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Federica Sicari, Psy.D.
University of Messina, Italy
Email: federicasicari7@gmail.com

Clinical psychology represents a complex and articulated area. The genesis is due to the confluence of two cultural traditions: the psychometric one based on a set of investigative tools, aimed at the observation and quantitative evaluation of human behavior and the dynamic tradition, linked to the understanding of psychic functioning and the organization of personality. For both "souls" of psychology, the object of study is unanimously recognized in the subject and in particular, in its psychic and behavioral manifestations,

referring to cognitive processes and emotional dynamics. The prevalent reference to the individual and especially to the problematic individual has progressively highlighted the existence of psychic disorders. The study of these dysfunctions is the focus of the articles presented in Volume 60 of the *Clinical Psychology Review*, whose contribution consists not only in analysis of the basic mechanisms of various diseases but also in providing an innovative interpretation of phenomena.

At the beginning of this issue, the authors present an article concerning the preventive interventions aimed at the children of depressed parents. This study is very important in the clinical field because depression is one of the most common psychiatric disorders: it's estimated that about 350 million people worldwide are affected (WHO, 2015). The age of onset is around 15-20 years, about twice as frequent in women. The appearance in adolescence is problematic because it affects the educational and social sphere and the possibility of chronic depression and suicide in adulthood (Thapar, Collishaw, Pine and Thapar, 2012; Weissman et al., 1999). One of the main elements that can contribute to the onset of disorder in adolescents concerns the presence of a depressed parent within the family context. In fact, through a detailed bibliographic research, the authors focused on studies concerning non-depressed children (aged no more than 18 years) of depressed parents: an example is the longitudinal analysis of Weissman et al. (2006), who showed that the offsprings of depressed parents develops disorder 3-4 times more than children of non-depressed parents. That result prove that 50% of the first group develops the pathology around the age of 20, with an earlier age of onset. Beyond the genetic component, the results shows that also the psychosocial and environmental components as attribution and parenting influence can contribute to the development of depression (Goodman & Gotlib, 1999; Hosman, van Doesum and van Santvoort , 2009). These risk factors represent the core of this innovative study; unlike previous meta - analyzes, it doesn't focus exclusively on the causal elements of pathology but also verifies the real effectiveness of the interventions.

By presenting an updated overview, it was found that current preventive tools such as Family Talk Intervention (FTI) (Beardslee et al., 1997), or Parenting Training (PT) programs (Sanford et al., 2003) attenuate childhood depression symptoms if present and prevent or delay the risk of disease.

Despite the proven effectiveness, the authors raised an important issue concerning duration of effects: effects are significant within four months from the end of intervention but decrease over time. This result could be linked to genetic components and to their impact in everyday life. In fact, living with a depressed parent is a chronic aspect of the child's existence: his daily exposure to the problem can reduce the long-term of intervention effects, generating guilt and undermining the sense of self-efficacy. These reflections have important implications for future perspectives, as the need to develop specific programs that are effective even after some time and which are tested on a diversified ethnic sample. According to the authors, therefore, it's necessary to extend the research to other groups and implement psychoeducational interventions that guarantee the maintenance of long-term results, favoring the development of coping strategies and the consequent resilience increase in adolescents. Moreover, parents should be involved in intensive courses to transmit information useful for the treatment of the disease and if necessary, they can start a therapeutic path that guarantees adequate support even during the critical phases of their life.

Psychoeducational interventions are effective for treatment of another type of pathology, object of study of the second article: the Specific Phobia of Vomiting (SPOV), better known as "Emetophobia". This disorder consists in a particular fear linked to the act of vomiting and is caused by the inability to prevent or dominate one's own contractions. The emetophobic is tormented by the idea of putting back, and / or seeing others do it. The subject also has a persistent nausea that doesn't allow him an adequate quality of life and that causes avoidance behaviors towards places, foods, people.

The disorder consists of a persistent fear of losing control and anxiety about the situation. Subjects with SPOV report a high degree of distress (Lipsitz et al., 2001), a greater propensity to disgust and fears related to the consequences of vomiting as loss of control and panic. It is a common condition among women and its prevalence is relatively rare compared to other specific phobias (Becker et al., 2007). Symptoms often represent the fulcrum of other pathologies, hindering not only the diagnosis but also a possible intervention (Wolitzky-Taylor, Horowitz, Powers & Telch, 2008); moreover, considering the high comorbidity with DOC and eating disorders, the treatment is very complex.

The objective of this study is to fill in the gaps and stimulate future research concerning SPOV phenomenology, etiological factors and possible treatment. This research is particularly interesting because it highlights two models that explain the pathology maintenance: the first associates SPOV with panic attacks as normal bodily sensations are erroneously interpreted as an imminent episode of vomiting and loss of control. These episodes generate anxiety and gastrointestinal symptoms, which create a dangerous vicious circle characterized by avoidance behavior (Boschen, 2007). The second model highlights the similarity between the cognitive patterns of individuals affected by SPOV and those of individuals who experienced a traumatic event. In fact, it emerged that almost a third of the affected population experiences intrusive images triggered by fragments of past memories and experiences related to vomiting. In order to cope with the anxiety arising from these episodes, individuals perform numerous protective behaviors to eliminate the risk of the event occurring: these include food restrictions, abuse of anti-emetic medicines, avoidance of crowded places from which it's difficult to escape or receive help, wash and clean oneself frequently to combat the fear of contamination. Similar to the Boschen model, the fear of vomiting is then maintained for avoidance, hypervigilance and safety behaviors (Veale, 2009). These have a negative effect on the emetophobic life, causing an interruption of normal daily activities (Davidson et al., 2008).

