

# Marriage in panic: Panic disorder and intimate relationships

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## Abstract

**BACKGROUND:** Panic disorder and agoraphobia not only affect the patients themselves but also may have a detrimental effect on their intimate relationships. A problem arising in the intimate sphere could be a trigger, a modulator, a maintenance factor, or the result of the panic disorder and agoraphobia. The consequences of panic disorder include increased demands on the non-affected partner to adapt, which may prove to be too challenging for some to manage. Panic disorder and agoraphobia can also change earlier relationship patterns which may result in partnership dysfunction. This review explores the effect of panic disorder and agoraphobia upon partnership problems and satisfaction.

**METHOD:** Relevant studies were identified via PubMed and Web of Science, published between January 1970 and April 2020. The search terms included "panic disorder", "agoraphobia", "marital problems", "marital conflicts" and "marital adjustment". Further references were found in reviews, books, and book chapters of the relevant papers. A total of 1154 articles were nominated by primary assortment using the keywords in different combinations. After selecting according to the inclusion and exclusion criteria, evaluating the complete texts and searching for secondary documents, 173 papers were finally chosen.

**RESULTS:** Problems in a relationship can act as a trigger for the development of the panic disorder and agoraphobia and could also function as modulating and maintenance factors. Panic disorder and agoraphobia often have a negative influence on the relationship and the non-affected partner. Partnership problems can be both a precursor and a consequence of panic disorder and agoraphobia.

**CONCLUSION:** The association between panic disorder and agoraphobia and partnerships is bi-directional: problems the couple have adversely affect the patient's symptoms, and the patient's symptoms disturb the relationship. To achieve better treatment results, – an investigation into the interaction of interpersonal factors with the onset and course of panic disorder and agoraphobia should be part of the therapy.

## INTRODUCTION

Panic disorder (PD) is characterized by recurrent attacks of massive anxiety, which usually seem unpredictable (APA 2013, Hoppe *et al.* 2012). They are associated with fears of death, insanity, or loss of control with typical bodily symptoms and lingering fears of another episode or its consequences (Sandin *et al.* 2015, Greenslade *et al.* 2017, Baker *et al.* 2019). Fear of having an anxiety attack in places where no help is available or where embarrassment is possible leads to avoidance and secondary agoraphobia (Rudaz *et al.* 2010, Riccardi *et al.* 2017). The lifetime prevalence of panic disorder ranges between 1–3% in the general population (Weissman *et al.* 1997, Roy-Byrne *et al.* 2000, Carta *et al.* 2015, de Jonge *et al.* 2016). Panic disorder usually starts between 26 and 34 years of age (De Jonge *et al.* 2016, Lijster *et al.* 2017) and is approximately two to three times more common in women than in men (Donner & Lowry 2013, Bandelow & Michaelis 2015).

Studies of families and twins indicate an inherited factor in panic disorder (Knappe *et al.* 2012). However, no specific gene or epigenetic pattern can fully explain the aetiology of the disorder (Kim & Kim 2018). Research on the biological aspects has led many to form hypotheses based on the presence of biological abnormalities in the brain structure and function (Klein 1993, Gorman *et al.* 1989, Gorman *et al.* 2000, Cosci & Mansueto 2019, Park & Kim 2019). However, these biological signs are insufficient on their own as predictors of panic disorder. Psychosocial factors such as childhood adversity, upbringing, particularly personal development and psychosocial stressors, have to be added (Asselmann *et al.* 2018). A stressful life event often conflicts in a close or important relationship, frequently precedes the first panic attack (Faravelli *et al.* 1986, Scocco *et al.* 2007, Klauke 2010). The psychosocial consequences of panic disorder are often job losses, marital problems, financial difficulties, and sexual discord (Mercan *et al.* 2006, Scocco *et al.* 2007, Batinić *et al.* 2009).

The course of panic disorder without treatment is usually long-term, and in 40 % of patients, the disorder is considered chronic (Nay *et al.* 2013, Chen & Tsai 2016). Even with the optimal and recommended treatment approach, more than half of the patients experience residual symptoms (Chen & Tsai 2016). However, both spontaneous recovery and recurrence of problems after several years of remission have been described

(Deltito *et al.* 1991). Inability to work, financial dependence on a partner and overuse of health services are prevalent in this disorder (Katon 1996). Unsatisfactory improvement is associated with chronic stressors, especially relationship-related (Franklin & Andrews 1989).

This review aims to describe the links between panic disorder/agoraphobia and intimate relationships in order to understand more fully the etiopathogenetic factors associated with the development, maintenance, and recurrence of these disorders. Research questions related to these goals include:

- (1) Which typical patterns can be found in the intimate relationships of patients with panic disorder/agoraphobia?
- (2) Do these patterns have any common causes?
- (3) How does the quality of the partnership affect the manifestations of panic disorder/agoraphobia?
- (4) How does panic disorder/agoraphobia affect the relationship?
- (5) How does the quality of the partnership influence the treatment of panic disorder/agoraphobia?
- (6) How does panic disorder/agoraphobia treatment affect the relationship?

## METHOD

Sources used in this review were acquired via PubMed and Web of Science from January 2000 to April 2020. The search terms included "panic disorder", "agoraphobia", "marital problems", "marital conflicts", "marital adjustment". The search was completed by repetitive usage of the terms in changed groupings without language limits. Further references were found in the research, reviews, books, and book chapters used in the relevant papers. The articles were collected, systematized by their importance, and the significant texts listed in reference lists were examined. The selected articles had to meet the following inclusion criteria: (1) published in peer-reviewed journals; (2) studies in humans; or (3) reviews on the topic. The exclusion criteria were: (1) abstracts from conferences; (2) commentaries. A total of 1154 articles were nominated by primary assortment using keywords in different combinations. After the selection, according to the inclusion and exclusion criteria, 326 papers were chosen. A detailed evaluation of full texts helped to select 91 eligible articles. Secondary documents from the reference lists of the primarily selected articles were examined, evaluated for appropriateness, and added to the first list of the documents (n = 82). In total, 173 papers were included in the review process (Figure 1), which is consistent with the PRISMA guidelines (Moher *et al.* 2009).

## RESULTS

Intimate relationships where a partner has a panic disorder or agoraphobia, are often, but not always, perceived as less satisfactory (Marcaurelle *et al.* 2005,

