

## COMORBID ANXIETY IN PATIENTS WITH PSYCHOSIS

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### SUMMARY

*A diagnosis of psychosis has tended to discount the considerable degree of emotional disorder associated with it, in a manner that may also inform psychological treatment options. Depression and anxiety are often associated with schizophrenia. Up to 40% of people have clinical levels of depression and anxiety symptoms could occur in 60% of patients with chronic psychotic disorder. Among emotional problems depression and depressive symptoms are well recognised and treated with success, whereas anxiety is a less known phenomenon and has not been studied as much as depression. Comorbid anxiety disorders or symptoms (social phobia, panic disorder, obsessive compulsive disorder, and post-traumatic stress disorder) occur in patients with psychosis in the same way as in patients who have only anxiety disorder. This comorbidity adversely affects outcome, and it may also reflect on processes underlying the development of psychotic symptoms. The present review highlights some major characteristics of anxiety and psychosis and also some aspects of coping and treatment strategies for anxiety in patients with psychosis.*

**Key words:** *psychosis – comorbid anxiety - treatment strategies – coping – emotional functioning*

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### Introduction

Persons suffering from any of the severe mental disorders present with a variety of symptoms that may include disturbances of thought and perception, anxiety, mood and cognitive dysfunction. Many of these symptoms may be relatively specific to a particular diagnosis or cultural influence. For example, disturbances of thought and perception (psychosis) are most commonly associated with schizophrenia. Similarly, severe disturbances in expression of affect and regulation of mood are most commonly seen in depression and bipolar disorder. However, it is not uncommon to see psychotic symptoms in patients diagnosed with mood disorders or to see mood-related symptoms in patients diagnosed with schizophrenia. Symptoms associated with mood, anxiety, thought process, or cognition may occur in any patient at some point during his or her illness. In accordance with the foregoing discussion, patients with psychosis have problems directly associated with psychotic symptoms, moreover, troubles associated with emotional problems, risk of relapse

and social disability are also important and they need clinical attention. Consequently, treatment strategies need to take mood disorders into account.

### Adjunctive social disability and emotional functioning in psychosis

It is acknowledged that the severity of social disability is likely to depend on at least four separate factors: the presence of chronic impairment (neuropsychological deficits), acute psychotic symptoms, adverse social circumstances and attitude towards self and to recovery (Wing 1983). Disturbances in emotional functioning are a major cause of persistent functional disability in schizophrenia. It is still not clear what specific aspects of emotional functioning are impaired. Some studies have indicated diminished experience of positive affect in individuals with schizophrenia, while others have not (Herbener 2008). Nevertheless, emotional symptoms are recognised as an important aspect of the subjective psychological experience of psychosis and they

influence attitude for the future. Current views of the link between emotion and psychosis include:

- Some types of negative emotions (anxiety and depression) may arise as the consequence of appraising the experience of psychotic illness (negative reaction to threatening symptoms and stigma, low self-esteem, criticism, hopelessness and helplessness, loss of control) (Siris 1991). According to this explanation there is a concept of grieving after losing the personal capacities to function, key roles and status (Apello 1993).
- Certain type of psychotic symptoms (i.e. paranoid and grandiose delusions and some types of voices) may arise as a consequence of emotional disturbance.

*Circulus vitiosus* could develop from entrapment into negative implications about the future, themselves and the world (Teasdale 1993).

Among emotional problems depression and depressive symptoms are well recognised and treated with success (Lançon 2001, Schatzberg 2003). Whereas anxiety is a less known phenomenon and is not as much studied as depression (Braga 2004, Muller 2004). Some authors hypothesise that anxiety is an integral part of the development of schizophrenia in a significant subgroup of cases (Turnball 2001). Surveys have shown the variability of symptoms of depression and anxiety. These symptoms may precede, occur concurrently with or follow the acute psychotic episode or occur independently between episodes (Barnes 1989). The prevalence of severe depressive syndromes at the time of relapse could be as high as 50% of patients (Siris 1991). Depression could occur in 65% of patients in one to three years after acute psychosis (Johnson 1981).

