addiction but also treatment of the family’s codependency.[35, 40]

Characteristics like low self-esteem, tendency to prioritize others’ needs, exaggerated caretaking behaviours, obsessive involvement with others are usually pointed out by addicts’ relatives.[15] Being codependency so frequently present, we need to give it a major focus during treatment for addicted individuals[39] and an intervention for the dyad might be the answer to a higher success regarding rehabilitation programs.

In our days, clinicians are becoming more and more interested in understanding substance misuse from a systemic perspective rather than its traditional framing as the challenge of a single individual, involving not only the diagnosed individual but the whole environment he/she lives in since it is now known this can be used to obtain better outcomes and improve life quality of both the user and who deals with him/her – the main goal of any intervention.[3, 27, 28]

Typically, the drug user seeks treatment 6-10 years after the beginning of the abuse; the earlier the engagement in treatment, the better are the outcomes[4] so it is

389 important to reduce this time interval which might happen through the intervention of
390 CSOs.

391 Since, after treatment, the family's lack of adjustment to the member who
392 changed greatly in the rehabilitation may lead him to relapse, an intervention oriented
393 to the family is also needed – improving their own health and contributing to the
394 complete rehabilitation.[4, 10, 35, 39] Besides solving the drug use problem,
395 interventions provide family members of DUs improved skills to cope with an adverse
396 situation, reduce depressive symptoms and enhance family functioning – putting both
397 recoveries in synchrony.[27, 41]

398 To those emotionally close to the DU who often suffer the most, there are
399 several benefits of entering treatment such as less vulnerability to stressors and better
400 coping; also visible decreases in family conflict and physical/mental problems and
401 increases in relational satisfaction and in self-esteem.[4, 17, 18]

402 In SUDs, relapse is particularly frequent and some factors are associated with
403 it, such as low levels of self-efficacy and commitment to abstinence, more problematic
404 family environments (particularly low cohesion), specific personality traits (like histrionic
405 and antisocial) and greater life stress/depression; whereas greater social reintegration
406 and more social/relatives' support are predictors of better outcomes.[22, 25, 47]

407 The decision of entering the treatment is usually a difficult one not only for the
408 DU but also for the CSOs. Before engaging in treatment, all intervenients will need to
409 be committed to it and determined to do something different to promote well-being.
410 Usually, to proceed with the treatment, the DU needs to go through several stages of
411 change, which lead to the complete cessation of drug abuse – this process of change
412 was described in the Transtheoretical Model of health behaviour change.

413 In behaviour change, there should be a balance between external pressure and
414 intrinsic motivation. It is a mistake to believe all people who use alcohol and drugs must

415 change alone – there are numerous methods through which loved ones can influence
416 the drug user, all of them highlighting the power family/friends hold.[28]

417 According to the literature, compared to participants in the individual treatment
418 conditions, family-based approaches are clearly more effective therapies. Showing
419 better rates of abstinence and fewer substance-related problems, greater
420 improvements in relationship satisfaction and, consequently, decreased risk of
421 relationship dissolution. Also it is known that when the user is unwilling to seek help, a
422 family approach can be useful in helping the family cope better and motivating the
423 users to enter treatment.[3, 27, 31]

424

425 Of course it is not only about commitment and there are some problems that
426 could arise after entering in the program. One is obviously partner violence that can
427 arise right after the first changes are introduced at home. Another barrier that could be
428 pointed out is the lack of therapists' training since this is a relatively new concept of
429 treatment. Lastly, there are also important practical and logistical barriers such as
430 geographical distances between the people involved and difficulties in coordinating
431 schedules.[3]

432 In conclusion, since codependency and the consequences for those around
433 users are important variables for the evolution of a substance use disorder, they could
434 be used as weapons to achieve the primary goal: the complete rehabilitation and
435 improvement in quality of life of both the user and the surrounding "system".

436 **Future Directions**

437 In this study, alcohol and other drugs were collapsed which can originate a
438 misconception so it could be useful to investigate them separately. More research is
439 needed in this area since there is a lack of consistent evidence on substance abuse
440 related interventions for codependency and the sample sizes of existing studies are
441 often small which makes it difficult to put the concept in use.[35] More studies
442 comparing the outcomes of patients with and without a good social environment are
443 needed in order to support this assumption allowing a broader implementation of these
444 approaches. Also it could be interesting to analyse ethnic and cultural differences
445 which are important variables regarding these issues – specially the concept of
446 codependency.