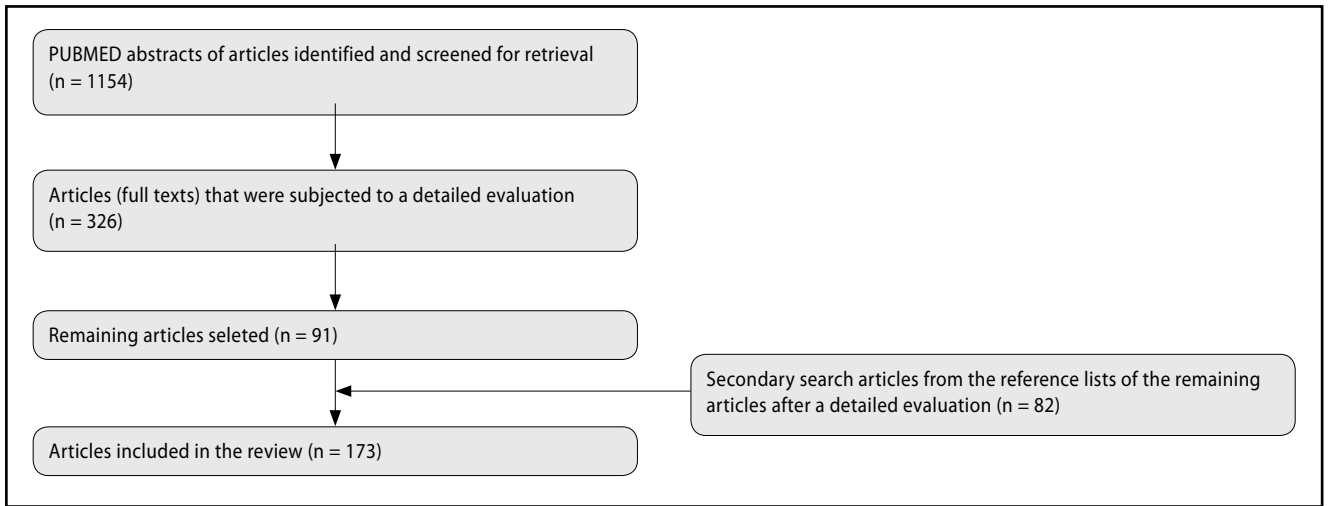


Fig. 1. Summary of the selection process

Zaider *et al.* 2010, El-Baalbaki *et al.* 2011, Davidoff *et al.* 2012, Palardy *et al.* 2018). Psychological problems in such relationships negatively affect the intimacy and the quality of the bond between partners, which influences the anxiety experienced (Kessler *et al.* 1998; Pilkington *et al.* 2015; Callaci *et al.* 2020). However, the direction of causality is unclear because the studies have been mostly cross-sectional. Intimate relationships can be so burdensome for some individuals that it can trigger panic disorder or agoraphobia and predict its severity (Marcaurette *et al.* 2005). Other types of difficult life situations, such as discovering an extramarital relationship, difficulties with raising children, or sexual problems (anorgasmia, impotence), may also contribute to the development of the panic disorder (Aksoy *et al.* 2012, Wang *et al.* 2016). However, the manifestations of panic disorder and agoraphobia can increase tension between partners and lead to disputes and partner disagreements (Schless *et al.* 1977, Rao & Nambi 2009). Panic disorder and agoraphobia also impact a couple's life through changes in lifestyle (e.g. travel restrictions, limited time spent outside together, the loss of many

previously pleasurable activities and social events), and family and work functioning (e.g. reduced ability or inability to work in full) (Rao & Nambi 2009). Institutional solutions, such as obtaining a disability pension significantly affect family life as well (Korkeila *et al.* 2001) and can lead, for example, to a decrease in the family's income, social isolation, and increased engagement in avoidant behaviours (Detzel *et al.* 2015).

### MODELS OF MARITAL PROBLEMS IN PANIC DISORDER/AGORAPHOBIA PATIENTS

When it comes to panic disorder/agoraphobia, several models of problematic functioning of the relationship have been proposed (Marcaurette *et al.* 2003):

- (1) According to some authors, a partner can gain some positive consequences from caring for their affected partner. If the patient improves, the partner may feel that their autonomy is threatened and that they can lose a significant function (Hafner 1977b, Fry 1982, Carpiniello *et al.* 2002). Maintaining panic

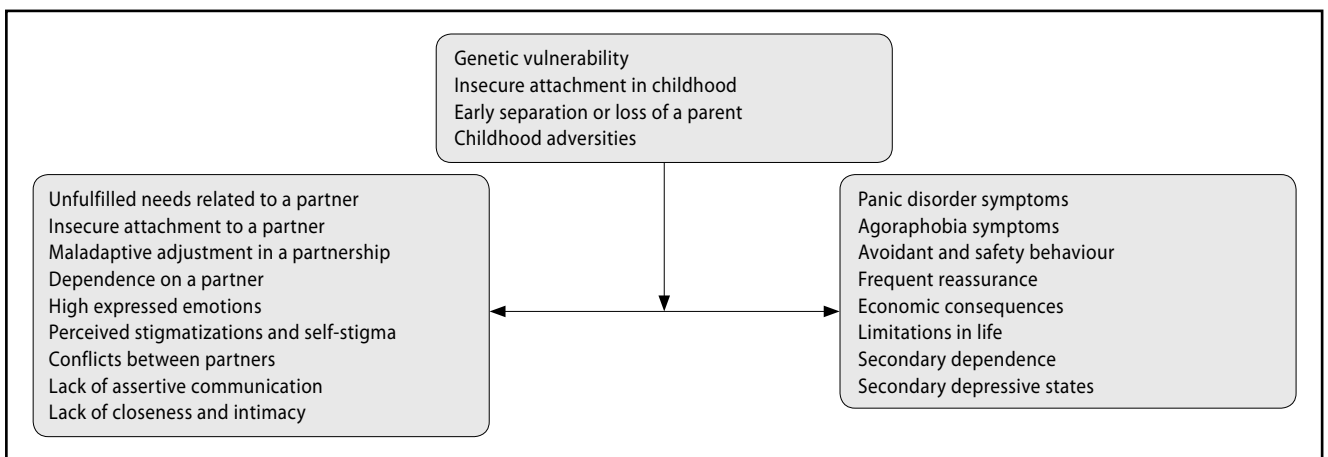


Fig. 2. Schema of interaction between panic disorder and marital problems

- disorder/agoraphobia can protect the partner's self-confidence (Figure 3).
- (2) According to another model based on the complementary connection hypothesis (Hafner 1977a, Cundiff et al. 2015, Detzel et al. 2015), both partners can benefit from the dynamics of the relationship: e.g. an agoraphobic woman is dependent on a dominant husband, experiences protection in the relationship, and the partner feels valued (Figure 3). This model also takes into consideration the potential feelings of threat in the non-affected partner in case the patient would improve (Goodstein & Swift 1977; Hafner 1977a, Hand & Lamontagne 1976, Hoffart 1997).
  - (3) Panic disorder/agoraphobia can reduce marital conflicts in the short-term (Goldstein & Chambless 1978, Lange & Van Dyck 1992). Panic disorder/agoraphobia can help a dissatisfied, but dependent patient, who is afraid of loneliness, to create a way to manage the dilemma between relationship dissatisfaction and preservation (Symonds 1971, Liotti & Guidano 1976, Brock & Lawrence 2011). Panic disorder can present a way to express the feeling of being trapped in a relationship, gaining the partner's attention, and agoraphobia can serve to control the partner (Craske & Zoellner 1995, Kleiner & Marshall 1985, Shean 1990, Lay & Hoppmann 2014). In his review, Bekker (1996) concludes that

empirical evidence shows that agoraphobic women show more dependence than unaffected healthy women. The rate of dependence is, however, the same as with other mental disorders.

- (4) A fourth model suggests that the relationship problems of a patient with panic disorder/agoraphobia can be a consequence of the disorder (Hoffart 1997a, Saris et al. 2017). According to this model, marital problems result from the symptomatology. Due to the disorder, the patient becomes more dependent on the partner, which brings tension to the relationship. Partner problems should then decrease when the symptoms of panic disorder/agoraphobia are alleviated. However, this model does not sufficiently explain why some couples experience an increase in relationship problems when the symptoms diminish because of the treatment of panic disorder/agoraphobia.