Currently there's no clear and unambiguous cause that can explain the genesis of disorder but it's only possible to hypothesize it, based on the diagnosis. For example, if considered as phobia, the cause could be traced back to adverse experiences such as severe food poisoning. Within an agoraphobic or social phobia framework, the causes of the SPOV can be related to the fear of being in places where it would be difficult or embarrassing to leave and this could generate a sense of shame considered dramatic and unacceptable.

This study therefore creates significant insights into clinical practice and can have important implications from a future perspective. At the diagnostic level, as we have seen, research on comorbidity is fundamental due to the overlap of the clinical features of SPOV with diseases such as panic, social phobia, agoraphobia, DOC, depression and eating disorders. In particular,

although part of anxiety disorders, SPOV is often confused with anorexia nervosa, making the care path even more complex and often unsuccessful.

Although some emetophobic had this disorder in the past, the correlation between two diseases is almost always wrong because in many cases it's only the fear of throwing up to produce food restrictions, resulting in an underweight. In contrast to people suffering from eating disorders in fact, emetophobics don't present any disturbance of the body image but rather a poor enteroceptive awareness that is an extreme difficulty in recognizing hunger and satiety, in addition to internal and external emotional states. Unfortunately, from studies performed, it emerged that only a small number of researches explores the co-morbidity in SPOV, resulting in a high rate of misdiagnosis and difficulty in accessing specialist care. Moreover, due to the small size of the samples used, the generalizability of the results is particularly affected. Research on the effectiveness of psychological treatments is also quite limited: the existing ones suggest that the disorder can be successfully treated with CBT (Graziano, Callueng, & Geffken, 2010); systemic therapy (O'Connor, 1983); psychotherapy (Manassis and Kalman, 1990) and hypnotherapy (McKenzie, 1994; Ritow, 1979). CBT significantly reduced levels of depression, anxiety and stress, improving quality of life while individuals subjected to graduated exposure and relaxation techniques (Philips, 1985) showed a significant reduction in symptoms, also maintained at the follow up. Psycho-education has also proved effective because it develops awareness in the subject: through an investigation of the beliefs related to the act of vomiting, in fact, the patient implements therapeutic strategies that allow him to preserve or replace these thoughts in a functional way. On the basis of the topics just discussed, it is useful to analyze with other studies the subjects affected by Emetophobia, using reliable tools; it's also necessary to explore the phenomenology through a large sample, to consider the co-morbidity in the planning of the intervention and in particular, to fill the gaps related to the effectiveness of psychological treatments, in order to improve well-being and quality of life of the patients.

The quality of life is compromised in another type of disorder characterized by a persistent alteration of psycho-social functioning and with important relapses in clinical terms: the Binge Eating Disorder (BED). This pathology,

representing the fulcrum of the third article, is characterized by the presence of hyperphagia, not followed by compensatory or elimination behaviors, as it occurs in bulimia nervosa.

The episodes of uncontrolled eating are characterized by the presence of some peculiar elements, such as eating in a defined arc of time a quantity of food greater than what other people would do in the same condition. This is accompanied by a loss of control over the act of eating and a consequent sensation of not being able to stop the compulsive binge.

Although the diagnosis of BED was recently included in the DSM-5 (APA, 2013), current studies indicate a high prevalence of the disorder, with an incidence of 3.5% and an early onset age around 20 years. This fact underlines the importance of a timely and effective intervention, which focuses on the psychological processes and the neural substrates involved in the genesis of the disorder; according to the authors, these factors are fundamental to differentiate Binge Eating Disorder (BED) from Obesity (OB). These two conditions are often associated with two fundamental elements: the size of the binge and loss of control (Z. Cooper & Fairburn, 1987). These constructs are often ambiguous and difficult to define, so the authors have introduced studies and suggested solutions for a correct diagnosis: for example, it is important to differentiate an "objective episode of binge", according to the definition of DSM-5 or "subjective". In the first case, the patient experiences a severe loss of control and consumes an objectively large amount of food; in the second case, the same loss of control is present but the quantity of food consumed although not objectively large is perceived as such. This clarification is fundamental because only objective episodes are considered for diagnostic purposes; however, determining the "objective size" of a food episode is rather complex since it's mostly based on the individual judgment of the physician (Wolfe et al., 2009).

For this reason, the authors have suggested the calculation of BMI to determine the right caloric intake of each patient and evaluate whether the amount of food consumed is excessive (Arikian et al., 2012). It's also requested to clarify the meaning of "loss of control", also through the use of metaphors, so that the patient can easily identify it and improve the diagnosis (Blomquist et al., 2014).

The authors therefore suggested a valid diagnostic methodology but at the same time tried to clarify the link between BED and obesity. Although two diseases are related, there are important differences between the disorders: BED is considered as a distinct phenotype within the obesity spectrum, with a different neurobiological base and different functional domains (Carnell et al., 2012). One of the identified domains concerns high emotional responsiveness associated with a larger deficit in cognitive control and high levels of anxiety and depression.

Another factor analyzed and inspired by Pavlov's research concerns the strong desire for food; the view of food creates conditioned responses including salivation, increased heart rate, dopamine release and activation of certain neural areas. Such reactivity to foods and the resulting food cravings are higher in subjects with BED and can be causally linked to an increased number of binges. This thesis was also demonstrated thanks to neuroimaging techniques, which allowed an examination of the neural activity of the subjects with Binge Eating through exposure to food stimuli. Through the use of EEG or SPECT, it's demonstrated that obese or BED patients had a greater reactivity to high-calorie foods, compared to the control group (Svaldi et al., 2010). They also showed an increase in cerebral blood flow in the left hemisphere (Karhunen et al., 2000), including the orbitofrontal cortex (OFC) involved in the response to food stimuli.