References

1. Hore BD. Clinical Guide to Alcohol Treatment. The Community Reinforcement Approach.By Robert J. Meyers and Jane Ellen Smith. The Guilford Press, New York. 1995; 38(1):501-2.

2. Şenormancı Ö, Şenormancı G, Güçlü O, Konkan R. Attachment and family functioning in patients with Internet addiction. General Hospital Psychiatry. 2014;36(2):203-7.

3. Klostermann K, O'Farrell TJ. Treating Substance Abuse: Partner and Family Approaches. Social Work in Public Health. 2013;28(3-4):234-47.

4. Roozen HG, De Waart R, Van Der Kroft P. Community reinforcement and family training: an effective option to engage treatment-resistant substance-abusing individuals in treatment. Addiction. 2010;105(10):1729-38.

5. Crime UNOoDa. World Drug Report 2017. 2017.

6. World Health Organization - Health topics: Substance abuse [Available from: http://www.who.int/topics/substance_abuse/en/. Access Date: 09/01/2018].

7. Ferreira AC, Capistrano FC, de Souza EB, Borba Lde O, Kalinke LP, Maftum MA. Drug addicts treatment motivations: perception of family members. Rev Bras Enferm. 2015;68(3):415-22.

8. Assadbeigi H, Pourshahbaz A, Mohammadkhani P, Farhoudian A. Effectiveness of Community Reinforcement and Family Training (CRAFT) on Quality of Life and Depression in Families with Drug Abuse2016. 167 p.

9. Timko C, Cronkite R, Laudet A, Kaskutas LA, Roth J, Moos RH. Al-Anon family groups' newcomers and members: Concerns about the drinkers in their lives. The American Journal on Addictions. 2014;23(4):329-36.

10. Bortolon CB, Moreira TdC, Signor L, Guahyba BL, Figueiró LR, Ferigolo M, et al. Six-Month Outcomes of a Randomized, Motivational Tele-intervention for Change in the Codependent Behavior of Family Members of Drug Users. Substance use & misuse. 2017;52(2):164-74.

11. Meyers RJ, Smith JE. Getting off the fence:: Procedures to engage treatment-resistant drinkers. Journal of substance abuse treatment. 1997;14(5):467-72.

12. Velleman R, Arcidiacono C, Procentese F, Copello A, Sarnacchiaro P. A 5-step intervention to help family members in Italy who live with substance misusers. Journal of Mental Health. 2008;17(6):643-55.

13. Borges Bortolon C, Andrade Machado C, Ferigolo M, Barros H. Abordagem Motivacional para familiar de usuário de drogas por telefone: um estudo de caso2013.

14. Daley DC. Family and social aspects of substance use disorders and treatment. Journal of food and drug analysis. 2013;21(4):S73-S6.

15. Panaghi L, Ahmadabadi Z, Khosravi N, Sadeghi MS, Madanipour A. Living with Addicted Men and Codependency: The Moderating Effect of Personality Traits. Addiction & Health. 2016;8(2):98-106.

16. Meyers RJ, Miller WR, Smith JE, Tonigan JS. A randomized trial of two methods for engaging treatment-refusing drug users through concerned significant others. Journal of Consulting and Clinical Psychology. 2002;70(5):1182-5.

17. Young LB, Timko C. Benefits and Costs of Alcoholic Relationships and Recovery Through Al-Anon. Substance use & misuse. 2015;50(1):62-71.

18. O'Farrell TJ, Fals-Stewart W. Family-Involved Alcoholism Treatment: An Update. In: Galanter M, editor. Recent Developments in Alcoholism 15: Services Research in the Era of Managed Care. New York: Kluwer Academic Publishers; 2001. p. 329-56.

19. Sinha R. New Findings on Biological Factors Predicting Addiction Relapse Vulnerability. Current psychiatry reports. 2011;13(5):398-405.

20. Volkow ND. Drugs, brains, and behavior—the science of addiction. National Institute On Drug Abuse. 2014.

21. DiClemente CC, Nidecker M, Bellack AS. Motivation and the stages of change among individuals with severe mental illness and substance abuse disorders. Journal of substance abuse treatment. 2006;34(1):25-35.

22. Fernandez-Montalvo J, López-Goñi JJ. Comparison of completers and dropouts in psychological treatment for cocaine addiction. Addiction Research & Theory. 2010;18(4):433-41.