Thus, couples may show a pattern of any of these models or their combinations (Figure 3).

#### Insecure attachment

Individuals with panic disorder often depend so much on their loved ones that it reinforces their anxiety (Symonds 1971, Lange & Van Dyck 1992, Zaidler et al. 2010). In more severe cases, a partner must always be present to help the patient in case of need (Kleiner 1987, Hafner & Minge 1989, Dewey & Hunsley 1990).

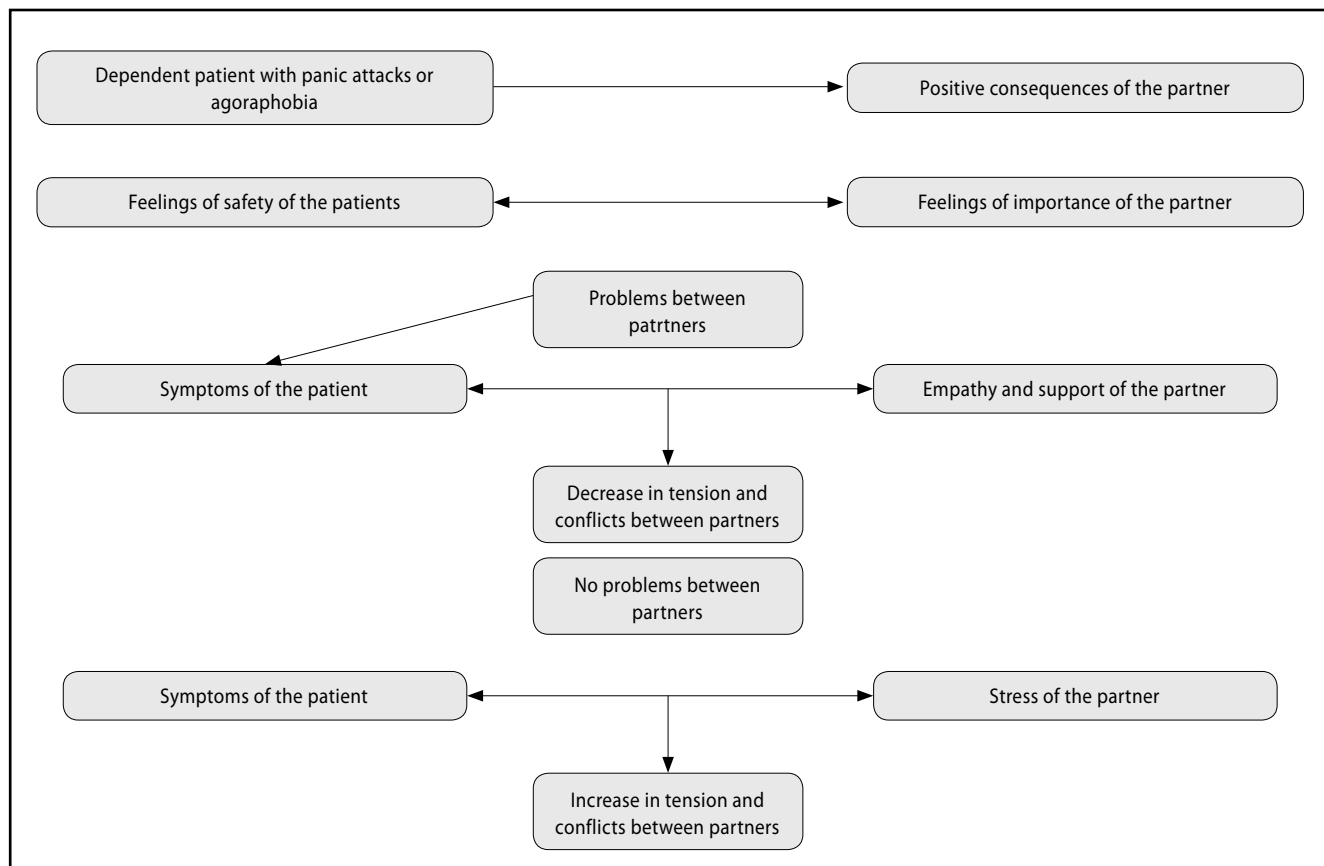


Fig. 3. Hypothetical models of panic disorder intimate relationship

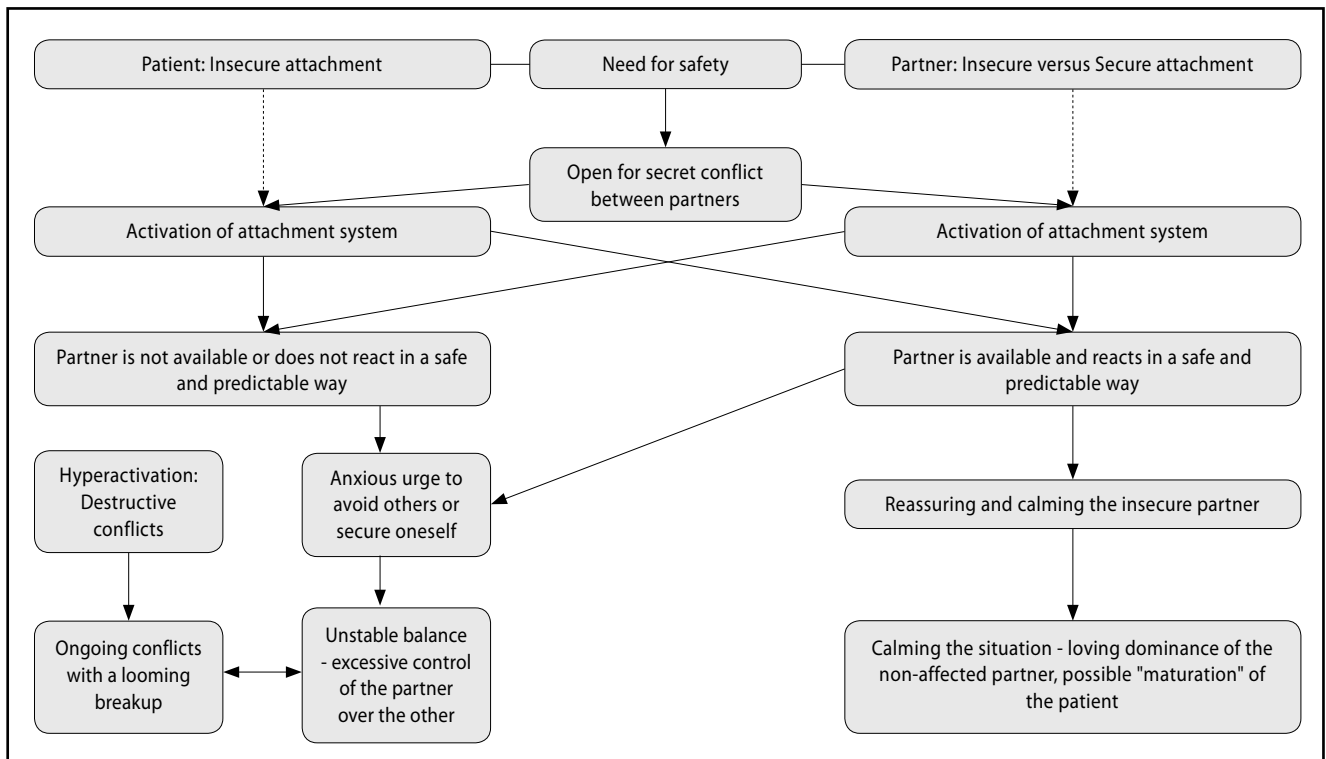


Fig. 4. Attachment and conflict between partners in panic disorder

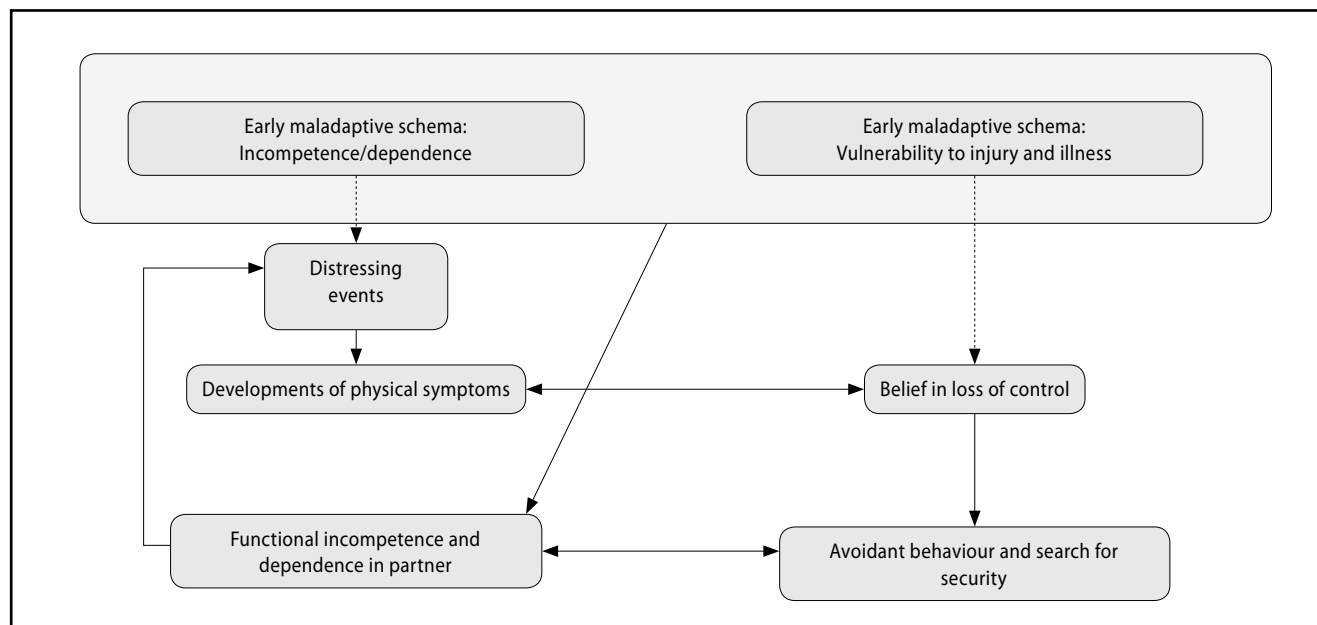
At the time of a fully developed panic disorder, it is difficult to determine whether the fear of abandonment preceded the development of the panic disorder and is only amplified during its development, or is entirely a consequence of it (Carter *et al.* 1994; El-Baalbaki *et al.* 2011). These patients as children often experienced premature separation from parents and coped with it by feeling anxious or by being resigned to it (Manassis *et al.* 1994, Cobb *et al.* 2001, Bandelow *et al.* 2002, Biederman *et al.* 2007). Bowlby's theory of attachment initially focused on the formation of emotional bonds between children and their caregivers (Bowlby 1973). Through these experiences with caregivers, the child gradually creates internal "working models" of a fundamental relationship between themselves and other people (Saavedra *et al.* 2010, Callaci *et al.* 2020). These relationship models include beliefs about how worthy an individual is, how good other people are, how to understand their behaviour, and how to behave in interpersonal relationships (Callaci *et al.* 2020). Hazan & Shaver (1987) point out that the models are stable and provide global patterns that function throughout a person's life in all close relationships. The model, with all its variables, is presented in Figure 4.

Compared to the control group, patients with panic disorder were separated from their mother or both parents more often (e.g. due to divorce or other loss) in the early stages of their life (Tweed *et al.* 1989, Bandelow *et al.* 2002, Biederman *et al.* 2007) and they were more familiar with maltreatment (Westermair *et al.* 2018). Panic disorder is also more commonly related to the

death of a father in childhood (Kessler *et al.* 1997). When compared to controls, the panic disorder was more often associated with an uncertain and ambivalent attachment style (Muris *et al.* 2001, Cassidy *et al.* 2009, Newman *et al.* 2016).

