CHAPTER 20

Delusions

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INTRODUCTION

There has been a remarkable transformation in how delusions are viewed. The prevailing view had been that delusions are 'ununderstandable' in terms of normal psychological processes. Delusions were considered simply a symptom or epiphenomenon of an organic condition, schizophrenia. A consequence was that patients were discouraged from talking about their delusions. In the past ten years, however, this has changed. Empirical evidence indicates that delusions, though complex phenomena, can be understood in terms of psychological processes. Moreover, the new theoretical understanding has developed in tandem with cognitive-behavioural interventions for delusions. Together with medication, it is now recommended that most patients should be given time to talk about their experiences and that particular therapeutic techniques be used to reduce their distress. In this chapter we summarize the transformation in thinking about delusions.

WHAT IS A DELUSION?

In essence, a delusion is a fixed, false belief. In clinical settings the belief is likely to be distressing or disruptive for the individual. However, there has long been debate about such definitions, in that most proposed criteria do not apply to all delusions. A more sustainable position is that of Oltmanns (1988). Assessing the presence of a delusion may best be accomplished by considering a list of characteristics or dimensions, none of which is necessary or sufficient, that with increasing endorsement produces greater agreement on the presence of a delusion. For instance, the more a belief is implausible, unfounded, strongly held, not shared by others, distressing and preoccupying then the more likely it is to be considered a delusion. The practical importance of the debate about defining delusions is that it informs us that there is individual variability in the characteristics of delusional experience (see Table 20.1). Delusions are definitely not discrete discontinuous entities. They are complex, multi-dimensional phenomena (Garety & Hemsley, 1994). There also can be no simple answer to the question "What causes a delusion?". Instead, an understanding of each dimension of delusional experience is needed: what causes the content of a delusion? What causes the degree of belief conviction? What causes resistance to change? What causes the distress? And as clinicians we need to think with clients about the aspect of delusional experience that we are hoping will change during the course of an intervention.

HOW COMMON ARE DELUSIONS?

It is little discussed—though there is much evidence -that many people regularly have thoughts or ideas enter their mind of a delusional nature. For instance, questionnaire surveys have found that 20–30% of people regularly experience paranoid thoughts

Freeman, D., & Garety, P. A. (2006). Delusions. In J. E. Fisher & W. T. O'Donohue (Eds.), *Practitioner's guide to evidence-based psychotherapy.* New York: Springer.

TABLE 20.1 The multi-dimensional nature of delusions.

Characteristic of delusions	*Variability in characteristic*
Unfounded	For some individuals the delusions reflect a kernel of truth that has been exaggerated (eg. the person had a dispute with the neighbour but now believes that the whole neighbourhood is monitoring them and will harm them). It can be difficult to determine whether the person is actually delusional. For others the ideas are fantastic, impossible and clearly unfounded (eg. the person believes that she/he was present at the time of the Big Bang and is involved in battles across the universe and heavens)
Firmly held	Beliefs can vary from being held with 100% conviction to only occasionally being believed when the person is in a particular stressful situation
Resistant to change	An individual may be certain that they could not be mistaken and will not countenance any alternative explanation for their experiences. Others feel very confused and uncertain about their ideas and readily want to think about alternative accounts of their experiences
Preoccupying	Some people report that they can do nothing but think about their delusional concerns. For other people, although they firmly believe the delusion, such thoughts rarely come into their mind
Distressing	Many beliefs, especially those seen in clinical practice, are very distressing (e.g., persecutory delusions) but others (e.g., grandiose delusions) can actually be experienced positively
Interferes with social functioning	Delusions can stop people interacting with others and lead to great isolation and abandonment of activities. Other people can have a delusion and still function at a high level including maintaining relationships and employment
Involves personal reference	In many instances the patient is at the centre of the delusional system (e.g. "I have been singled out for persecution"). However friends and relatives can be involved (e.g., "They are targeting my whole family") and some people believe that everybody is affected equally (e.g., "Everybody is being experimented upon")