23. Hendershot CS, Witkiewitz K, George WH, Marlatt GA. Relapse prevention for addictive behaviors. Substance Abuse Treatment, Prevention, and Policy. 2011;6:17.

24. Assadbeigi H, Pourshahbaz A, Mohammadkhani P, Farhoudian A. Effectiveness of Community Reinforcement and Family Training (CRAFT) on Motivational Stages of change of Drug Abusers to Engage in Treatment2016.

25. Klingemann H. Environmental influences which promote or impede change in substance behaviour. In: Edwards G, Lader MH, editors. Addiction: Processes of change. Addiction Monograph no. 3 ed: Oxford University Press; 1994. p. 131-61.

26. DiClemente CC, Schlundt D, Gemmell L. Readiness and Stages of Change in Addiction Treatment. The American Journal on Addictions. 2004;13(2):103-19.

27. Li L, Hien NT, Lin C, Tuan NA, Tuan le A, Farmer SC, et al. An intervention to improve mental health and family well-being of injecting drug users and family members in Vietnam. Psychology of addictive behaviors : journal of the Society of Psychologists in Addictive Behaviors. 2014;28(2):607-13.

28. Fernandez AC, Begley EA, Marlatt GA. Family and peer interventions for adults: past approaches and future directions. Psychology of addictive behaviors : journal of the Society of Psychologists in Addictive Behaviors. 2006;20(2):207-13.

29. Timko C, Laudet A, Moos RH. Newcomers to Al-Anon family groups: Who stays and who drops out? Addictive Behaviors. 2014;39(6):1042-9.

30. Miller WR, Meyers RJ, Tonigan JS. Engaging the unmotivated in treatment for alcohol problems: A comparison of three strategies for intervention through family members. Journal of Consulting and Clinical Psychology. 1999;67(5):688-97.

31. O'Farrell TJ, Clements K. Review of Outcome Research on Marital and Family Therapy in Treatment for Alcoholism. Journal of Marital and Family Therapy. 2012;38(1):122-44.

32. Kirby KC, Benishek LA, Kerwin ME, Dugosh KL, Carpenedo CM, Bresani E, et al. Analyzing components of Community Reinforcement and Family Training (CRAFT): Is treatment entry training sufficient? Psychology of Addictive Behaviors. 2017;31(7):818-27.

33. Dear GE. The Holyoake Codependency Index: further evidence of factorial validity. Drug and alcohol review. 2002;21(1):47-52.

34. Fuller JA, Warner RM. Family stressors as predictors of codependency. Genet Soc Gen Psychol Monogr. 2000;126(1):5-22.

35. Ahmad-Abadi FK, Maarefvand M, Aghaei H, Hosseinzadeh S, Abbasi M, Khubchandani J. Effectiveness of Satir-Informed Family-Therapy on the Codependency of Drug Dependents' Family Members in Iran: A Randomized Controlled Trial. Journal of Evidence-Informed Social Work. 2017;14(4):301-10.

36. Oakley B, McGrath M. Codependency and Pathological Altruism. In: Oakley B, Knafo A, Madhavan G, Wilson DS, editors. Pathological Altruism. New York: Oxford University Press, Inc; 2012. p. 49-74.

37. Stafford LL. Is codependency a meaningful concept? Issues in mental health nursing. 2001;22(3):273-86.

38. Harkness D, Cotrell G. The social construction of co-dependency in the treatment of substance abuse. Journal of substance abuse treatment. 1997;14(5):473-9.

39. Teichman M, Basha U. Codependency and family cohesion and adaptability: changes during treatment in a therapeutic community. Substance use & misuse. 1996;31(5):599-615.

40. Dear GE, Roberts CM. Validation of the holyoake codependency index. The Journal of psychology. 2005;139(4):293-313.

41. Lee B. Where Codependency Takes Us: A Commentary2014.

42. Rusnáková M. Codependency of the Members of a Family of an Alcohol Addict. Procedia - Social and Behavioral Sciences. 2014;132:647-53.

43. Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. American journal of health promotion : AJHP. 1997;12(1):38-48.

44. Prochaska J, Diclemente C. Trans-Theoretical Therapy - Toward A More Integrative Model of Change1982. 276-88 p.

45. Norcross JC, Krebs PM, Prochaska JO. Stages of change. Journal of clinical psychology. 2011;67(2):143-54.

46. Kougiali ZG, Fasulo A, Needs A, Van Laar D. Planting the seeds of change: Directionality in the narrative construction of recovery from addiction. Psychology & Health. 2017;32(6):639-64.