#### Early maladaptive schemas in patients with panic disorder/agoraphobia

Early maladaptive schemas (EMS) are broad and ubiquitous personality patterns that develop during childhood based on temperament and the aversive events the person has suffered (Young & Klosko 1994, Young *et al.* 2003). Patients with panic disorder/agoraphobia suffer from recurring thoughts about possible threats (Clark 1986). These thoughts are related to a core belief that they are unable to handle such threats (Young 1980). At least two of the 18 EMSs may be involved in the etiopathogenesis of panic disorder (Young 1990). The *Incompetence/dependence schema* lies in a belief that an individual is unable to function on their own and is therefore dependent on the help of others. This schema leads to excessive help-seeking and is related to dependent interpersonal behaviour (Kwak & Lee 2015). The *Vulnerability to harm and illness schema* directly concerns one's health and a sense of losing control. It leads to avoiding supposedly threatening situations and securing oneself by relying on a partner (both schemas presented in Figure 5). Hedley *et al.* (2001) examined the relationships between these two EMSs in patients with panic disorder and agoraphobia. The authors showed that the *Vulnerability to harm or illness schema*



**Fig. 5.** Model connecting early maladaptive schemas with dependence on a partner's help in patients with panic disorder/agoraphobia

predicted fear of bodily sensations, a fear of losing control, and avoidant behaviour. The *Vulnerability to harm and illness schema* then explained the 48.5 % variance in agoraphobia severity in women with comorbid eating disorders (Hinrichsen *et al.* 2004). A study of 36 patients with panic disorder undergoing 10-week CBT sessions compared symptoms and EMSs before and after treatment. This study concluded that while symptoms in the CBT group were resolved, there were no significant changes in the EMS severity (Rusinek *et al.* 2004).

In Kwak & Lee's study (2015), a group of patients with panic disorder showed higher scores for the *Vulnerability to harm and illness schema* than the patients with OCD and the control group. The panic disorder group also had a higher score on the *Self-sacrifice schema* than the patients in the OCD group. This schema is characterized by an excessive focus on the desires, feelings, and reactions of others, frequently at the expense of one's own needs (Young *et al.* 2003).