### **Comorbid anxiety disorders or symptoms in patients with psychosis**

Comorbid anxiety disorders or symptoms are common in psychosis although differences in reporting are observed across cultures. Anxiety symptoms could occur in 60% of patients with chronic psychotic disorder (Siris 1991, Cassano 1999, Morey 1994). Studies have shown that emotional symptoms may be a predictor of relapse (Goldberg 1977, Johnson 1988) and risk of suicide (Drake 1986, Caldwell 1990). In clinical samples the prevalence of obsessive-compulsive disorder in patients with schizophrenia was 15.8% (Kruger 2000), 29% for obsessive symptoms (De Haan

2001) and 23.5% in hospitalized patients with chronic schizophrenia (Poyurovsky 2001).

Social phobia is frequent in patients with schizophrenia. Some studies indicated that approx. 17% of social phobia was associated with psychotic features (Cassano 1998, Cosoff 1998). The nature and severity of social anxiety was found to be similar in schizophrenia and in patients having social phobia as a primary diagnosis (Pallanti 2004). In comparison with other patients with psychosis, those with social phobia had more suicide attempts of a greater lethality and a lower social adjustment.

Data from different studies established that panic attacks are also widespread among individuals with schizophrenia (45%). Patients with panic attacks had elevated rates of coexisting mental disorders, psychotic symptoms and health service utilization (Goodwin 2002, 2003). Panic attacks are associated with an increased risk for comorbidity of alcohol or substance use disorder. In a clinical sample Labbate (1999) found a cooccurrence in 43% with a higher rate in paranoid schizophrenics. Chen (2001) also found that patients with panic attacks had more depressive symptoms, greater hostility and a lower level of functioning.

Post traumatic stress disorder is highly prevalent (46% - 52%) in clinical samples (Shaw 1997, Neria 2002). Although a causal relationship is far from established, some authors found a higher prevalence (67%) (Frame 2001). They also demonstrated that psychotic symptoms and hospitalisation were a relevant contribution to the traumatisation of the sample. Therefore the reduction of distress during hospitalization is a fundamental part of the therapeutic strategy.

The existence of a comorbid anxiety disorder correlates with positive and negative symptoms, higher levels of anxiety were associated with greater hallucinations, withdrawal, depression, hopelessness, better insight and poorer function (Huppert 2001, Lysaker 2007). The correlation with positive symptoms is the strongest, suggesting that the majority of anxiety is related to the acute exacerbation of schizophrenia (Emsley 1999, Craig 2002). Most of the time anxiety is considered secondary to the psychotic condition and is expected to improve in parallel with the schizophrenic symptoms.

Anxiety symptoms have a significant negative impact on the quality of life of patients with schizophrenia. Anxiety symptoms were associated

with poorer outcomes on overall quality of well-being and subscales representing vitality, social functioning, and role functioning limitations due to physical problems. Moreover, some studies found that the quality of life accounted for by anxiety symptoms was greater than that accounted for by depressive symptoms (Huppert 2001, Wetherell 2003, Hansson 2006).

### **Coping with psychosis**

The experience of psychosis may tend to a continuous searching for the least harmful and painful balance between positive self-esteem and maintaining valued goals and roles vs. adjusting to the perceived demands of the psychotic experience, and the adverse social predicament of the person with chronic mental illness (Estroff 1989). There are several reactions to psychotic illness in patients with a psychotic experience including: denial and lack of awareness of psychosis, or resignation or engulfment into the social role of a chronic mental patient and acceptance of psychotic illness (Kuipers 2006, Watson 2006).