47. McKay JR, Van Horn D, Rennert L, Drapkin M, Ivey M, Koppenhaver J. Factors in sustained recovery from cocaine dependence. Journal of substance abuse treatment. 2013;45(2):163-72.

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Anexos

INSTRUCTIONS FOR AUTHORS

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1. Aims and Scope

The International Journal of Clinical Neurosciences and Mental Health is an open-access peer-reviewed journal published by ARC Publishing.

Our goal is to provide high-quality publications in the areas of Psychiatry and Mental Health, Neurology, Neurosurgery and Medical Psychology. Expert leaders in these medical areas constitute the international editorial board.

The journal publishes original research articles, review articles, drug reviews, case reports, case snippets, viewpoints, letters to the editor, editorials and guest editorials.

The International Journal of Clinical Neurosciences and Mental Health follows the highest scientific standards, such as the CONSORT / STROBE guidelines and the Uniform Requirements for Manuscripts Submitted to Biomedical Journals (ICJME).

The journal offers:

- Trusted peer review process
- Fast submission-to-publication time
- Open-access publication without author fees
- Multidisciplinary audience and global exposure

2. Types of papers

The International Journal of Clinical Neurosciences and Mental Health publishes scientific articles in the following categories:

- Original Research.
- Reviews.
- Drug Reviews.
- Case Reports.
- Case Snippets.
- Viewpoints.
- Letters to the Editor.
- Editorials and Guest Editorials.

As an open-access, online-only publication, the International Journal of Clinical Neurosciences and Mental Health does not enforce arbitrary word count or illustration limits. The journal a provides a recommendation on the length of manuscripts, but authors are welcome to submit manuscripts outside those recommendations if deemed appropriate.

2.1. Original Research

The International Journal of Clinical Neurosciences and Mental Health welcomes original clinical or translational research related with psychiatry, mental health, medical psychology, neurosurgery and neurology.

Reports of randomised clinical trials should follow the CONSORT Guidelines and reports of observational studies should follow with STROBE Guidelines.

Original Research articles are recommended to have up to 4000 words (excluding title page, abstract, acknowledgements, references and tables) and up to 8 illustrations (figures or tables). Submission of supplementary material is encouraged. This may include additional illustrations of study results (both figures and/or tables), video files presenting study results or procedures, study protocol, study database and statistical analysis plan.

2.2. Reviews and Drug Reviews

Review articles on current topics related to psychiatry, mental health, medical psychology, neurosurgery and neurology, as well as CNS-related drugs are welcome. Both invited and unsolicited submissions are accepted.

Review articles are recommended to have up to 5000 words (excluding title page, abstract, acknowledgements, references and tables.). Inclusion of newly designed figures and tables to summarise key points is encouraged. The used of previously published material is subject to the licence agreement of the original publisher, and should generally be avoided. If previously published materials are, nonetheless, included in the illustrations, the authors should procure appropriate authorisation for use from the original publisher prior to submission.

2.3. Case Reports and Case Snippets

Highly meaningful Case Reports are accepted, presenting major educational content or major clinical findings. Case Snippets should describe a diagnosis or therapeutic challenge.

Case Reports and Case Snippets are recommended to have 750–1000 words (excluding title page, abstract, acknowledgements, references and tables) and up to 2 figures or tables.

2.4. Viewpoints

Viewpoints should provide an expert opinion on important topics for medical research or practice, with possibility for covering social and policy aspects. This section encourages dialogue and debate on relevant issues with expert views based on evidence.

Viewpoints are recommended to have 1500–3000 words (excluding title page, abstract, acknowledgements, references and tables) and can include figures or tables, as deemed appropriate.

2.5. Letters to the Editor

Letters to the Editor should share views on published articles, any findings insufficient for a research article or present ideas on any subject within the scope of the journal.

Letters to the Editor are recommended to have up to 1500 words (excluding title page, abstract, acknowledgements, references and tables) and can include figures or tables, as deemed appropriate.

2.6. Editorials and Guest Editorials

Authors are invited by the Editor-in-Chief to comment on specific topics and express their opinions in the form of Editorials. Nonetheless, interested authors are encouraged to contact the Editor-in-Chief with proposals for writing Editorials.