Such research, although interesting and innovative, is rather limited because it includes only small samples and focus on reward-related constructs. Instead, it is important to replicate the studies on larger groups and analyze the interactions between emotions, reactivity to food stimuli and cognitive control, to work on the specific BED domains and address the treatments in a specific way; it's hypothesized that if these factors are so important for the etiology and maintenance of BED, altering them could be a powerful target for treatment. Through a review of the psychological and pharmacological interventions, it was found that cognitive behavioral therapy (CBT) and behavioral weight loss therapy (BWL) are more effective. The first focuses on the use of techniques such as: pre-meal planning, food diaries for monitoring and use of strategies that modify dysfunctional beliefs. The BWL focuses instead on behavioral techniques to control exposure to unhealthy foods, even suggesting exercise patterns. From a comparison between two

techniques, CBT is more effective because it's based on cognitive changes, it allows to better regulate emotions, increases awareness and inhibits the active search for food.

As for pharmacological treatments, a recent meta-analysis (Vocks et al., 2010) has demonstrated its effectiveness but only if these are combined with cognitive behavioral therapy. In addition, in most drugs only short-term effects were considered without considering the long-term consequences.

In short, psychological interventions allow better results to be achieved but the number of researches today is too small to test their effectiveness. Further studies are needed to deepen the functional domains underlying the BED, in order to analyze the interaction between emotional responsiveness and cognitive control and to test the regulation of negative emotions and desire. Such research can contribute to a greater understanding of aetiology and affect the long-term effects of treatment, particularly when the disorder occurs in comorbidity with other diseases.

The issue of comorbidity, understood as the coexistence of two or more disorders, is one of the factors that most affects the negative outcome of treatments. This construct is debated in the fourth article, with a review of the literature of the last ten years concerning its consequences on psycho-social functioning.

The presence of various diseases may cause different responses: for example, anxious children without comorbid disorders show lower functional disability and better psychosocial functioning, unlike anxious subjects characterized by ADHD or behavioral problems. Therefore, a better understanding of the different comorbidity profiles may have important implications for the interventions on anxious children with multiple diagnoses (Johnco et al., 2015).

The authors thus identified the effects of comorbidity on the treatment of young anxious patients aged 6-18 years, undergoing cognitive behavioral therapy (CBT). Secondly, they analyzed how CBT affects the treatment of multiple diseases. Primary anxiety disorders considered in the present study included Separation Anxiety Disorder (SAD), Generalized Anxiety Disorder (GAD), Panic Disorder (PD), Agoraphobia (AP), Specific Phobia (SP) and Social Phobia / Social Anxiety Disorder (SOC).

Regarding the first objective concerning the effects of comorbidity on treatment, various diseases coexisting with the anxiety syndrome have been analyzed. One of the predictors of the negative response to CBT treatment is the presence of depressive symptoms associated with anxious ones. Depression affects the motivation for change and makes it difficult to engage in treatment. Furthermore, it influences the style of personal attribution because the subject blames himself and perceives errors and imperfections much more negatively.

Recent findings indicate that social anxiety disorder also exerts a worse treatment outcome (Lundkvist-Houndoumadi et al., 2014). Several studies in fact note that its presence produces worse therapeutic results in longitudinal perspective (Kerns et al., 2013).

The role of ADHD was also examined and it was found that subjects with ADHD and anxiety had lower rates of remission despite CBT intervention. This result was justified by the fact that the symptoms of ADHD may interfere with some components of the treatment that require the child to remain focused on the task (Halldorsdottir et al., 2015).

Finally, as regards the second objective of the review concerning the effects of CBT treatment on comorbid disorders, internalizing symptoms related to anxiety have significantly improved following treatment, compared to externalizing ones.

The results presented in the following study have the merit of providing a broader view of the effects of comorbidity on treatment outcomes. Despite that, there are some limitations related to the sample: the subjects taken into consideration are not only numerically reduced but they are of different age. This variability revealed differences in the comorbidity profiles during the comparison between the different groups: Rapee et al. (2013) in fact highlighted that the oldest ones showed a greater number of comorbidities while the youngest presented externalizing disorders. The authors also found gender differences because the males showed externalizing symptoms, the female depressive symptoms.

Overall, comorbid disorders have a more negative impact on treatment outcomes than those proposed in previous reviews, particularly in cases of social anxiety and mood disorders. For a better understanding of treatment outcomes in anxious children, the authors suggest an approach that carefully

evaluates predictive and moderating factors that could influence the modalities of intervention: these elements constitute an interesting direction to follow for systematic research and future analysis.

Cognitive functioning and emotional well-being represent two of these factors because they affect the manifestation of pathology and moderate gravity. Their role has been analyzed in the fifth article and has been related to a particular disorder called Chronic Tinnitus (TC), a complex sensory experience characterized by constant buzzing in the ears or in the head and which becomes chronic after 3 months. This phenomenon, despite the significant impact on the well-being of individuals, is explored only in a small number of researches; for this reason the authors largely analyzed the phenomenon, focusing on the complex relationship between the emotional / cognitive functioning and the gravity of the tinnitus.