(e.g., Verdoux et al., 1998; Freeman et al., 2005). In approximately 10% of the general population these sorts of ideas are held at the level of a delusion (i.e., are firmly held and incorrect), though they mostly do not interfere with everyday functioning. An epidemiological study of seven thousand people in the Netherlands found that 3.3% had a "true," psychiatrist-rated delusion and 8.7% had a "not clinically relevant" delusion (van Os et al., 2000). In short, more people have delusions than receive a psychiatric diagnosis. This is consistent with a continuum view of delusional experience and indicates that delusions might indeed be understood in terms of normal psychological processes. Nevertheless, delusions are particularly prevalent in people with psychiatric diagnoses, especially psychotic disorders, and it is delusions in schizophrenia that have received by far the most research attention. In a World Health Organisation study in ten countries of first-in-lifetime contacts with services because of schizophrenia the frequencies of delusions were: delusions of reference (50%), delusion of persecution (50%), grandiose abilities (15%), religious delusions (10%), grandiose identity (5%) (Sartorius et al., 1986). In clinical services it is common to be dealing with delusions of reference and persecution because they are both the most distressing and most common delusions.

HOW ARE DELUSIONS UNDERSTOOD?

Delusions are complex phenomena that will not be explained by a single factor. Partly this is because, as we have seen, the experience contains many different elements. Many factors are implicated in delusion development, and the contribution of each in individual cases varies. In our summary of the evidence we will focus upon those factors that plausibly link to the subjective experiences that patients report and that have been the topic of research. These ideas can be used to help 'make sense' of delusions with clients seen in therapy. In Figure 20.1 how the factors may combine in delusional experience is summarized.

Explanations of experience

To understand delusions it is important to be clear about their function. In contemporary accounts, delusions are conceptualised as individuals' attempts to make sense of events. That is, delusions are explanations of experiences or personal narratives reflecting a search for meaning. This account was originally