3. Manuscript Submission

These instructions advise on how the manuscript should be prepared and submitted. Manuscripts that do not comply with the guidelines will be returned to the authors before being considered for peer-review.

All manuscripts should be prepared in A4-size or US-letter size, in UK or US English throughout the manuscript, a mixture of UK and US English will not be accepted.

Manuscripts should be submitted in *.doc and *.pdf formats, in the appropriate section of the journal website: IJCNMH online submission.

3.1. Cover Letter

A cover letter should be submitted together with the manuscript, in *.doc or *.pdf format, addressed to the Editor-in-Chief, and signed by the author submitting the manuscript.

A template for the cover letter is available for download.

The cover letter should contain statements about originality of your publication, Ethics Committee approval and informed consent (if applicable), conflicts of interest and why in your opinion your manuscript should be published.

3.2. Manuscript Preparation

The manuscript must be divided in 2 files: the Title page (submitted in *.doc format and *.pdf formats) and the Manuscript body (submitted in *.doc and *.pdf formats).

Submitting these 2 files is essential to ensure double-blind peer-review. Failure to provide these 2 files will result in delay in the peer-review process, since the manuscript will be returned to the authors for adjustment.

Title page

This should be submitted as a separate file from your manuscript (to ensure anonymity in the peer review process) and should include:

- Article title.
- Authors' names, titles (e.g. MD, PhD, MSc, etc.) and institutional affiliations.
- Corresponding author: name, mailing address, telephone and fax numbers, email address.
- Keywords (maximum of 10), according to MeSH terms, whenever possible.
- A short title (running head) (up to 70 characters).
- Abstract word count (up to 250 words).
- Disclosure of conflicts of interest. Any conflict of interests should be declared. If authors have no declaration it should be written: "The authors declare no conflict of interest".

Manuscript body:

The Manuscript body must be anonymous, not containing the names or affiliations of the authors. It must be structured in the following order: title, abstract, body text, acknowledgements, references, tables, and figures captions/legends. The manuscript body should contain the title and the abstract, since the title page is not sent to reviewers during peer-review.

- The text must be formatted as follow:
- Arial fonts, size: 11 points.
- Double line spacing (see paragraph menu).
- Aligned to the left (not justified).

Showing continuous line numbers on the left border of the page. For MS Word you can add line numbers by going to: Page Layout -> Line Numbers -> select "Continuous"; for OpenOffice: Tools -> Line Numbering -> tick "Show numbering".

Title

A descriptive and scientifically accurate article title should be provided.

Abstract (250 words maximum)

An abstract should be prepared for all types of manuscript, except Editorials.

Abstracts of Original Research articles should be structured as: background/objective, methods, results, and conclusions. If the publication is associated with a registered clinical trial, the trial registration number should be referred at the end of the abstract.

Case-reports should be structured as background/introduction, case report, discussion.

Systematic review articles should have a structured abstract with generally the same headings as Original Research articles, whereas narrative review articles can have a structured or unstructured abstract, as deemed appropriate by the authors.

Abstracts for Viewpoint articles and Letters to the Editor, can have a structured or unstructured abstracts, as deemed appropriate by the authors.

Body text

Original research articles

Original research articles should be structured as follows:

Introduction: Should present the background for the investigation and justify its relevancy. Claims should be supported by appropriate references. Introduction should end by stating the objectives of the study.

Methods: Should allow the reproduction of results and therefore must provide enough detail. Appropriate subheadings can be included, if needed.

Results: Should include detailed descriptions of generated data. This section can be separated into subsections with concise self-explanatory subheadings.

Discussion: Should be brief but comprehensive and well argued, summarise and discuss

the main findings, their clinical relevance, the strengths and limitations of the study, future perspectives with suggestion of experiments to be addressed in the future.

Review articles and Drug Reviews

These types of articles should be organised in sections and subsections, as deemed appropriate by the authors

Case Reports and Case Snippets

These types of articles should be organised in the general following sections: Introduction/ Background, Case Report, Discussion. Subsections should be used as deemed appropriate by the authors

Acknowledgements

This section should name everyone who has contributed to the work but does not qualify as an author. People mentioned in this section must be informed and only upon consent should their names be included along with their contributions. Financial support (with grant number, if applicable) should also be stated here.

References

References citation in the text should be numbered sequentially along the text, within square brackets. The use of a reference management tool (such as Endnote or Reference Manager) is recommended. References must be formatted in Vancouver style.

