Mentalization Based Treatment for Behavioral Addictions: A Conceptual Framework

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Abstract: Mentalization is concept with almost 30 years of history and it is the core of mentalization-based therapy, a form of psychotherapy initially designed for borderline personality disorder. Mentalization based treatment (MBT) includes techniques focused upon practicing with the patient on how to make representations of internal states, analyzing current problems and not the past ones, and constructing mentalizing capacities instead of creating insight. A review of current data regarding the efficacy of MBT include randomized trials for borderline personality disorder and major depressive disorder, but also protocols for further studies and conceptual discussions about MBT in eating disorders, severe borderline personality disorder and psychotic disorders. Several references have been found on MBT-derived approaches in alcohol and drug related disorders, as well as several studies about attachment styles and mentalization deficits as risk factors or associated factors in cell phone addiction, Internet and food addiction. An evaluation and treatment framework for patients with behavioral addiction is suggested, with validated psychometric scales applied initially and periodically, throughout the duration of MBT. Therapeutic techniques should focus on the difficulties the subject has in controlling his/her own emotional impulses, and on mentalizing the internal and environmental cues that trigger the addictive behavior.

Key-Words: mentalization, mentalization based treatment, behavioral addictions, Internet addiction, cell phone addiction, food addiction, psychotherapy

1 Introduction

Mentalization is a term used for the first time by P. Fonagy in 1989 [1] and developed further in the context of psychotherapy for borderline personality disorders. Mentalization is defined as the capacity to understand one own's behavior and the actions of others in terms of intentional mental states [2]. Mental states refer to the entirety of thoughts, perceptions, feelings, intentions, and motivations, encompassing all the dynamic processes that define at one specific time one individual' psychic life. This concept of "mentalization" has a specific importance in the domain of psychiatric disorders, due to its fundamental participation in the developing of adequate interpersonal relationships and healthy self-image [3].

Mentalizing is the process by which individuals make sense of each other and of themselves, in terms of subjective states and mental processes [4]. As social beings, mentalizing is intrinsic to our daily existence and form the basic structure of our relational network. This concept has been considered as the core of borderline personality disorder phenomenology, because these individuals have reduced capacities to understand own feelings, as well as others' emotional states [4].

Mentalization based treatment (MBT) includes techniques focused upon practicing with the patient on how to make representations of internal states, analyzing current problems and not the past ones, and constructing mentalizing capacities instead of creating insight [5].

Competing techniques for behavioral addictions are not very numerous, and only cognitive-behavioral therapy and self-help groups have been supported by reviews until now [6]. Brief motivational interviewing using telephone short consultations and motivational interventions have been also explored for behavioral addictions with mixed results [6].

A review that analyzed direct comparisons among treatments failed to reveal consistent superiority of one approach over another [7]. The psychotherapeutic approaches investigated in this review were twelve step and disease oriented treatments, cognitive behavioral therapy,

motivational interviewing, and contingency management [7].

In this context, mindfulness based therapies could offer a new perspective over the factors involved in the pathogenesis of behavioral addictions, and several programs that have been developed for drug induced disorders could also be used in behavioral therapy [8].

2 Mentalizing and mentalization-based therapy applications

In *borderline personality disorder* mentalization based therapy has been evaluated in randomized trials, with positive results. A study with 134 subjects compared MBT with structured clinical management, with blind-to-randomization evaluators assessing every 6 months the results [9]. Subjects receiving MBT presented a steeper decline of self-reported and clinically significant problems, including suicide attempts and hospitalization [9].

Another randomized trial included 58 subjects diagnosed with borderline personality disorder that were randomized to either 2 years of intensive individual and group MBT, or 2 years of less-intensive supportive group therapy [10]. MBT-treated subjects were significantly superior to control-group only in the global functioning, but a trend for higher rate of recovery was also detected in the MBT group [10].

An 8-year follow-up after randomization comparison of MBT and treatment as usual for borderline personality disorder detected clinical and statistical superiority for MBT on suicidality, diagnostic status, service use, use of medication, global function above 60, and vocational status [11].

Adolescents (n=80) who presented *self-harm and comorbid depression* were randomized to either MBT or treatment as usual, and monitored for 12 months, and the results were superior for MBT-treated group, as reflected in the self-harm and depression scores decrease [12]. This superiority was explained by improved mentalization and reduced attachment avoidance [12].