## PROBLEMS WITH PARTNERSHIP IN PANIC DISORDER / AGORAPHOBIA PATIENTS

An epidemiological study in the USA found that 12 % of people with panic disorder or agoraphobia did not get along with their marital partners. This number is six times higher than that of individuals without the disorder (Markowitz *et al.* 1989, Weissman 1991). The marital relationship of patients with agoraphobia is characterized by higher anxiety when compared to the marriage of the non-affected population (Emmelkamp & Gerlsma 1994). According to some studies, individuals with panic disorder or agoraphobia feel less adapted to married life or have less satisfaction with

their marriage than healthy controls (Fauerbach 1992, McCarthy & Shean 1996). However, other authors did not find a significant difference in marital adjustment or communication between the couples with a panic disorder partner and the controls (Arrindell & Emmelkamp 1986; Fisher & Wilson 1985, Powers 1984). Still, in an objective assessment by coding the spouses' behaviour, the marital relationships appeared to be significantly more problematic than the relationships of healthy controls (Fauerbach 1992, Scocco *et al.* 2007). The following problems have been documented to be relevant in the relationships that panic disorder/agoraphobia patients have with their partners: unfulfilled needs and partnership; problems in communication; dependence upon a partner; lack of closeness and intimacy in partnership; expressed emotions in panic disorder/agoraphobia partnership; stigmatization by a partner and self-stigma; adjustment in partnership and partner's support; lack of assertive communication; and conflicts between partners.

### Unfulfilled needs and partnership

Children with a good relationship with a mother who responded sensitively to their needs, are later able to mentalize (understand themselves and others) better than children whose mother was anxious or depressed (Nolte *et al.* 2011). The lack of fulfilment of the needs for safety, acceptance, recognition, leadership, and safe boundaries, which were not realised in childhood for various reasons, usually leads the person unconsciously to try to meet them in an intimate relationship (Young *et al.* 2003). These needs can be so urgent and robust that the partner cannot satisfy them (Pyke & Roberts 1987). The patient's partners often feel overwhelmed. However, sometimes it suits the partners since it gives

them a sense of dominance, of being valued and needed in a relationship. Some partners experience the needs of the patient as a significant constraint, and their resistance can then further facilitate panic attacks or lead to the development of comorbid depression by the patient. When external stress is experienced, something all relationships face from time to time, high interpersonal tensions or relationship conflicts quickly arise. The long-term duration of such tension leads to a situation where the probability of a relationship breakdown increases (Pyke & Roberts 1987, Praško *et al.* 2015). The couple's perception of the decrease in quality of their relationship then affects the degree of anxiety in both partners (Arrindel & Emmelkamp 1986, Oatley & Hodgson 1987, Stokes 2017).

#### Problems in communication

Communication style and conflict solving strategies involve aspects such as the degree of assertiveness, avoidance, initiative, aggression, or congruence, experienced by partners. Problems in communication are most often caused by inaccurate interpretations of the partner's behaviour (mainly related to feelings of threat, insecurity, non-acceptance, insufficient recognition, or perceived injustice in the relationship) and underdeveloped communication skills (fear of rejection leads to a lack of expression of one's own needs) (Craske *et al.* 1989, Praško *et al.* 2007). Dysfunctional communication between partners with or without panic disorder/agoraphobia can depend to a varying degree on the type of relationship (Hafner 1977, Chambless *et al.* 2001, Zaider *et al.* 2010, Zilcha-Mano *et al.* 2015). Communication can be affected by dependence on a partner (problems talking about one's needs, rejecting unsatisfactory requests, having a confidential, open conversation); problems with intimacy; overexpressed emotions; or the need to control the partner (remorse, manipulation, blaming, guilt) (Praško & Trojan 2001). The importance of understanding partner interactions in patients with panic disorder or agoraphobia is supported by many studies that show that interventions leading to an improvement in communication (e.g., the elimination of communication avoidance) improve treatment outcome as well (Craske *et al.* 1989; Marcaurelle *et al.* 2003). Conversely, unless more adaptive communicative patterns develop in a relationship, the results of psychotherapy are not satisfactory on its own (Oatley & Hodgson 1987, Hafner 1978, Chambless *et al.* 2017).

#### Dependence upon a partner

Partners are the most likely people to help an individual with panic disorder or agoraphobia avoid a suspected threat or somehow protect themselves from it (Zaider *et al.* 2010, Chambless *et al.* 2017, Palardy *et al.* 2018). Compared to healthy people, patients with panic disorder/agoraphobia show less autonomy (Hafner & Minge 1989, McCarthy & Shean 1996, Lay

& Hoppmann 2014). Panic disorder and agoraphobia also include safety and avoidance behaviours that can significantly affect the patients' marital functioning (Markowitz *et al.* 1989). In more severe cases, one of the loved ones must be present at all times to help the patient (Praško & Herman 2007, Stokes 2017). Patients' partners often feel constrained. This can sometimes please them by giving them a sense of self-worth or dominance. Conflicts can exacerbate panic attacks or can lead to the development of secondary depression (Winter & Gournay 1987).

In the case of agoraphobia, the unaffected partner assumes specific duties and responsibilities for the sick partner and is, therefore, helping the patient not to face the situations feared. However, this behaviour strengthens the partner's belief in his/her incompetence. The partner becomes a maintenance factor for the anxiety disorder, preventing the patient from facing the situations feared (e.g. the husband gives excuses for the wife at her work because she cannot get there alone, goes shopping for her and handles things for her at the office, goes with her to the doctor and accompanies her everywhere so that she does not have panic attacks). This behaviour is meritorious and humane; it is clear that this is an attempt to help the partner. On the other hand, this behaviour also contributes negatively to the maintenance of agoraphobia (Salkovskis 1989). The protective behaviour of the partner also reduces the patient's self-esteem and strengthens their tendency to surrender. A patient with agoraphobia may also feel overly devoted to their partner, who will "provide" for them. This can lead to some patients not openly expressing their needs and staying and retreating even in situations they do not like, which can lead to more profound relationship dissatisfaction (Praško & Trojan 2001, Martin & Tardif 2014).

#### Lack of closeness and intimacy in a partnership

The lack of closeness and intimacy in a relationship can play a significant part in the development of anxiety. Intimacy as a concept refers to various meanings that relate to age, gender, education, and culture (Kardan-Souraki *et al.* 2015). Intimacy requires a sense of security, acceptance and appreciation that is reciprocal. These feelings are difficult to achieve if one of the partners is dependent on the other, or if one is dominant in the relationship and the other submissive. With these position inequalities in the relationship, the possibility of openness is only partial. In the observed interactions between women with panic disorder/agoraphobia and their partners, problem-solving difficulties were higher when the topic of discussion was the wife's anxiety (Chambless *et al.* 2001).

#### Expressed emotions in a panic disorder/agoraphobia partnership

Expressed emotion refers to the emotions that the immediate environment exhibits towards an individual

with a mental disorder (Chambless *et al.* 2001). There are three dimensions to this concept: hostility, criticism, and excessive emotional involvement. Excessive emotional involvement involves disruptive behaviour, over-sacrificing behaviour, or exaggerated emotional responses to a patient's disorder (El-Baalbaki *et al.* 2011, Chambless *et al.* 2017). Two studies evaluated the link between expressed emotions and the severity of agoraphobia. According to Peter *et al.* (1993), criticism between partners is associated with more severe symptoms and emotional warmth with less severe symptoms. In the study by Rodde & Florin (2002), expressed emotions were evaluated during a five-minute monologue, during which the partner was asked to talk about the patient and their relationship. No relationship was found between the degree of emotions expressed in this way and the severity of the panic disorder. According to a controlled study by Chambless *et al.* (2017) excessively perceived criticism by the partner significantly worsens the effectiveness of psychodynamic and cognitive-behavioural therapy of panic disorder. However, this factor does not change significantly during standard treatment.