The innovative side of this research is the need to look for both the mechanisms that generate TC and those responsible for its maintenance. The mechanisms that generate TC are identified at the neurobiological level (De Ridder, Elgoyhen, Romo, & Langguth, 2011) in the peripheral and central auditory pathways and in the limbic system; the mechanisms that maintain TC are instead supported by emotional and cognitive processes that involve attentional, emotional and mnemonic functions, which in turn facilitate the awareness and the gravity of the sound (De Ridder et al., 2014). In fact, the presence of TC contributes to the maintenance of a vicious circle: some subjects become accustomed to the presence of buzzing, while others associate the sensation of tinnitus anxiety and catastrophic thoughts. Thus the individual continues to direct his attention and his emotional resources towards the tinnitus and this prevents him from getting used to the sensation, increasing the severity of its impact (Jastreboff et al., 1996).

Quality of life of the sample examined can be significantly compromised in three domains: physical (pain, sleep disorders, fatigue), social (relational withdrawal) and psychological (lack of self-esteem, apathy). Some studies also found the presence in some TC subjects of persistent pessimism, hysteria, anxiety, depression and social introversion, suggesting an alteration of personality traits related to self-regulation and self-awareness.

These results highlight the need to integrate psychological functions, in particular emotional well-being and cognition, in research and in health

interventions for people with TC; this should favor the implementation of standardized measures that evaluate the emotional well-being of the subjects with tinnitus and allow the identification of the co-morbid psychological symptoms.

It's also essential to recognize the elements that can moderate or influence the relationship between psychological processes and TC impact: there are in fact some elements such as depressive symptoms, which could affect the expression of tinnitus and exacerbate some aspects.

Longitudinal design can help support emerging research on the predictors of tinnitus impact and confirm the existence of a bi-directional relationship between TC and emotional or cognitive functioning. Furthermore, current advances in neuroimaging techniques offer the opportunity to also identify the neurobiological mechanisms underlying the individual's psychic functioning with TC and may constitute a new frontier for future research.

Neurobiological mechanisms are the focus of the sixth article, which analyzes a phenomenon called "Intolerance of uncertainty" (IU). IU has been defined as the "disposable inability to withstand the adverse response triggered by the perceived absence of salient, essential or sufficient information." It is believed to be supported by the associated perception of uncertainty "(Carleton, 2016). More generally, the UI can be interpreted as a fear of the unknown and as a cognitive distortion linked to the idea of danger, associated with reassortment; it's characterized by an excessive preoccupation with everything that is considered unpredictable, uncontrollable and without unambiguous possibilities of interpretation. In particular, the cause-effect relationships are conceived respectively in the following order: intolerance of uncertainty, rumination and anxious state. Such beliefs necessarily imply a catastrophic logic, which pervasively affects daily life.

IU is related to internalizing psychopathologies including generalized anxiety disorder (GAD), obsessive-compulsive disorder (DOC), social anxiety disorder, panic disorder, depression and eating disorders (Brown et al., 2017; McEvoy & Mahoney, 2012). According to the authors, in this type of disease there are high levels of uncertainty that generate anticipatory anxiety, causing in turn the implementation of maladaptive behaviors or attempts to reduce uncertainty such as excessive worry, search for reassurance, control and

hypervigilance (Barlow, 2004; Krohne, 1993). The presence of UI therefore has important clinical implications because it favors the development of anxious symptoms and predicts even worse results after treatment (Keefer et al., 2016; Oglesby, Boffa, Short, Raines, & Schmidt, 2016).

Based on these assumptions, understanding the predictive factors and the effects of IU can be important for preventing, understanding and treating internalizing psychopathology.

This study, in particular, focuses on a mechanistic neural model of uncertainty response: the authors carried out interesting research aimed at identifying the physiological correlates underlying the disorder, with particular reference to the model of anxiety of uncertainty and anticipation (UAMA) proposed by Grupe and Nitschke (2013). This model highlights the elements related to the uncertainty that contribute to the development of the anxious component, identifying possible neuronal circuits involved. The main purpose of this review is to examine how individual differences in UI are related to the physiological indicators of uncertainty responses, which are associated with an increased risk of anxiety.

UI was measured through the Uncertainty Scale (IUS). The IUS is a self-assessment tool for adults, composed of 27 items that evaluate cognitive, emotional and behavioral reactions to uncertain situations (Buhr & Dugas, 2002; Freestonet al., 1994). Afterwards, a short version of the IUS (IUS-12) is created, with two subscales that evaluate prospective UI, referring to the desire for predictability and active search for certainty ("I should organize everything in advance") and IU inhibitor, referring to paralysis of cognition and action in the face of uncertainty ("uncertainty prevents me from living a full life"). Perspective UI reflects the cognitive aspects of UI and is more closely associated with GAD and obsessive-compulsive disorder, whereas UI Inhibitory reflects behavioral aspects and is associated with social anxiety disorder, panic disorder and depression (Carleton, 2012; McEvoy & Mahoney, 2012). The problem is to demonstrate how UI can increase the risk of the onset of these pathologies: for this reason the authors have analyzed the underlying intrinsic mechanism.

According to the UAMA model, the excessive anxiety due to uncertainty is triggered by five processes:

- 1) estimates of the cost and the possibility of a negative event occurring are excessive;
- 2) subjects experience hypervigilance for the potential threat;
- 3) the ability to assess the situation as safe is lacking;
- 4) individuals avoid situations perceived as dangerous;
- 5) responsiveness to the threat has higher levels.

Each process according to the authors causes the maladaptive responses when the subject is in a situation of uncertainty: these factors increase individual responsiveness and avoidance behaviors, reinforcing the anxiety response (Grupe & Nitschke, 2013).