Third-wave cognitive therapy was compared with MBT in adult subjects (n=44) diagnosed with *major depressive disorder*, and the difference in Hamilton Depression Rating Scale score favored cognitive therapy after 18 weeks [13]. In another trial, patients with major depressive disorder received 40-week short-term psychodynamic psychotherapy with MBT (STMBP) and improvements at end-point and 1-year follow-up were recorded in both depression severity scores and alexithymia [14].

Deficits in social cognition have been identified in patients with *psychotic disorders*, d.e. difficulties in recognizing emotions, empathizing, and understanding social hints [15]. Attachment style is a clinically relevant construct for understanding the development and treatment of psychotic disorders, and associations between insecure attachment and impaired mentalization skills may be used for improving recovery [16]. Mentalization-based treatment for psychotic disorder (MBT-P) is expected to improve the patient functional prognosis through significant amelioration in the social cognition.

Ongoing randomized controlled trials focused on MBT have been reported in eating disorders comorbid with borderline personality disorder (NOURISHED study, MBT for Eating Disorders, MBT-ED versus standard comparison treatment, Specialist Supportive Clinical Management, SSCM-ED) [17], and severe borderline personality disorder (MBT- day hospitalization setting versus MBT in an intensive outpatient setting) [18].

3 Mentalization and addictive disorders

Drug addiction could be related to severe impairments in mentalizing, as well as developmental deficits, and the core problem is conceptualized by several authors to be deficits in the affect processing [19].

The quality of caregiving in mothers who present history of chronic substance use could be improved by psychotherapy [20]. It has been observed that mothers with history of drug addiction are at greater risk for losing custody of their young children [21]. This phenomenon could be mediated by lower levels of mothers' sensitivity and responsiveness to their children's emotional cues, and by oscillations between intrusive, over-controlling behavior and passive withdrawal [20,22]. All these are related to mentalization processes and seems intuitively correct to be addressed by MBT.

The efficacy of Mothering from the Inside Out (MIO), a form of therapy based on mentalization, was evaluated versus parent education, during 12 weeks, in a group of mothers (n=87) with *chronic substance use* [23]. A higher capacity for reflective functioning and representational coherence at posttreatment and 3-

month follow-up, as well as greater sensitivity were detected in the MIO-treated subjects [23].

The association between *food addiction* and mentalization deficits has been investigated in a general population survey [24]. High food-addiction symptoms were associated with more difficulties in emotion regulation and mentalization deficits in bivariate analysis, which explains the correlation between difficulties in understanding own and others inner mental states in moments of powerful emotions and the food addiction behaviors [24].

A stepwise multiple regression analysis showed that depression and avoidant attachment style predicted *cell phone addiction* in students [25]. Also, *Internet addiction* correlated with higher Beck Depression Inventory scores and higher attachment anxiety sub-scores on Experiences in Close Relationships Questionnaire- r [26].

Based on the few data about behavioral addictions pathogenesis, it may be considered that attachment styles and dysfunctions in mentalization are vulnerability factors that should be evaluated for configuring a complete profile of the patient.

4 A model for behavioral addiction evaluation and treatment

Very few data regarding the possibility of applying mentalization concept and MBT-derived techniques in behavioral addictions were found in the literature, except for references about attachment styles in Internet and cell-phone addiction, and mentalization deficits in food addiction [24,27]. In fact, very few good quality papers focused on MBT in any kind of addiction have been detected. However, based on the references found in relation to the MBT efficacy in affective, psychotic and personality disorders, the concept of mentalization could be applied in the field of behavioral addictions, due to the fact that various problems in emotional, ideational and relational domains can be explained by deficits in mentalization and dysfunctional attachment styles.

After reviewing the available data, we propose a model for evaluation and intervention in patients with behavioral addiction, based on the basic concepts of MBT.

We consider the first necessary step is a structured evaluation of the personality and attachment style the patient with a behavioral addiction present.

For this purpose, we suggest the use of the Structured Clinical Interview for the Diagnosis of Personality Disorders for DSM IV (SCID-II) [27,28], which remains the "golden standard" for axis II diagnoses, being widely used in research and clinical settings.

For the determination of the attachment style, Revised Adult Attachment Scale (RAAS) [28] offers a good evaluation of the interpersonal relationships, measured on a 5-point Likert scale, from 1= "not at all characteristics of me", to 5= "very characteristics of me". Results could be distributed on two dimensions, "closeness/dependency" and "anxiety", and 4 styles of attachment could result [28].