Schizophrenia and related psychotic disorders create enormous burdens for individuals who suffer from them, for their carers, for the mental health services, and for society at large (Knapp 2004). The best outcome can be seen after acceptance of psychotic illness. Acceptance of the psychotic disorder is often achieved after a long, painful and bitter struggle with a range of problems which may be associated with psychotic symptoms, social adversity with chronic mental illness and the health care system (Wing 1975, 1987, Velligan 2007). Patients develop several behavioural and cognitive strategies to cope with these problems (Wiedel & Schrottner 1991, Vauth 2007). The best result is achieved by using several coping strategies designed to maintain the patient's independence and empowerment. In such cases, the patient role is accepted only in the case of relapse.

In a study (Böker 1989) which examined coping strategies, the authors emphasized that some of these strategies can be classified as functional and some as dysfunctional. These coping strategies were (listed according to their frequency):

- The wish fulfilling fantasy.
- Tendency to take medication which increases psychotic symptoms.
- Developing long term life changes and social withdrawal.

In patients with a psychotic experience there appear to be several dysfunctional beliefs which are associated with:

- Symptoms of psychosis – i.e. patients with experience of paranoid delusions tend to be less trustful; the voices could tell the patient that he or she is a loser.
- Consequences of psychosis – due to stigma and experience with the consequences of psychosis the patient could have dysfunctional beliefs about being a loser, or being inappropriate.
- Emotional disturbances like depression and anxiety – we find typical beliefs in these disorders and they are connected to a negative appraisal of him or herself, other people and the world around for the past, present and future.

Five dysfunctional beliefs frequently addressed in therapy are:

1. Belief that the self is extremely vulnerable to harm.
2. The belief that the self is highly vulnerable to losing self-control.
3. The belief that the self is doomed to social isolation.
4. The belief in inner defectiveness.
5. The belief in unrelenting standards.

It is important to understand dysfunctional beliefs in the context of individual history and all the negative experiences that might have occurred in childhood or later. It is known that patients with psychosis have a lot of negative experiences in their life. Some studies suggest that persons with schizophrenia tend to experience significant levels of anxiety and that a history of childhood sexual abuse may predispose some with schizophrenia to experience significant levels of persistent anxiety. It is unclear whether childhood sexual abuse is more closely linked to specific forms of anxiety including symptoms of post-traumatic stress disorder (Janssen 2004, Lysaker 2005, Lysaker 2007). Moreover, cumulative trauma may also operate to further heighten risk, given the positive association between the number of traumatic experience types and the risk of a psychotic illness (Shevlin 2008).

### **Diagnosis of anxiety symptoms or disorder in patients with psychosis**

It is essential to actively explore emotional symptoms in patients with psychosis. Clinical

assessment of any emotional disturbance should cover three important areas:

- When the emotional symptoms occur – before, concurrently or after the psychotic episode.
- The severity of symptoms and their impact on everyday functioning.
- Symptoms vs. disorder.

Signs and symptoms of anxiety are the same in patients with psychosis as in patients who have only anxiety disorder. Sometimes the symptoms of psychosis are more prominent and the anxiety symptoms do not get full clinical attention. There is also overlapping of anxiety symptoms and reaction to psychotic experience (Braga et al. 2004, Muller et al. 2004). Because anxiety accompanies so many medical conditions, it is extremely important for health care professionals to uncover any physiological medical problems or medications that might underlie or be masked by anxiety. Some difficulties with accurate diagnosis are commonly associated with drug/alcohol abuse effects which may obscure signs and symptoms of anxiety or diminish them (self medication) (Castle 2008).

We can conclude, that anxiety is a problem in a patient with psychosis when (American Psychiatric Association 1994, Kaplan 1995):

- Anxiety is severe and functioning is impaired due to severe anxiety.
- Patients describe or show diffuse and intense negative emotion with a lack of the feeling of having control over it, or the patients' attention is entrapped in these symptoms, and continuous thinking about the solution of a problem does not lead to effective conclusion and solving the problem.
- There are bodily symptoms of anxiety.
- There are typical emotional symptoms like panic, tension, helplessness.
- Behaviour is typical for anxiety – avoiding the trigger of anxiety, anticipatory anxiety and behaviour that does not solve the problem in the long term.