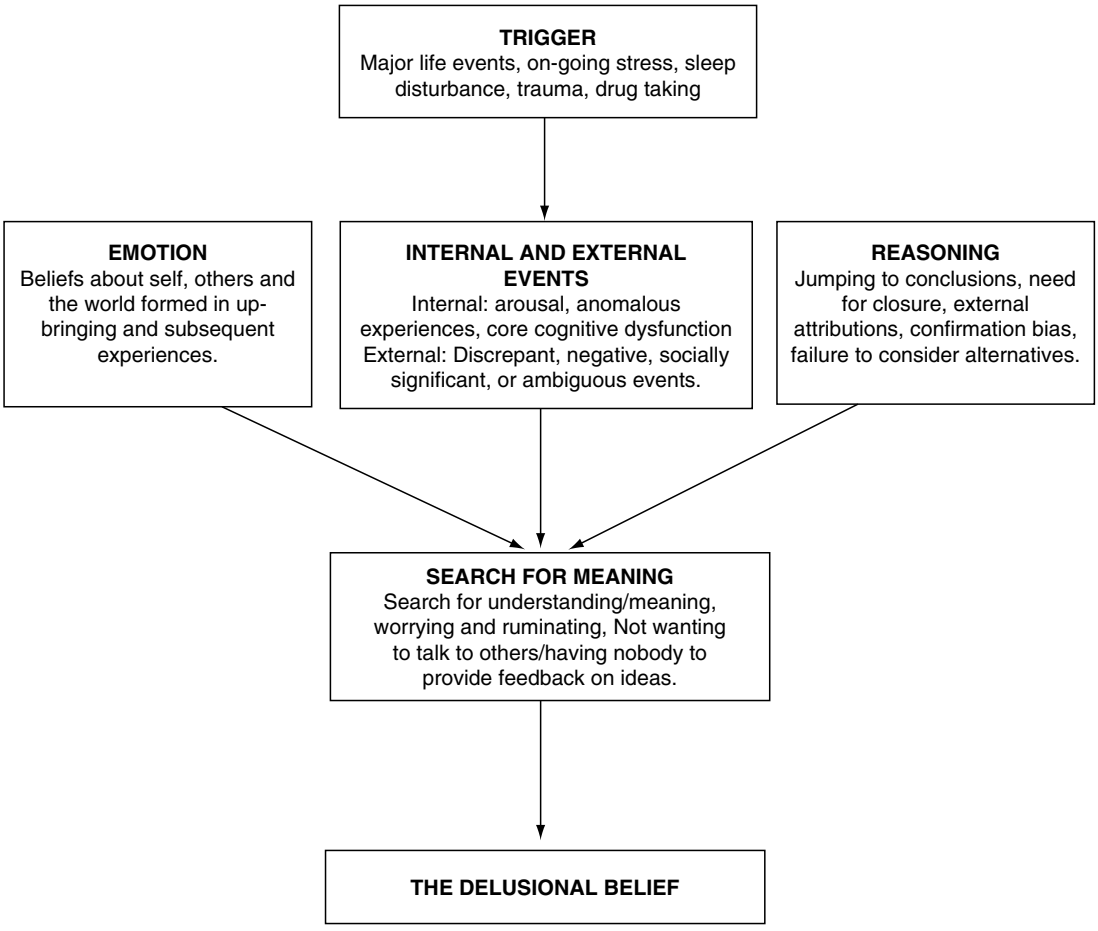

FIGURE 20.1 Outline of factors involved in delusion development

argued by the American psychologist Maher (1988). He particularly argues that delusions are explanations of unusual internal events, which includes hallucinations, perceptual anomalies, feelings of significance, depersonalisation, and arousal. The internal states may reflect a core cognitive dysfunction in psychosis that has an associated neurological disruption (e.g., Gray, Feldon, Rawlins, Hemsley, & Smith, 1991). Further, the cognitive dysfunction may arise from a proximal cause such as using certain illicit drugs or from distal causes such as a family history of psychosis or subtle deviance in brain development arising, for example, from obstetric complications (see Murray, Jones, Susser, van Os, & Cannon, 2003).

Crucially, rather than recognizing and correctly labeling unusual internal states, people with delusions instead take information from the external environment to form their explanation for their changed state. Typically, ambiguous social information, coincidences, and negative or irritating events are drawn in to the explanation. For example, a person may go outside feeling in an unusual state and rather than label this experience as such ("I'm feeling a little odd and anxious today, probably because I've not been sleeping well") the feelings are instead used as a source of evidence, together with the facial expressions of strangers in the street, that there is a threat ("People don't like me and may harm me"). Moreover, individuals with delusions have difficulties keeping in mind other (nondelusional) explanations for their experiences. In a recent study of 100 individuals with delusions it was found that only one-quarter had any alternative explanation for the experiences that their delusions were an attempt to explain (Freeman et al., 2004). Individuals who reported more internal events for their delusion found generating alternative explanations most difficult. This supports the idea that anomalous internal states may be crucial in leading to delusional explanations.

Emotion

The need for an explanation of experience may be caused by internal states but where does the particular delusional content arise from? Why a persecutory or grandiose explanation? It is likely that an important factor is emotion. Delusions build upon emotional concerns. There is evidence that anxiety, low self esteem, adverse events, victimisation, emigrating, isolation, and living in potentially difficult environments such as urban settings all raise the chances of later development of psychosis (e.g., Krabbendam, Janssen, Bijl, Vollebergh, & van Os, 2002). At an individual level such circumstances will influence beliefs about the self, others, and the world, and it is these sorts of beliefs that contribute to the delusional explanations. For example, having negative beliefs about the self (e.g., vulnerable, bad), others (e.g., untrustworthy, devious) and the world (e.g., unfair, punitive) will make persecutory ideation likely (e.g., Fowler et al., in press). Moreover, it is well established that psychosis often occurs at a time of stress. Life events, incidents that are threatening, stressful and arousing, are common in the 3-month period before symptom onset (Bebbington et al., 1993). This is likely to exacerbate long-standing emotional vulnerabilities. The emotion generated is likely to feed into the delusional explanations for experiences (see Table 20.2). Persecutory delusions may build on anxious concerns (there is a shared theme of the anticipation of danger), depressive delusions may build on depressive concerns (there is a shared theme of loss, guilt and shame), and grandiose delusions on elation (there is a shared theme of success and achievement).

TABLE 20.2 The themes of emotions and delusions. From Freeman & Garety (2004)

Emotions	*Main theme of emotion*	*Delusion with shared theme*
Anxiety	Anticipation of physical, social, or psychological threat	Reference ("People are watching me") Persecution ("People are saying negative things behind my back to get at me")
Depression	Loss, low self-esteem, guilt, shame	Guilt ("I've brought ruin to my family") Persecution ("I'm being persecuted because of what I've done in the past") Catastrophe ("The world is going to end and it's all my fault")
Anger	Deliberately wronged, frustration at not reaching goal	Persecution ("People are doing things to annoy me")
Happiness	Success, achievement, high self-esteem	Grandiose ("I've got special talents and am related to a famous person")
Disgust	Finding something offensive, revulsion, dislike	Persecutory ("My food is being poisoned") Hypochondriacal ("My insides are rotting") Appearance ("My body is ugly and misshapen")
Jealousy	Fear of losing another's affections	Jealousy ("My wife is sleeping with other men in our bed while I lie asleep")