#### Stigmatization by a partner and self-stigma

It is unacceptable for some individuals that their partner has a psychiatric diagnosis which threatens and affects them (Praško *et al.* 2011). They often fight against this and discourage the patient from visiting a specialist, taking medication or undergoing psychotherapy. They instead force the patient to "do it on their own". This pressure is more pronounced when encouraged by the extended family of the partner. The situation may be exacerbated at the beginning by an insufficient response to treatment or adverse drug reactions (notably decreased libido), as well as by the development of co-occurring related disorders (Praško *et al.* 2011). The symptoms of panic disorder may initially be so dramatic that it brings the partner to believe the patient has a severe somatic illness. Both the patient and the partner may be disappointed with the psychiatric diagnosis. If a patient develops avoidant behaviour, the partner is usually tolerant at first.

In many cases, avoidance is gradually considered a "weakness", a "lack of courage" and is attributed to the character of the affected individual. This stigmatization can lead to self-stigmatization by the patient who receives the label (Praško *et al.* 2011). Auto-stereotypes can then hinder treatment because these people do not believe that treatment approaches can change their personality.

#### Adjustment in partnership and the partner's support

Family adjustment is generally aimed at supporting or assisting an individual with panic disorder (Jacobson *et al.* 1989, Cutrona & Russell 1990). However, family adaptation to the symptoms, mainly to avoidant behaviour, may also be associated with long-term negative

consequences (Craske *et al.* 1989). The partner's adaptation to the symptoms through safety behaviours towards the patient helps to reduce the patient's immediate anxiety. However, at the same time, it can maintain the symptoms of panic disorder and agoraphobia, as it helps patients to avoid anxiety, which they then do not learn to manage. Moreover, it maintains the disproportionate belief in their vulnerability (Salkovskis 1996). Examples include participating in avoidant behaviour or safeguarding, recommending that the patient avoid anything that they fear, encouraging them to take a sedative, and taking responsibility for them, and others (Craske *et al.* 1989). Partners sometimes start doing activities that patients avoid. They try to help them, which provides short-term relief from the patients' fears, but in the long run, the patients' beliefs about their weakness and inability to cope are maintained. The partner's behaviour then helps to maintain avoidant behaviour, and the disorder itself is strengthened (Salkovskis 1996).

Three studies used the Maudsley Marriage Questionnaire (MMQ) as a tool. The MMQ evaluates three areas: marital adjustment, sexual adjustment, and general life with a partner (e.g., housework, social activity). None of these studies found a significant correlation between adjustment in marriage and symptoms of panic or agoraphobia. Arrindell *et al.* (1986) found no significant correlation between marital adjustment and the severity of the disorder. Cobb *et al.* (1984) evaluated whether accepting a husband as a co-therapist improves the outcome of behavioural agoraphobia therapy. The authors found that there was no link between the initial severity of marital problems and the severity of agoraphobia. Monteiro *et al.* (1985) also evaluated marriage adjustment and found that there was no difference in the symptoms of agoraphobia between participants in terms of the quality of the marriage. Chambless (1985) used the Marital Dissatisfaction Questionnaire, which is a five-item questionnaire that assesses the difference between a real and an ideal spouse in the respondent's perception. The author did not find significant correlations between spouses' dissatisfaction and the severity of agoraphobia or the frequency of panic attacks.

Marcaurette *et al.* (2005) were interested in the effect of marital conflicts and adaptation on the severity of panic disorder or agoraphobia. They used the Dyadic Adjustment Scale (DAS), a questionnaire that evaluates four areas of marital adjustment: coherence, consensus, satisfaction, and affection. Their results show that patients with panic disorder or agoraphobia, who had a lower degree of adjustment in marriage, had more catastrophic thoughts, as well as stronger fears of bodily sensations or the consequences of anxiety. No significant correlation was found between the severity of the panic disorder or agoraphobia and overall adjustment to marriage. In contrast, Marcaurette *et al.* (2005) found significant negative correlations between DAS



and catastrophic thoughts, fear of bodily sensations, and fear of the consequences of anxiety.

In their study, Lange & Van Dyck (1992) used the Interaction Problem Solving Inventory (IPSI), a self-assessment questionnaire that measures the extent to which partners are satisfied with their problem-solving abilities. They did not find a significant correlation between the quality of the relationship and the severity of agoraphobia before treatment.

Tukel (1995) divided 45 patients with panic disorder or agoraphobia into three subgroups: housewives, working women, and working men. Participants were evaluated according to the severity of the disorder and the quality of the marital relationship (MMQ). The results showed a significant positive correlation between the severity of panic disorder with agoraphobia and the quality of the marital relationship for housewives. No significant correlations were found for the other subgroups.

Several studies evaluated interactions between patients and their relatives through observation. Chambless *et al.* (2002) were interested in the marital interaction between couples in which one partner has panic disorder and a control group. They used the Kategoriensystem für Partnerschaftliche Interaktion (KPI), a system used to code the interaction between two partners in solving problems. During interaction analysis, each meaningful unit of speech is assigned a verbal and nonverbal code (e.g., positive, negative, or neutral). The frequency of panic attacks was not related to any variable in the evaluation. However, husbands whose wives showed more signs of avoidance became more involved in negative verbal behaviour and were more critical during problem-solving interactions. Renneberg *et al.* (2002) also used KPIs. They did not find a significant difference between adjustment in marriage and the severity of panic or agoraphobic symptoms. El-Baalbaki *et al.* (2011) used another observational evaluation, the Global Couple Interaction Coding System (GCIS). This approach also evaluates partners in a problem-solving situation but evaluates each partner in the five components of verbal and nonverbal marital interaction. These five components are divided into three negative dimensions: (a) avoiding and withdrawing from the discussion, (b) dominance, asymmetry in conversation management, and (c) hostility, criticism, and conflict; and two positive dimensions: (d) support and validation that reflect active listening and warmth, and (e) problem-solving skills. Criticism and hostility of the partner were positively correlated with fear of bodily feelings and catastrophic thoughts. Partner dominance also correlated positively with these two variables. Supportive partner behaviour was negatively correlated with the clinical severity of the panic disorder, catastrophic thoughts, and agoraphobic avoidance (if accompanied). The partner's ability to solve problems through clarification or negotiation was negatively associated with agoraphobic

avoidance. Finally, the quality of the husband's solution to the problem was negatively associated with fear of bodily sensations. El-Baalbaki *et al.* (2011) showed that a higher level of marital adjustment was associated with more significant expressions of support, respect, and appreciation during problem-solving interactions.