Several diagnostic and standardised self reported measures are available for assessment of anxiety symptoms. The anxiety could be explored by the Beck Helplessness Scale (Beck 1973), the Beck Anxiety Inventory (Beck 1985) and the Generalized Anxiety Disorder Screener (GAD-7) (Spitzer 2006). For psychological interventions a cautious assessment of what patients report about their subjective experience and the problems facing them is indispensable. Research studies have

shown that such reports are reliable and consistent even in the most severely impaired patients (MacCarthy 1986).

### **Treatment of comorbid anxiety in patients with psychosis**

Antipsychotic pharmacotherapy is the standard of care for the treatment of psychosis. Although pharmacotherapy effectively improves some symptoms, others can remain. Pharmacotherapy alone also tends to produce only limited improvement in social functioning and quality of life. Supportive psychosocial therapies have been developed as adjuncts to pharmacotherapy to help alleviate residual symptoms and to improve social functioning and quality of life (Patterson 2008).

The past decade has seen an outpouring of new drugs introduced for the treatment of psychosis. New medications for the treatment of anxiety, depression and schizophrenia are among the achievements driven by research advances in both neuroscience and molecular biology. Their goal is to create more effective therapeutic agents, with fewer side effects, exquisitely targeted to correct the biochemical alterations that accompany mental disorders.

Pharmacotherapy of anxiety in patients with psychosis should be based on the clinical manifestation of anxiety, with regards to other prescribed medication and patients characteristics. Pharmacotherapy of anxiety in patients with psychosis is very important and several possibilities must be taken in account for each individual patient:

- Different regime in previously prescribed medication could be effective.
- Different antipsychotic medication is thought to be better.
- Additional therapy could be prescribed.

Most of the time anxiety is considered secondary to the psychotic condition and is expected to improve in parallel with the psychotic symptoms. However, in certain patients with significant agitation and anxiety, antipsychotic drugs with low sedative potential may not sufficiently attenuate these symptoms even though hallucinations, delusions and other positive treatments are satisfactorily managed. This 'residual' anxiety may interfere with compliance to medication, as well as being distressing to the patient. Two strategies are available to manage anxiety in such patients, namely the use of sedative antipsychotic drugs or the use of adjuvant benzodiazepine therapy.

Benzodiazepines or sedative neuroleptics (Levomepromazine, Cyamemazine) with potent antihistaminic properties are often associated with the core antipsychotic treatment presenting with an acute or sub-acute exacerbation for some weeks, as long as anxiety is present (Carpenter 1999, Gillies 2005). Sedative antipsychotics, such as quetiapine or olanzapine can be used as treatment to manage both overt psychotic symptoms and anxiety (Sumiyoshi 2003, Bourin 2004).

Antipsychotics are not effective in treating obsessive compulsive symptoms and possibly social phobia symptoms in schizophrenia (Pallati 1999). They are well known to exacerbate or to induce them. (De Haan 2002). Conventional antiobsessive drugs (chlomipramine or selective serotonin re-uptake inhibitors - SSRIs) are effective when used as augmentation treatment (Rahman 1998, Margetic 2008). This is a statement commonly accepted although not based on convincing double blind trials. Some sample studies suggest that Cognitive behavioural therapy is an effective intervention as an adjunctive treatment (Kingsep 2003) Although no systematic study is available, there is consensus that social phobia should be treated and that SSRIs are the first line treatment as an add on therapy.