The analysis of these five factors is fundamental for understanding how UI determines high levels of anxiety and constitutes a risk factor for the internalizing pathologies onset. The model highlights the existence of a distortion of the threat estimate, which may reflect an interruption of the circuits of the orbitofrontal cortex, the ventral striatum and the anterior insula; these areas are associated with the calculation of the expected results and the possible cost of a future event. Also the presence of prediction errors, generated by the midbrain dopaminergic neurons, contribute to inflated estimates of both the probability and the cost of the threat.

Hypervigilance behaviors and excessive attention to stimuli perceived as threatening, is instead associated with the hyperactivity of the amygdala and its connections with the areas of the orbitofrontal cortex, the ventral and dorsal striatum and the anterior cingulate cortex (ACC). The anterior insula is also involved in the assessment and anticipation of uncertainty (Grupe & Nitschke, 2013).

Within the research, the authors explored another interesting aspect regarding the relationship between the UI and the "startle", a defensive response that is activated in response to a conditional stimulus (Davis, 2006; Lang, 1995). This reflex announces an alarm situation and constitutes an innate reaction of the organism to strong stimuli. Startle originates from the amygdala and may indicate a greater reactivity to uncertainty, central to UAMA. By recording the electromyographic activity (EMG) of the eye muscles responsible for blinking, the authors measured the response to the startle and found that UI may be associated with exaggerated startle responses only in situations perceived as more uncertain or alarming.

It also emerged that UI is reliably associated with increased activity of the anterior insula, which reflects the increase in fear expectations. UAMA suggests that a greater number of fear expectations leads to an increase in avoidance responses but there is still no direct evidence of this link.

Moreover, despite the UAMA model seems a valid working model, fundamental for future investigations related to the neuronal and physiological components of UI, it would be important to extend the research also to other factors implicated in the intolerance of uncertainty such as emotional regulation, cognitive control and reward processing. As regards the first factor, it may be useful to investigate not only the emotional regulation strategies, notoriously conceived as maladaptive in this area, but it would also be necessary to explore the relationship between UI and the adaptive capacity of the individual. In fact, it's found that the maladaptive responses to the uncertainty proposed in the UAMA could be linked to the fact that the ability to use cognitive control in the context of an uncertain material decreases, especially in those with a high level of IU. Cognitive control is recognized as a key mechanism for regulating emotions (Joormann and Tanovic, 2015), so the deficits linked to it could contribute to increasing individual anxiety in situations of uncertainty.

Research in particular shows that UI is closely related to processing deficits, typical of diseases such as depression, eating disorders (Frank et al., 2012) and autism (Oglesby et al., 2016). The problem is that the overwhelming majority of UI neural and psychophysiological studies is limited to non-clinical, depressed or anxious samples. For this reason, future work should focus on different diagnostic groups to understand the association between neural and psychophysiological correlated UI. The research could also focus on the UI and neural correlates, analyzing how they change in natural conditions rather than in response to laboratory conditions; in fact, they could be analyzed in uncertain periods of life such as when one is waiting for the first child or the results of an important exam. Overall, further research is needed to better understand the relationship between UI and emotional regulation, cognitive control and reward processing. The analysis of these phenomena within natural contexts could also represent a promising path for future research to analyze the mechanisms underlying the UI, responsible for disorders such as anxiety and depression.

The concept of Intolerance to Uncertainty is particularly relevant for understanding two other diseases: Obsessive-Compulsive Disorder (OCD) and Generalized Anxiety Disorder (GAD), widely debated in the seventh article. Although two disorders are classified as distinct diseases within the DSM-5, the onset age, the high rates of co-morbidity and the significant phenomenological overlap may indicate common basic processes.

UI is identified as a risk factor in both disorders as it represents an element that characterizes both obsessions and concerns; this element is very important in this field because working on it, it is possible to improve the results of many patients with DOC and GAD who continue to show symptoms even after receiving appropriate treatments.

Within this research, therefore, the authors explored the differences and similarities between the main characteristics of the two pathologies, analyzing the relationship between obsessions, concerns and the role played by UI. Various therapeutic treatments and the neural substrate underlying the UI are also explored, as its analysis encourages the birth of new interventions for the improvement of the DOC and GAD symptoms. Regarding the first point, the authors underlined the remarkable similarities between DOC, characterized by the presence of obsessions and compulsions, and the GAD constituted by excessive and uncontrollable concerns (APA, 2013). These concerns share with the obsession an anxious and apprehensive way of thinking; the first ones also represent a means by which to neutralize the anguish and are accumulated in this sense to compulsive ritualization. In practice, through obsessions, compulsions and concerns, there seems to be a reactive cognitiveness that can be difficult to distinguish in clinical settings.

Despite the ego-syntactic nature of concern, young people with GAD often recognize that their concerns are excessive and unreasonable, similar to the insights shown by patients with DOC (APA, 2013).

A clear distinction between obsessions and concern is linked to the representation of repetitive cognitive activities as visual images within the DOC, compared to the verbal material of GAD (Borkovec & Inz, 1990; Freeston, Dugas, & Ladouceur, 1996; Langlois, Freeston, & Ladouceur, 2000). The tendency of individuals with GAD to process verbally concern suggests that concern serves to circumvent the emotional processing of cognitive material and serves as an evasion strategy. In fact, some works

suggest that voluntary concern diminishes physiological activation (Borkovec and Hu, 1990): voluntary fear and compulsions can both serve to reduce anxiety through the experience of perceived control (Borkovec & Roemer, 1995 ; Freeston, Rhéaume, Letarte, Dugas and Ladouceur, 1994; Rachman, 2002). Concerns and compulsions can be experienced by patients as burdensome and unwanted but they are both reinforced by the reduction of anxiety associated with the perceived prevention of a negative outcome.