Reasoning

It needs to be remembered that delusions are inherently a judgment, and therefore reasoning processes are also of central importance. Delusional ideation is most likely to become of delusional intensity when there are accompanying biases in reasoning. There is evidence for a number of reasoning biases in people with delusions. The most established finding has been of a "jumping to conclusions" bias in people with delusions (see review by Garety & Freeman, 1999). This reflects a data-gathering bias: on experimental tasks about half of people with delusions seek limited information before being certain of a decision. Making premature decisions is likely to lead to errors in belief formation, particularly when the experiences to be explained are inherently confusing. A further finding reported in the research literature is of people with delusions showing an externalising bias (that is, they are more likely to attribute blame to others rather than the self or situation) (Kinderman & Bentall, 1997). This is likely to make correct explanations for internal anomalous experiences less likely. There have also been preliminary findings of people with delusions not considering alternative explanations (Freeman et al., 2004) and having a high need for closure (Bentall & Swarbrick, 2003), which is a desire for an answer rather than tolerate uncertainty or ambiguity.

Maintenance Factors

Once formed, there is evidence for a number of factors that maintain delusions. The "confirmation bias" (Wason, 1960), the normal tendency to seek evidence that is consistent with beliefs rather than inconsistent, will provide a source of confirmatory evidence for delusions. Safety behaviors such as avoidance will prevent disconfirmatory evidence being processed in relation to persecutory delusions

(Freeman, Garety, & Kuipers, 2001). Rumination and worry will maintain delusion preoccupation and distress (Freeman & Garety, 1999). And difficulties with "belief flexibility," the meta-cognitive capacity of reflecting on one's own beliefs, changing them in the light of reflection and the evidence, and generating and considering alternatives, will lead to delusion persistence (Garety et al., 2005). Lastly, the person's interactions with others may become disturbed. The person may act upon their delusion in a way that elicits hostility or isolation (e.g. by being aggressive or treating others suspiciously), and they may suffer stigma, which will reinforce the delusional belief.

Summary

The study of delusions is a rapidly growing area of research. It is becoming clear that delusions are multidimensional phenomena that will need to be understood within multifactorial frameworks. A range of factors—anomalous experiences, emotional processes, reasoning biases, environmental factors, organic vulnerabilities—have now been shown to be associated with delusions. Such factors are incorporated into contemporary biopsychosocial models of delusions (Garety, Kuipers, Fowler, Freeman, & Bebbington, 2001; Freeman, Garety, Kuipers, Fowler, & Bebbington, 2002; Kapur, 2003). In essence, delusions are attempts by people to explain their experiences and these attempts to make sense are in line with previous experiences, knowledge, emotional state, memories, personality, and decision-making processes.

How can delusions be treated psychologically?

If delusions can be understood psychologically then it is likely they can be treated psychologically. In parallel with the development of the theoretical literature on delusions there have been repeated demonstrations of the efficacy of cognitive behavioural therapy for delusions (see review by Pilling et al., 2002). It is recommended for people with *distressing* delusions. Cognitive deficits are not a contraindication for treatment.

The evidence base is strongest concerning CBT for persistent positive symptoms such as delusions. Approximately 20% of patients with persistent symptoms do very well in treatment and another 40% show important improvements. Tarrier et al. (1998) report that receipt of CBT results in almost eight times greater odds of showing a reduction in psychotic symptoms of 50% or more in comparison with routine care alone. However, not all patients respond to this approach. Regarding acute groups, there is evidence that CBT can speed time to recovery (e.g., Drury, Birchwood, Cochrane, & MacMillan, 1996). Further, there is a small amount of evidence that forms of CBT for psychosis may be able to reduce relapse rates (Gumley et al., 2003). The intervention is certainly popular with clients and on the basis of the randomised controlled trials, CBT for psychosis is now a recommended intervention for schizophrenia in several countries including the US (Patient Outcomes Research Team; Lehman et al., 2004) and the UK (National Institute of Clinical Excellence, 2002).