Several studies of the prescription patterns of psychotropic medications in patients with psychosis have highlighted a high rate of polypharmacy. Negative consequence of polypharmacy are pos interactions, diminished compliance (McCue 2003) and in the case of benzodiazepine the possibility of abuse and dependence. With their low toxicity, their action limited almost exclusively to the central nervous system and their other practical advantages, anxiolytics and hypnotics of the benzodiazepine group apparently represent almost ideal medications. However, it is precisely the good tolerability and lack of subjectively unpleasant side effects that can lead to problems: whereas hardly a single patient wants to take antipsychotics or antidepressants without a clinical need, there is a great risk of anxiolytic drug abuse. These medications have a relaxing and calming action, the world seems friendlier and more harmonious and real personal problems become less pressing. On the other hand, unrest, anxiety and distress reappear quickly and are often intensified after withdrawal of these medications (Denis 2006). In a six-year longitudinal study of patients with co-occurring disorders, where the authors examined benzodiazepine use and associated psychiatric,

substance abuse, and institutional outcomes, the results revealed that a greater proportion of patients who were prescribed benzodiazepines developed benzodiazepine abuse (15%), compared with those who were not prescribed benzodiazepines (6%). The authors also emphasized that physicians should consider other treatments for anxiety in this population (Brunette 2003).

Clinical studies indicate that psychological interventions for anxiety can be effective in general psychiatric settings. The most popular, and those with the best evidence to support them, are based on the principles of behaviour, cognitive behaviour, or interpersonal therapy. In behaviour and cognitive behaviour therapies the main aim is to help patients identify and challenge unhelpful ways of thinking about and coping with symptoms and their meaning, about themselves, and about how they should live their lives (Hendriks 2008). In interpersonal therapies the main focus is on relationships with family members and friends - how such relationships are affected by illness and how they influence patients' current emotional state.

Cognitive behavioural therapy for patients with psychosis aims to reduce distress and disability associated with psychotic symptoms and consequences, reduce emotional disturbance and promote active participation of the patient in reducing the risk of relapse and social disability (Fowler 1999, Kuipers 2006). The principle for using cognitive behavioural therapy is modified for patients with psychosis (Fowler 1999). The therapeutic relationship must be carefully maintained and sessions could be shorter and structure is modified. It is important to increase the understanding of emotional disturbance and its recognition. Some patients strongly resist direct enquiry about feelings and consequently indirect questioning must be used. Some patients have difficulties in accepting the simple explanation of the cognitive model of the relationship between thought and feelings and consequently a different model and more emphasis should be put into identifying emotional difficulty and tracing its development over the life history of a patient. More emphasis should be also put on the collaborative rationale for working on emotional difficulties. It may be useful to understand the life predicament of a patients with psychosis and coping strategies. Patients could be encouraged to view themselves as a hero in the face of adversity rather than a personal failure. After undertaking careful assessment and functional analysis of

coping strategies and life predicament, the psychotherapist could develop an individualised approach taking into account the relevant facts in each patient.

Cognitive behaviour therapy aims to promote acceptance and awareness of psychotic illness. It is based on the patients' perspective, encouraging them to achieve what is possible and feasible and keeping a realistic hope for the future and preventing demoralisation. Kingdon and Turkington (1991, 1994) explain normalising strategies for reducing stigma, installing hope and decreasing anxiety. Fowler and Moray (1989) described treatment of patients with chronic psychosis. The results suggested that the changes of belief about psychosis could lead to marked improvement.

Using the vulnerability – stress model many psychotherapeutic interventions have been developed with the aim of promoting understanding of psychotic illness by psychoeducation, providing clear rationales for the use of neuroleptics and fostering strategies likely to reduce relapse (Birchwood 1992).

## Conclusion

Considerably more emphasis should be placed on identifying emotional problems in patients with psychosis and enabling them to overcome them. Anxiety is frequent in patients with psychosis and coping with it can increase the quality of life and functioning. It is important to support patients to accept psychotic illness and cope with its limitations. The management of anxiety is important in the process of adaptation to limitations and to achieve the best possible outcome in psychosis.

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