These premises show that despite the diagnostic criteria of DOC and GAD may seem distinct, the actual clinical manifestation of disorders occurs along a continuum, suggesting that they may exist along a single dimension and derive from a common substrate.

The shared phenomenology raises the possibility that there's a common process at the base of the symptoms, identified in the UI factor. In individuals with a high level of IU, uncertain situations elicit a fear response, including automatic thoughts regarding the individual's lack of ability to cope with such situations. In the DOC, high levels of IU have been coherently correlated with compulsions and ritualistic behaviors (Beech & Liddell, 1974); in GAD, concern can serve to reduce uncertainty (Dugas, Schwartz, and Francis, 2004) and to extinguish the excitement (Holaway et al., 2006) associated with feared situations.

Within this study, authors explored in particular the dimension of school uncertainty in children and adolescents, which are characterized by high levels of UI associated with concern, anxiety and positive beliefs about fear (Cowie, Clementi and Alfano, 2016). Thus, IU appears to have a prominent role in the production and severity of symptoms in GAD. The exploration of the neural circuit in the UI in the DOC and in the GAD can therefore clarify the pathological mechanisms underlying both pathologies and potentially facilitate treatment to improve the outcome.

Researchers have suggested that neurobiological substrates including amygdala, insula and ventromedial / prefrontal cortex can be commonly implicated in reactivity and regulation of threats. These networks seem to function abnormally in situations of uncertainty and could therefore demonstrate a connection between DOC, GAD and UI. With regard to the modalities of intervention, the traditional CBT is considered the treatment of choice in pediatric age for both disorders, despite between 50 and 60% of

patients continue to suffer from clinically significant symptoms (Hofmann & Smits, 2008). In this sense, the UI could represent an element of innovation to work on as it implies the basic processes of both DOC and GAD. In addition to the typical components of CBT (problem solving, cognitive restructuring, exposure), the CBT-IU protocol focuses on the recognition of uncertainty, on the re-evaluation of positive beliefs about worry and exposure to uncertainty. The therapist tries to shift attention from considering problems as a threat to a continuum between threat and opportunity. Indeed, following the application of this protocol, a significant reduction of IU at follow-up and a marked improvement of symptoms was highlighted (Dugas et al., 2003) but further research is needed to test the hypothesis that CBT-IU has better and longer lasting effects than traditional CBT. It could also be interesting to evaluate if the administration of treatment during early childhood actually improves long-term results thanks to the optimization of the individual's neural ability to tolerate uncertainty. Even the involvement of parents is considered fundamental for effectiveness and the treatment of DOC and GAD in children. In fact, parents could act as collaborators outside standard treatment sessions, encouraging new acquisitions and supporting involvement in typical exposure exercises (Pereira et al., 2016).

Family members or caregivers in general often play a key role in the treatment and consequent improvement of subjects suffering from physical or mental illnesses. Several studies, analyzed in the eighth article, underline that offering assistance and support to family members or friends with chronic conditions can determine the onset of clinically significant psychophysical disorders.

For this reason, the authors proposed the application of interventions dedicated to the promotion of knowledge, self-efficacy and mutual support, which allow individuals to develop adequate coping and self-management skills. Such interventions, often psycho-educative, improve their knowledge and also have a positive impact on patients. However, the authors highlighted the common difficulty of caregivers to access health services and obtain the desired assistance due to lack of adequate resources or appropriate training programs. Operators in particular request the possibility of obtaining flexible interventions through the use of online services (Powell & Clarke, 2006) that are enhanced by the support of professionals. In the last decade, in fact, in

line with the growing popularity of information and communication technology (ICT), e-Health interventions become widespread, including programs of psychoeducation, self-management, social support and clinical assistance. For these reasons, the following study are particularly interesting: besides representing the first systematic review dedicated to the analysis of the physical and mental suffering condition experienced by the family members of subjects suffering from long-term illnesses, it also focus on interventions innovative defined eHealth and mHealth (mobile technology via smartphones and wearable devices). These tools, offered to family members of patients with chronic diseases, are not only able to improve communication between patients and operators, but also make the automatic data collection and archiving functions more effective (Eysenbach, 2001).

The sample taken into consideration includes members of the extended family, close relatives and close friends who take care of an individual with progressive physical and mental pathologies, persistent for more than six months and which consequently require continuous assistance. All types of ICT interventions considered, consisting of: transmission of information, emotional support, evaluation of the care experience, virtual applications, forums conducted by experts. The results of the audits show that eHealth interventions are well received by the caregivers, who considered as particularly advantageous the possibility of accessing a flexible, individualized program enriched with expert support through online help forums. The most commonly used intervention was the psycho-educational one, but the small number of studies concerning eHealth interventions didn't allow to adequately evaluate the interactions between the characteristics of the assistants, the design of the intervention and the expected use patterns.

For this reason, further field research is needed to increase the available knowledge and focus on maximizing the internal validity of the studies; analytical strategies should explore results based on usage patterns and user characteristics, trying to understand how caregivers interact with different aspects of online or mobile interventions over time. This would also encourage optimal design of treatments, resulting in improved accessibility and assistance experience.

The concept of health plays a central role also in the ninth article, which deals with the phenomenon of "child negligence" and its link with the violent behavior present in adulthood.