Only published or accepted for publication material can be referenced. Personal communications can be included in the text but not in the references list.

Tables

Tables should be smaller than a page, without picture elements or text boxes. Tables should have a concise but descriptive title and should be numbered in Arabic numerals. Table footnotes should explain any abbreviations or symbols that should be indicated by superscript lower-case letters on the body table.

Figures

Figures should have a concise but descriptive title and should be numbered in Arabic numerals. If the article is accepted for publication, the authors may be asked to submit higher resolution figures. Copyright pictures shall not be published unless the authors submit a written consent from the copyright holder to allow publishing.

Figures should be tested and printed on a personal printer prior to submission. The printed image, resized to the intended dimensions, is almost a replication of how the picture will look online. It shall be clearly perceived, non-pixelated nor grainy. Only flattened versions of layered images are allowed. Each figure can only have a 2-point white space border, thus cropping is strongly advised. For text within figures, Arial fonts between 8 to 11 points should be used and must be readable. When symbols are used, the font information should be embedded.

Photographs should be submitted as *.eps at high-resolution (300 dpi or more), *.tif or *.pdf. Graphics should be submitted in *.eps or *.pdf format, to allow proper reproduction. MS Office graphics are also acceptable, if submitted in their original, editable formats.

Lines, rules and strokes should be between 0.5-1.5 points for reproducibility purposes.

Nomenclature

All units should be in International System (SI). Drugs should be designated by their International Non-Proprietary Name (INN).

3.3. Supporting Information

Code of Experimental Practice and Ethics

The minimal ethics requirements are those recommended by the Code of Ethics of the World Medical Association (Declaration of Helsinki). Authors should provide information regarding ethics on patient informed consent, data privacy as well as competing interests. If the authors have submitted a related manuscript elsewhere, they should disclose this information prior to submission.

3.4. Submission Checklist

Please ensure you have addressed the following issues prior submission:

- Details for competing interests.
- Details for financial disclosure.
- Details for authors contribution.
- Participants informed consent statement.
- Authorisation for use of figures included in the manuscript, not produced by the authors and subject to copyright.
- Authorship, affiliations and email addresses are correct.
- Cover letter addressed to the Editor-in-Chief.
- Identification of potential reviewers and their email addresses (to be introduced at the online submission platform).
- Manuscript, figure and tables comply with the author guidelines, including the correct format, SI units and standard nomenclature.
- Separated files for Title page (*.doc+*.pdf) and Manuscript body (*.doc+*.pdf)—4 in total.
- Manuscript body does not contain the names or affiliations of the authors, or other directly identifying information, and contain the title and the abstract.

If you have any questions, please contact the editorial office at ijcnmh@arc-publishing.org

4. Overview of the Editorial Process

The International Journal of Clinical Neurosciences and Mental Health aims to provide an efficient and constructive view of the manuscripts submitted to achieve a high quality level of publications. The editorial board is constituted by expert leaders in several areas of medicine particularly in Clinical Neuroscience and Mental Health.

Once submitted, the manuscript is assigned to an editor which evaluates and decides whether the manuscript is accepted for peer-review. At this initial phase, the editor evaluates if the manuscript fulfils the scope of the journal according to the content and minimum quality standards. For peer-review, one or two additional expert field editors will comment on the manuscript and decide on whether it is accepted for publishing with minor corrections or not accepted for publishing. The editor may ask authors to resubmit after revision (minor or major). Decision is based on technical and scientific merits of the work. Reviewers can be asked to be disclosed or stay anonymous. Authors can exclude specific editors or reviewers from the process, upon submission, a rational should be provided.

Upon evaluation, an email is sent to the corresponding author with the decision. If accepted, the manuscript enters the production process. It takes approximately 2-4 weeks for the manuscript to be published.

4.1. Appeal Process

The editors will respond to appeals from authors which manuscripts were rejected. Their interests should be sent to the Editor.

Two directions can be followed:

- If the Editor does not accept the appeal, further right to appeal is denied.
- If the Editor accepts the appeal, a further review will be asked. After the new review, the editor can reject or accept the appeal. If rejected, nothing else can be done, if accepted the author is able to resubmit the manuscript.

The reasons for not accepting a manuscript for consideration can be:

- The manuscript does not follow the scope of the journal.
- The manuscript has potential interest but there are methodological concerns after peer-review or editorial examination.