Hamilton Depression Scale - 21-item version, Hamilton Anxiety Scale, and Brief Psychiatric Rating Scale are necessary for an initial evaluation, but also for monitorization of patients with behavioral addiction, due to the high rates of co-morbidity reported in the literature [29-31].

Specific behavioral addiction scales should be used initially and periodically, for the symptoms' severity measurement. Such instruments are, for example, Smartphone Addiction Scale [32] for cell phone dependence, or Bergen Social Media Addiction Scale [33] for cases of social network sites dependence.

The duration of MBT for behavioral addiction is hard to be estimated, due to the lack of trials in this field, but based on alcohol or drug-dependence cases, a 12-week duration for reaching a level of significant change seems granted.

Therapeutic techniques should focus on the difficulties the subject has in controlling his/her own emotional impulses, and on mentalizing the internal and environmental cues that trigger the addictive behavior. A patient with a behavioral addiction could have difficulties in understanding the impact his/her actions has over the family members and friends, and the therapist could be helpful in helping the subject to represent him/herself emotional states of others while he/she engages in the addiction. Reaching a superior level of mentalization could act as a break for the addiction-related behaviors, and developing a more secure style of attachment during therapy could help patients to construct a more realistic sense of self and a better self-image.

5 Conclusion

Behavioral addictions are a difficult target for psychotherapy, due to an intricated and very complex pathogenesis, which includes personality factors, peculiarities of the attachment style, and mentalization dysfunctions.

While no therapy has been proved superior to another in direct comparisons, new techniques of psychotherapy should be investigated. Addressing

patients' difficulties in understanding their own' and others' mental processes could be a good start for changing addictive behaviors.

MBT could be useful in behavioral addiction, but more studies should be designed for evaluating its efficacy. Until now, determining the attachment style and possible mentalization dysfunctions proved useful as a way of finding vulnerability factors that could be addressed in a future therapy.

Further research should address important aspects of MBT in behavioral addictions, like the correlation between attachment style and the propensity for developing a behavioral addiction, the involvement of the patient' theory of mind in the genesis of an addiction, and the responsiveness of multiple behavioral addictions to MBT.

Designing a randomized trial with an active comparator, like the cognitive behavioral therapy, could be the most important way to prove the MBT's efficacy in the treatment of behavioral addictions.

References:

[1] Fonagy P. On tolerating mental states: theory of mind in borderline patients. *Bulletin of the Anna Freud Centre* 12, 1989, 91-115.

[2] De Oliveira C, Rahioui H, Smadja M et al. Mentalization based treatment and borderline personality disorder. *Encephale* 2016, pii: S0013-7006(16)30124-5.

[3] Fonagy P, Gergely G, Target M. *Affect regulation, mentalization, and the development of the self*. New York, US, Other Press, 2004.

[4] Bateman A, Fonagy P. Mentalization based treatment for borderline personality disorder. *Am J Psychiatry* 165(9), 2008, 1127-35.

[5] Bateman A, Fonagy P. *Handbook of mentalizing in mental health practice*. Washington, American Psychiatric Publishing, 2012.

[6] Yau YHC, Potenza MN. *Gambling disorder and other behavioral addictions: Recognition and treatment.* Harv Rev Psychiatry 23(2), 2015, 134-146.

[7] Longabaugh R, Magill M. Recent advances in behavioral addiction treatments: Focusing on mechanisms of change. Curr Psychiatry Rep 13(5), 2011, 382-389.

[8] Nallet A, Briefer JF, Perret I. Mindfulness in addiction therapy. Rev Med Suisse 11(480), 2015, 1407-9.

[9] Bateman A, Fonagy P. Randomized controlled trial of outpatient mentalization-based treatment versus structured clinical management for borderline personality disorder. *Am J Psychiatry* 166(12), 2009, 1355-64.

[10] Jorgensen CR, Freund C, Boye R et al. Outcome of mentalization-based and supportive psychotherapy in patients with borderline personality disorder: a randomized trial. *Acta Psychiatr Scand* 127(4), 2013, 305-17.

[11] Bateman A, Fonagy P. 8-year follow-up of patients treated for borderline personality disorder: mentalization-based treatment versus treatment as usual. *Am J Psychiatry* 165(5), 2008, 631-8.