#### Lack of assertive communication

Both panic disorder and its social consequences threaten the balance in the relationship and can lead to a situation where the patient loses their position as an equivalent partner (Girard *et al.* 2017). Zilcha-Mano *et al.* (2015) showed that panic/agoraphobic patients compared to controls had, when it came to their intimate relationship, a higher degree of distress in the domains of dominance, cold/distance, social avoidance, self-assertion, abuse, extreme care, and intrusiveness. Patients with comorbid agoraphobia reported more communication interrogations than patients without agoraphobia. Interpersonal dysfunction manifested itself in two opposing profiles: as a non-assertive subtype and as a dominant intrusive subtype (Zilcha-Mano *et al.* 2015).

- (1) The non-assertive subtype is characterized by dependence and significant disadvantage. These individuals are generally considered subordinate and lacking confidence and self-esteem. They often avoid situations that require independent freedom and self-assertion, and they feel they are the victim of each panic attack they have (Pollock & Andrews 1989, Renneberg *et al.* 2002). This profile includes users with complex agoraphobias, who feel incapacitated (Goldstein & Chambless 1978, Milrod *et al.* 1997). This profile is consistent with the clinical observations of patients with panic disorder with a history of non-assertiveness dependence (Chambless *et al.* 1982, Kleiner & Marshall 1987).
- (2) The second subtype of patients with panic disorder is used to controlling others (Horowitz *et al.* 2000). These individuals perceive the loss of control during the attack as a threat to dignity, and they fear losing mental stability. They tend to spend time with their friends or argue with them and have the strength needed to be with others (Clair *et al.* 1992, Hafner & Minge 1989). They avoid loneliness. These individuals tend to get angry with their surroundings and blame their partners for their current condition (Milrod *et al.* 1997; Katerndahl 1999; Rudden *et al.* 2003). Such an individual is often referred to as "domineering" in interpersonal relationships. In addition to panic attacks, they usually have outbursts of anger (Gould *et al.* 1996).

Empirical detection of communication subtypes may be necessary for treatment. Individuals with a non-assertive communication style need more significant strengthening in the therapeutic relationship during treatment (Goodstein & Swift 1977, Boswell *et al.* 2013, Zilcha-Mano *et al.* 2015). Patients of the dominant – intrusive

subtype did not show any changes in the therapeutic relationship during therapy, while the non – assertive type showed a significant strengthening of the relationship. At the same time, strengthening the therapeutic relationship during treatment is essential for the success of therapy (Hafner & Ross 1983, Zilcha-Mano *et al.* 2014). The higher degree interpersonal aggression was also connected with a lower adherence during therapy and lower perceived competence of their therapists (Boswell *et al.* 2013). Patients with a dominant interpersonal style may seek to control therapists and reject therapeutic formulations or interventions (Safran *et al.* 2011). Also, the partnerships of these patients are often complicated, because the patients put high demands on their partners, while they have a problem empathizing with them., They also cannot sufficiently estimate how this disrupts the relationship. It may be essential to examine whether different therapeutic approaches (e.g., learning how to express anger without losing control, vs learning how to release feelings of anger instead of suppressing it) will be useful in each of the two groups.

#### Conflicts between partners

Despite inconsistent findings on partner satisfaction in patients with panic disorder/agoraphobia, some patients at least show more frequent partner disagreements (Oppenheimer & Frey 1993). Partner disagreements can be associated with anxiety in one or both partners. Some patients with panic disorder and agoraphobia have excessive control over their relationship. The partner must ensure that the patient is not left alone or has to perform tasks that the patient with panic disorder/agoraphobia fears doing. Significant ambivalence often develops in a relationship (Pollock & Andrews 1989, Berg *et al.* 1998). For example, since the patient is dependent on the partner's help, they feel subordinate and even humiliated, and have a considerable aversion towards the partner. However, the situation is unsolvable because they cannot be alone. Agoraphobia can also lead to open conflicts with a partner. Requiring a partner to accompany the patient, restricting the whole family from travelling (e.g. on vacation), avoiding cinemas, theatres, concerts or shopping, and then requiring the partner to do the shopping. can limit the whole family and lead to quarrels. The patient may also restrict the partner's activities and freedom by requiring the partner to serve the patient's needs (Eher *et al.* 2000). Thus, panic attacks and agoraphobia may act as control factors in a relationship (Berg *et al.* 1998).

## **RELATIONSHIP BETWEEN PARTNERS AND TREATMENT**

### The influence of partnership on therapy

In addition to the fact that panic disorder and agoraphobia may be related to the characteristics of the partnership and these interact with each other, the question

is to what extent the nature of the partnership can affect therapeutic efficacy. When working with agoraphobia patients treated within in vivo exposures, Hudson (1974) found that patients from "problematic families" improved less than patients from "well-adapted families". According to Arrindell *et al.* (1986), overall pre-treatment social adjustment is a good predictor of panic disorder/agoraphobia outcome. Adaptation in the family at the beginning of treatment is a good predictor of the outcome of treatment even in the annual evaluation in (Hudson 1974). Similarly, pre-treatment partner adjustment predicts treatment outcomes after two years (Monteiro *et al.* 1985) and five years (Lelliott *et al.* 1987).

However, the results differ sometimes. Carter *et al.* (1994) conclude in their review that treatment based on in vivo exposure reduces the symptoms of panic disorder regardless of the quality of the marriage before treatment. However, the better adjustment in marriage or greater marital satisfaction before treatment predict a more significant reduction in agoraphobic symptoms. Kleiner & Marshall (1985) concluded that the degree of marital difficulties initially predicts the efficacy of therapy through in vivo exposure only in a follow-up. Three other reviews (Jansson *et al.* 1987, Steketee & Shapiro 1995) found that the pre-treatment marriage relationship did not sufficiently predict the outcome of treatment for panic disorder or agoraphobia at the end of treatment or at follow up. Emmelkamp & Gerslma (1994) argue that the methodological differences of the individual studies are so different, that it is not possible to draw definite conclusions about the prediction of the outcome of panic disorder/agoraphobia from the quality of the partnership.

Meta-analyses also generate mixed results. Dewey & Hunsley (1990) concluded that the higher the marital adjustment before therapy, the more significant the reduction in agoraphobic symptoms would be, at least one year after treatment. When they added two more studies to the previous six studies, Daiuto *et al.* (1998) conclude in their meta-analysis that the predictive link between marital adjustment and treatment outcome is not significant. The discrepancy of the results is connected to different methodologies used in the studies, as well as to the various evaluated variables (partner satisfaction, partner adaptation, communication, problem-solving) and approaches to evaluation. With a more specific focus on communication, the results are more apparent.

Emmelkamp (1980) measured the effects of controlled in vivo exposure and compared assertive and non-assertive patients with agoraphobia and those with higher and lower satisfaction in marriage. In agoraphobic patients, they identified two types of interpersonal problems: (1) problems with others and (2) lack of assertiveness. No significant differences in the effectiveness of exposure treatment were found between higher and lower satisfaction in marriage. However,

when comparing patients, according to assertiveness, the more assertive patients improved more.

Renneberg *et al.* (2002) investigated the balance between positive and negative affects of patient's dyads and their relationship and their connection to the results of cognitive behavioural therapy. To assess the level of affectivity in the sample, the authors used observational measurements, evaluating verbal and unusual behaviour in the interaction between partners. Based on these observations, the groups were divided into couples with a balanced and unbalanced affect. Patients with balanced affect achieved a significantly higher benefit from cognitive behavioural therapy after six months of treatment.