Negligence is part of the macro-category of "abuse" and represents one of the four subtypes, along with physical and emotional abuse, sexual abuse and neglect. According to the WHO definition, the term negligence means various forms of neglect, which entail real or potential harm to the health, survival, development and dignity of the child in the context of a relationship of responsibility, trust or power. Despite the incidence and severity of its effects, this construct does not receive the same degree of attention from the scientific community as compared to other forms of child maltreatment (Gilbert et al., 2009).

According to recent statistics, the incidence rates of the phenomenon worldwide are quite high: in the Philippines it's estimated that 23% of children between the ages of 3 and 6 suffer from physical negligence, including deprivation of food and sanitation inadequate; in New Zealand 23% of minors are abandoned while in Romania, 34% do not see their educational needs satisfied with the consequent school dropout.

The underlying problem highlighted by the authors is that most forms of ill-treatment are underestimated, suggesting higher percentages than those currently considered. The consequences of child neglect aren't adequately treated, neglecting relevant social issues such as internalizing and externalizing behaviors, delayed emotional and cognitive development, lack of resilience, substance abuse, high-risk behavior and disorganized attachment styles that predict the possible appearance of psychopathy (Stoltenborgh et al., 2013).

This review focuses in particular on the correlation between exposure to neglect in childhood and the appearance of violent attitudes in adulthood, which negatively affect vital domains and affect the victims and authors. The authors often find educational discomfort, unemployment, drug abuse and antisocial behavior, while the victims show more internalizing disorders such as depression and suicidal behavior (Devries et al., 2011). In line with this theory, called the "cycle of violence", the authors tried to assess the degree of predictability of child negligence with respect to the implementation of violent behavior in maturity.

Taillieu, Brownridge, Sareen and Afifi (2016), in particular, focused on the study of negligence and emotional abuse, analyzing their role in the genesis of adult psychopathology. Compared to the control group consisting of subjects who is never exposed to episodes of maltreatment, it emerged that the negligent victims had a significantly greater risk of developing depression, social phobia, schizoid, schizotypal and personality avoidance disorders while the victims of emotional abuse were exposed to all kinds of mental disorders. Based on the findings, children subjected to emotional abuse are more at risk and are therefore more likely to carry out violent behavior in adulthood than those subjected only to negligence.

The authors continued their analysis, focusing on some methodological problems related to the identification of the elements that would indicate the presence of negligence and focusing on the effects of the possible combination of various forms of ill-treatment.

Regarding the first point, Lewis and Herron (2007) underlined the common difficulty in correctly identifying the indicators of negligence and the different subtypes. As a result, thanks to the help of health professionals, they highlighted several key components that could facilitate the assessment of the phenomenon including: lack of adequate supervision and medical treatment, malnutrition, exposure to domestic violence, emotional abuse and poor sanitation while poverty, education and outward appearance are considered secondary characteristics.

Regarding the second point, in a study by Stoltenborgh et al. (2013) it was highlighted that child neglect often occurs in association with forms of sexual, physical and emotional abuse but it's difficult to determine how any sub-type of maltreatment increases the risk of developing violent behavior.

Smith et al. (2005) studied the impact of maltreatment on children aged 12 to 17 and found that both physical abandonment and physical abuse significantly predicted antisocial behavior in adolescence compared to the control group. Abandonment was also significantly associated with the risk of arrest and use of drugs in early adulthood; however, only the adolescent's physical abuse significantly predicted violent behavior in early adulthood.

Evans and Burton (2013) also analyzed how five different types of child maltreatment, physical, sexual, emotional and negligent abuse could cause the implementation of crimes. The authors found that negligence, unlike

physical abuse, is significantly related to violent adolescent crime, once again demonstrating its predictive value. It's therefore important to further investigate the nature of this relationship and the extent to which negligence can contribute directly or indirectly to the development of violent behavior in the future. So the authors explored the possible mechanisms underlying these behaviors, highlighting the role of factors related to the physical, cognitive and emotional development of the child: in fact, negligence suffered in early childhood can interfere with an adequate brain development (Teicher et al., 2004) and with the individual's educational performance, determining the onset of internalizing disorders such as anxiety and depression. The presence of attachment-related problems or psychopathologies such as provocative oppositional disorder is associated with the development of antisocial behavior in adulthood. In the future, further research is needed to determine the degree of correlation between maltreatment and violence, considering also other moderation components such as gender, race, exposure to environmental factors that can play a fundamental role. It's also necessary to analyze the indices that could facilitate the identification of child maltreatment and include longitudinal research; its allow to trace the development of these subjects, including a more objective assessment which does not consist exclusively in retrospective self-assessments, which are often unreliable.

Another field of research that requires more accurate and detailed longitudinal analyzes is in the last article and concerns alcohol.

Alcohol is one of the most widespread psychoactive substances in the world and persistent use can have negative consequences in the short and long term, especially when its consumption begins during adolescence (DeWit, Adlaf, Offord and Ogborne, 2014). Risk factors that induce a high use of the substance may be related to environmental factors such as family, friends, media and individual including personalities, genetic components and a particular type of cognition called "Alcohol Expectation" (AE): it represents the belief that a certain behavioral, emotional and / or cognitive effect occurs following the intake of alcohol (Jones et al., 2011). This belief is significantly correlated with alcohol initiation and subsequent use and can be considered a psychological model of cognitive processing, which indirectly

influences other factors such as the personality and the living environment of the individual.

Alcoholic expectations play a fundamental role in the treatment as the high modifiability gives them a strategic value in terms of early prevention (Campbell & Oei, 2010).