It is important to note that at this stage of development CBT for delusions is not a brief treatment; typically it needs to be provided weekly for approximately 6–12 months. Although similar to CBT for other disorders clinicians should be aware that modifications to the approach are needed for delusions. CBT for psychosis therapists are often working with complex cases and need a good understanding of the psychology of psychosis, cognitive therapy skills, and regular supervision and support. It is also important to be aware that it is provided as part

of a multimodal treatment that includes neuroleptic medication and, for example, assertive community treatment, rehabilitation, supported employment, and family intervention.

OUTLINE OF THE MAIN STRATEGIES OF CBT FOR DELUSIONAL BELIEFS

Engagement and Assessment

It is important to be flexible when working with people with delusions. Sessions are normally up to an hour but can be far briefer at the early stages of engagement. Basic engagement skills are crucial: being collaborative, warm, empathic, taking clients problems seriously, explaining what is happening in therapy, eliciting feedback, and not taking the stance of trying to prove that clients' beliefs are wrong. Ideally, clients and therapists should be on a "voyage of discovery" with the aim of understanding the clients' difficulties and taking steps to decrease their distress and increase their control. The aim of assessment is to derive a formulation based upon the factors that have been reviewed above. This occurs through detailed descriptions of delusional experiences and their development. Formal measures of symptoms should be taken to monitor the effectiveness of intervention (e.g., PSYRATS; Haddock, McCarron, Tarrier, & Faragher, 1999). The assessment should lead to the setting of clear therapeutic goals.

Individualised Formulation: "Making Sense of Psychosis"

The initial aim is to develop an individualised formulation that accounts for the delusion and the associated distress. This is a description based upon biopsychosocial models of clients' subjective experiences (e.g., Garety et al., 2001) and is not simply "education about illness." Sometimes all, or sometimes parts, of the formulation are shared with clients. There are a number of benefits to good formulation: a full description of clients' subjective experiences is made which is empathic, normalising, makes the experiences understandable and does not treat individuals as if they are "mad"; it enables clients to revisit their decision-making processes with the benefit of time and new information; it can provide an alternative nondelusional account of experiences; and it identifies targets of therapy.

Interventions After Formulation

Making sense of psychosis, and identifying the many factors and steps on the way to delusion development, illuminates many potential therapeutic paths. Thus, if anomalous experiences are assessed as central to delusion formation—for instance, the delusions are provoked by feelings of depersonalisation, a sense of reference, perceptual disturbances or hallucinations—therapy may aim to reduce the frequency of such experiences via a functional analysis, to change the interpretation of the anomalous experiences, or simply to enhance coping strategies. Where anxiety and worry processes contribute to the persistence of delusional ideas, other ways of dealing with thinking about fears can be introduced. In some cases it is possible to review with clients the evidence for and against different explanations for their experiences and to conduct behavioural experiments. In other cases, the therapist and client will be "working within" the delusion and distress may be reduced by, for example, focusing upon the interpretations associated with the most distressing aspects of the delusion, or by developing alternative ways of reacting to the threat. It is also the case that therapists often will work with clients to improve low self-esteem, reduce depression, increase activities, and structure time. Finally, the

therapist and client may try to prevent relapse by identifying vulnerabilities and early warning signs and rehearsing compensatory strategies.

OVERALL SUMMARY

Delusions are complex phenomena that have started to be the focus of psychological research. Clearly, a number of factors combine in their formation and maintenance. This means that psychological therapy will draw upon a range of techniques that are applied on the basis of individual formulations of clients' difficulties. However, what unites the techniques is the underlying assumption that clients' subjective experiences should be taken seriously and that they can be helped to make delusional experiences less threatening, less interfering, and more controllable. This parallels the approaches taken to nonpsychotic disorders such as anxiety and depression.

FURTHER READING

Reviews of delusion theories: Garety & Freeman (1999); Winters and Neale (1983); Freeman & Garety (2004), Garety and Hemsley (1994).

Recent theoretical models of delusions: Garety et al. (2001); Freeman et al. (2002); Bentall et al. (2001); Kapur (2003).

CBT for psychosis manuals: Fowler et al. (1995); Chadwick et al (1996); Morrison (2002); Kingdon & Turkington (2002).

Website: British Psychological Society: *www.understandingpsychosis.com*

Self-help: Freeman et al. (2006).

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