Bélanger *et al.* (2017) found that conflicts in marriage in addition to dissatisfaction with the treatment were among the reasons given for discontinuing cognitive behavioural therapy.

The patient's attachment also seems to correlate with the results of psychotherapy. Petrowski *et al.* (2019) hypothesized that patients with panic disorder with positive schemas about their mother and partner might show better psychotherapeutic outcomes than patients with less favourable patterns. Before treatment, two Implicit Association Tests were implemented – IAT (for mother and partner). Negative attitudes towards the mother in the pre-treatment period predicted a higher global severity index and post-treatment anxiety level. Positive attitudes towards the mother predicted a more significant reduction in symptoms and a better therapeutic outcome. The schemas about the partner had no significant impact.

Zalaznik *et al.* (2019) examined attachment style by measuring changes in avoidance and anxiety bonds during CBT of panic disorder with agoraphobia. Attachment improved during therapy. These changes have been associated with decreased sensitivity to anxiety, reduced avoidant behaviour, and improved emotional regulation. These findings indicate that CBT positively affects attachment style in panic disorder.

#### The partner as co-therapist

According to some studies, exposure with the presence of a partner reduces the symptoms of panic disorder/agoraphobia more than exposure without a partner (Barlow *et al.* 1981; Barlow *et al.* 1984; Cerny *et al.* 1987) or exposure with a friend (Oatley & Hodgson 1987). Other studies, however, conclude that the presence of a spouse during exposure does not significantly improve treatment outcomes (Cobb *et al.* 1984; Emmelkamp *et al.* 1992; Himadi *et al.* 1986; Dewey & Hunsley 1990). According to Craske *et al.* (1989), the effectiveness of treatment is associated with the quality of marital communication and not just the presence of a partner as a co-therapist. The more supportive the patient perceives partner communication to be, the less anxiety they experience during exposure. In contrast, more inadequate adjustment and negative communication

in marriage before treatment predict higher anxiety during in vivo exposures (Murphy *et al.* 1998). In addition, patients who discontinue treatment prematurely show more inadequate communication about anxiety than those who continue treatment (Carter *et al.* 1995). The introduction of a partner as a co-therapist is even more beneficial in therapy that also involves cognitive restructuring than in approaches that rely on simple accompaniment during exposure (Barlow *et al.* 1984; Cerny *et al.* 1987; Woods 1989; Carter *et al.* 1994). However, if pre-treatment communication is problematic, having the partner as a co-therapist may not produce any benefits.

Only a few studies have assessed the impact of treatments aimed at improving partner communication and problem-solving skills added to in vivo exposure. The results are mixed. According to Kleiner (1987) and Crowe (1989), the combination of these two interventions reduces the symptoms of panic disorder/agoraphobia more than exposure therapy alone. Arnow *et al.* (1985) also found that the addition of steps aimed at marital interactions helps to reduce symptoms more than the addition of relaxation. However, two investigations did not find a significant difference between exposures alone and in combination with marital interaction training (Chambless *et al.* 1982, Cohen 1987). It is possible though that a large proportion of these couples may not have any significant communication problems. Adding communication training and problem-solving to exposure treatment may be crucial for couples communicating negatively, rather than for well-matched couples. However, this hypothesis requires empirical verification.

#### The influence of treatment on the partnership

Empirical results on this topic show a complex picture. Successful in vivo exposure treatment appears to be able to improve marital adjustment (Monteiro *et al.* 1985), marital communication (Arnow *et al.* 1985) and relationship satisfaction (Hoffart 1997, Lange & van Dyck 1992). CBT has also been found to reduce hostility and irritable moods and increase friendliness in a relationship (Fava *et al.* 1993). Thus, the improvement of the marital relationship can be considered a positive side effect of the treatment of panic disorder/agoraphobia.

However, many authors also state that in some cases, the marital relationship may worsen after the treatment of panic disorder/agoraphobia (Barlow *et al.* 1981, Kitch 1983; Milton & Hafner 1979, Perlmutter 1990). Hafner (1984) identified two possible patterns that could occur over a year. During the first six months after starting therapy, some couples experience more conflict but find ways to resolve it in the next six months, and the symptoms of panic disorder/agoraphobia remain low. In contrast, other couples with non-functional mutual interactions, such as dominance and subordination, as well as stereotypical notions of the role of the individual in the couples, do not report any obvious partner

difficulties during the first six months. However, conflicts occur in the next six months, and these remain unresolved and predict a relapse of the disorder. Hafner (1977b) even states that in such couples, the neurotic symptoms of a male non-agoraphobic partner decreased as soon as the symptoms of panic disorder/agoraphobia worsened again in his wife.

Thus, the outcome of panic disorder/agoraphobia and the quality of the post-treatment marital relationship appear to be related to the ability of couples to resolve clashes (Hafner 1984) or to adapt to changes caused by therapy, such as greater autonomy of the agoraphobic patient. A study by Emmelkamp & Van der Hurt (1983) reveals that the more patients with panic disorder/agoraphobia complain about their partner or their marital relationship during therapy, the less successful their treatment will be. They suggest a link between an inability to find a solution to marital conflict and anxiety symptomatology. For some couples, the outcome of treatment is associated with the inability of the spouses to acknowledge their problems in the first place. According to Chernen & Friedman (1993), unlike a couple who reports marital problems before treatment, those who falsely believe they do not have any, show little reduction in symptoms. Similarly, when partners establish an idealized conception of their relationship after treatment, a slight change in symptoms can be expected with a six-month and twelve-month evaluation (Hafner & Ross 1983).

## CONCLUSIONS

The results presented in this review generally suggest that a relationship may affect the severity of panic disorder and agoraphobia and vice versa. The connection between panic disorder and the relationship between partners can be two-way: psychological problems adversely affect the partners' relationship and attitudes towards the patient and partnership difficulties and the quality of their relationship significantly affect their anxiety. It is often difficult to determine what is the cause and what is the consequence, and how much anxiety overlaps with the partnership problems. Insufficient partner support also seems to be related to the severity of panic disorder and agoraphobia, while positive social support can be of benefit for the patients.

Treatment of panic disorder/agoraphobia may affect the marital relationship and that marital relationship may, in turn, affect the outcome of treatment. The couple's ability to communicate, identify problems and find solutions is essential for a better prognosis of the disease. However, more studies are needed to accurately assess the level of support, focusing on which type of partner support is useful for different couples and which type helps to maintain the problem.

The inclusion of partners in therapy, as well as providing the tools (e.g. psychoeducation, psychotherapy for a partner) to deal with the symptoms of

the disorder, could, therefore, be beneficial for both the patient and the partner. However, the inclusion of a partner must be considered based on the relationship of the couple. If the patient has significant problems in their marriage, it may be wise to work on marital communication at the beginning before asking the partner to participate as a co-therapist. Adding therapy focused on marital communication and problem solving only makes sense in dysfunctional couples.

Many questions remain unanswered. There is a lack of longitudinal studies with an objective evaluation of the interaction between partners, in order to assess the relationship between the partnership as such and the development of panic disorder/agoraphobia over time to seek effective strategies of helping these couples.

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