[12] Rossouw TI, Fonagy P. Mentalization-based treatment for self-harm in adolescents: a randomized controlled trial. *J Am Acad Child Adolesc Psychiatry* 51(12), 2012, 1304-13.

[13] Jakobsen JC, Gluud C, Kongerslev M et al. Third-wave cognitive therapy versus mentalization-based treatment for major depressive disorder: a randomized clinical trial. *BMJ Open* 4(8), 2014, e004903.

[14] Bressi C, Fronza S, Minacapelli E et al. Short-term psychodynamic psychotherapy with mentalization-based techniques in major depression disorder patients: relationship among alexithymia, reflective functioning, and outcome variables- a pilot study. *Psychol Psychother* 2016 Nov. doi: 10.1111/papt.12110.

[15] Weijers J, ten Kate C, Eurelings-Bontekoe E et al. Mentalization-based treatment for psychotic disorder: protocol of a randomized controlled trial. *BMC Psychiatry* 16, 2016, 191.

[16] Korver-Nieberg N, Berry K, Meijer CJ, de Haan L. Adult attachment and psychotic phenomenology in clinical and non-clinical samples: a systematic review. *Psychol Psychother* 87(2), 2014, 127-54.

[17] Robinson P, Barrett B, Bateman A et al. Study protocol for a randomized controlled trial of mentalization based therapy against specialist supportive clinical management in patients with both eating disorders and symptoms of borderline personality disorder. *BMC Psychiatry* 14, 2014, 51.

[18] Laurenssen EM, Smits ML, Bales DL et al. Day hospital mentalization-based treatment versus intensive outpatient mentalization-based treatment for patients with severe borderline personality disorder: protocol of a multicenter randomized clinical trial. *BMC Psychiatry* 14, 2014, 301.

[19] Savov S, Atanassov N. Deficits of affect mentalization in patients with drug addiction: Theoretical and clinical aspects. *ISRN Addict* 2013, 2013, 250751.

[20] Suchman NE. Mothering from inside out: A mentalization-based therapy for mothers in

treatment for drug addiction. *Int J Birth Parent Educ* 3(4), 2016, 19-24.
[21] Choi S, Ryan J. Completing substance abuse treatment in child welfare: The role of co-occurring problems and primary drug of choice. *Child Maltreatment* 11(4), 2006, 313-25.
[22] Burns KA, Chethik L, Burns WJ, Clark R. The early relationship of drug abusing mothers and their infants: An assessment at eight to twelve months of age. *Journal of Clinical Psychology* 53, 1997, 279-87.
[23] Suchman NE, DeCoste CL, McMahon TJ et al. Mothering from the inside out: Results of a second randomized clinical trial testing a mentalization-based intervention for mothers in addiction treatment. *Dev Psychopathol* 29(2), 2017, 617-36.
[24] Innamorati M, Imperatori C, Harnic D et al. Emotion regulation and mentalization in people at risk for food addiction. *Behav Med* 43(1), 2017, 21-30.
[25] Ghasempour A, Mahmoodi-Aghdam M. The role of depression and attachment styles in predicting students' addiction to cell phones. *Addict Health* 7(3-4), 2015, 192-7.
[26] Senormanci O, Senormanci G, Guclu O, Konkan R. Attachment and family functioning in patients with internet addiction. *Gen Hosp Psychiatry* 36(2), 2014, 203-7.
[27] Ryder AG, Costa PT, Bagby RM. Evaluation of the SCID-II personality disorder traits for DSM-IV: coherence, discrimination, relations with general personality traits, and functional impairment. *J Pers Disord* 21(6), 2007, 626-37.
[28] Collins NL. Working models of attachment: Implications for explanation, emotion and behavior. Journal of Personality and Social Psychology 71(4), 1996, 810-832.
[29] Hamilton M. A rating scale for depression. *J Neurol Neurosurg Psychiatry* 23(10), 1960, 56-62.
[30] Hamilton M. The Assessment of anxiety states by rating. *Br J Med Psychol* 32, 1959, 50-55.
[31] Overall JE, Gorham DR. The brief psychiatric rating scale. *Psychol Rep* 10, 1962, 799-812.
[32] Kwon M, Lee JY, Won WY et al. Development and validation of a smartphone addiction scale (SAS). *PLoS One* 8(2), 2013, e56936.
[33] Andreassen CS, Torsheim T, Brunborg GS, Pallesen S. Developing of a Facebook Addiction Scale. *Psychological Reports* 110, 2012, 501-517.