A particularly useful picture to understand how AE can influence the abuse of alcohol is the double process theory: in this model, the cognitions can follow two different paths, implicit (unconscious) or explicit (controlled) (Strack & Deutsch, 2004). The explicit AE is based on voluntary, non-automatic processes, usually measured with answers to questions like "I expect a particular change will occur after drinking", while the implied AE is based on automatic motivational processes, usually measured with reaction times to certain stimuli (Thush & Wiers, 2007). Both explicit and implicit AE play a key role in the early use of alcohol (Colder et al., 2014).

Therefore, the current review aims at providing a summary of longitudinal studies that focus on the development of AE over time and on the predictors involved in the development period from infancy to adolescence (4-18 years).

Before the abuse behavior begins then during the acquisition phase, the adolescent's expectations are based on social learning principles deriving mainly from the observation of parental conduct. During the maintenance phase, once the subject begins to drink frequently, his beliefs will play a fundamental role in eliciting automatic responses. In this regard, numerous studies have carried out a further differentiation between positive AE (benefits, facilitation) and negative AE (negative consequences): AE seems to pass from predominantly negative to predominantly positive in the transition from childhood to early adolescence (Hipwell et al., 2005). The predictive factors in this sense can be linked to elements of nature:

- cognitive: the presence of more positive images related to the consumption of alcohol between friends and family is related to a more positive AE among adolescents;
- psychopathological: outsourcing behaviors are more related to a positive AE;
- genetics and environmental: the parental exposition, which shows the socially shared nature of AE (Donovan et al., 2009), the availability and

approval of parents (Martino et al., 2006) facilitates the modalities of access to alcohol.

Overall, the results showed that positive AE seems to be related to greater alcohol consumption in adolescence, suggesting that the effects tested strengthen alcoholic expectations (Campbell & Oei, 2010).

However, the problem noted by the authors is that most of the studies focused exclusively on the subject's life environment and parental perception, neglecting the influence of individual characteristics on alcohol abuse (Epstein et al., 2008). The research is in fact concentrated in a limited way on important components such as genetic predisposition (Lee & Humphreys, 2014), personality characteristics (Woicik, Stewart, Pihl, & Conrod, 2009) and adolescent psychopathology (Goodman, 2001) that could have a high predictive value. The studies examined do not consider the importance of some environmental factors such as the influence of the media on alcohol consumption and do not adequately examine the phenomenon even on different ethnic and religious groups (Donovan, 2004).

In addition, appropriate assessment tools for adolescents should be introduced to analyze alcoholic expectations and obtain a complete picture of it as the Alcohol Expectancy Scale for Children (DAESC) (Pieters, van der Vorst, Engels, & Wiers, 2010), the Alcohol Expectancy Task (Kuntsche & Kuntsche, 2017). The authors also underline the need for further longitudinal studies that analyze the genesis and development of alcoholic expectations in adolescents, through the introduction of important theories such as Social Learning (Bandura and McClelland, 1977) that demonstrate the possible mechanisms by which children and adolescents learn the consequences of alcohol, such as parents' behavior and verbal statements about their effects. Such research could influence the development of more effective preventive strategies, which focus not only on alcoholic expectations but also on the role played by parental influence in abuse behaviors.

In conclusion, the articles in Volume 60 of the *Clinical Psychology Review* contribute to a thorough analysis of various diseases, favoring the understanding of the mechanisms involved in their genesis and providing an innovative key to their interpretation. In particular, some overlooked subgroups such as children of depressed parents have been observed in addition to some diffused but poorly treated disorders such as Emetophobia,

Binge Eating Disorder and Chronic Tinnitus. The authors also explored new treatment modalities such as eHealth care and analyzed important phenomena such as comorbidity, intolerance of uncertainty, child negligence and expectations related to alcohol abuse.

Overall, the articles show that the mental health sector has a rather high degree of complexity and requires the management of multidimensional problems. These studies, in fact, while improving our knowledge, reveal numerous limitations: from their comparison common problems emerged concern the smallness of some researches, the small size of the samples associated with a low ethnic variability, the lack of treatments that guarantee maintenance long-term results and methodological limitations due to unreliable instruments.

The aforementioned issues brought out various points of reflection regarding the need for further empirical studies that favor the exploration of phenomenology through a larger sample and the implementation of more effective and lasting interventions. To this end, a longitudinal design could be useful to trace the genesis and development of certain phenomena, improving the knowledge related to the predictive and moderating factors. This type of research would be able not only to improve the internal validity of the above studies but also to favor an optimal planning of the interventions: among the most used cognitive behavioral treatments and in particular the psychoeducational treatments is highlighted, which guarantee a maintenance of the results in the long term through the development of adequate coping strategies by the subject.

In fact, even the preventive interventions, little treated within the examined articles, play a fundamental role: the intermediate space between health and pathology, functionality and dysfunctionality, seems to be a privileged place for the articulation of numerous problems that extend from the possibility of identifying the implications of psychological risk in certain contexts, looking for psychosocial conditions that can compromise a balanced development of the individual. Numerous studies show that reducing risk factors and identifying protective factors decreases the likelihood of developing a mental illness; the problem is that the articles focus on the treatment of existing pathologies rather than on the improvement of resilience or the capacity of resistance and positive adaptation to critical situations.

It's therefore necessary, from a future viewpoint, not only to work on the methodological limits mentioned above, but also to focus on the implementation of adequate preventive strategies that increase the individual's awareness of their problems and at the same time reduce the burden of mental illness, favoring the optimal well-being and an overall improvement of the quality of life.

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