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## Chapter 7

### **From „religious delusions“ to „hallucinations and delusions with religious content“**

Sylvia Mohr, PhD and Samuel Pfeifer, MD

## **Summary**

Delusions and hallucinations with religious content have been a subject of interest in psychiatry over the last 200 years. The prevalence of the phenomena displays great variations across periods and cultural areas. Hallucinations and delusions with a religious content are not restricted to schizophrenia. They can also be found in patients with mood disorders i.e., those presenting with depressive or manic states. In some studies, religious delusions have been associated with a poor prognosis. We discuss psychological explanations of delusions and hallucinations to point out that religion and psychopathology may interact in complex ways.

In order to disentangle the two, we (1) dispute the category of religious delusion, i.e. it is not a valid theoretical category, it is a stigmatizing category for patients and a confusing category for clinicians, (2) provide guidelines to differentiate between functional or dysfunctional roles of religion in order to disentangle religion from psychopathology, (3) examine

implications for the clinicians in the assessment of hallucinations and delusions with religious content, and (4) discuss treatment issues.

## Part 1: description of the phenomena

Subject of interest in psychiatry over the last 200 years.

There seems to be no area of psychopathology that draws such public attention and morbid fascination as the field of religious delusions. The discrepancy between grandiose revelations and disorganized behavior, between holy words and unholy demeanor, between mystical experiences and offensive conduct causes pitiful rejection at best and religious unrest at worst.

Historical accounts of “religious insanity” are found in a two volumes 1200 pages textbook by German psychiatrist K.W. Ideler (1) who was medical director of the psychiatric department of the famous Berlin Charité. He attributes “religious insanity” to ancient mystics living in the desert, to the flagellants of the 11<sup>th</sup> century, possession epidemics in medieval monasteries as well as radical religious movements during Reformation, to name but a few examples he was discussing. In 1879, Krafft-Ebing (2) describes “Paranoia chronica (acuta) hallucinatoria religiosa” (p. 293) and talks about “theomania”. Historical accounts of religious delusions go back to the very first issues of the American Journal of Insanity, the precursor of the American Journal of Psychiatry (3, 4). However, in their fascination with the often bizarre and grotesque religious content of delusions, the authors mostly failed to adequately express the respect for healthy religion and to address the difference between functional and dysfunctional aspects of religion.

Although William James did not directly address the topic of religious delusions in his seminal work on the varieties of religious experience (5), he commented on religious mysticism to be only half of the great mystical stream, insanity being the other “diabolical” half of mysticism.

Over the last 30 years there has been an increasing body of literature trying to approach the topic of religious delusions in more “objective”, scientific terms using psychopathology, anthropology and cultural sociology on the one hand and neurobiological techniques on the other hand to explore the nature of this multifarious phenomenon.

### **Prevalence of the phenomenon**

Religious delusions have been described in all major cultures across the continents. However, prevalence varies greatly with countries and sociocultural contexts. Several studies have been conducted to compare directly the expression of symptoms for in-patients with schizophrenia in different cultures. Here are some examples: In Malaysia, religious delusions were far more common for Malay patients (44%) than for Chinese patients (5%) (6). The rate of religious delusion was 6% in Pakistan versus 21% in Austria (7). Another study showed rates of 21% in Germany, 20 % in Austria and 7% in Japan (8). The rate of the syndrome of grandiose and religious delusions was 19% for Africans, 9% for Europeans, 8% for North Americans, Australians and New Zealanders, 6% for Middle Easterners and 8% for Asians (9). Gender and social class affect the rate of religious delusions in Pakistani in-patients with schizophrenia. Religious delusions were found more often in men than women and in higher social classes than lower ones (10). A comparative study of the prevalence of religious delusions in Eastern and Western Germany shows a distinctly higher prevalence in the catholic region of Regensburg, compared to very low prevalence rates in atheistic East Berlin (11). The authors conclude that religious delusions are “above all, associated with cultural factors” and have to be viewed as a secondary phenomenon in schizophrenia, not inherent to the illness process.

The prevalence of religious delusions varies widely not only with geography, but also with time. For example, in Egypt, the rate of religious delusions rose from 5% to 21% during a 22-year period when patterns of religious emphasis in Egyptian society changed (12). In

China, religion has been repressed by the communist government for decades. During that time, religious delusions were almost absent with a rate of only 8% in Shanghai, contrasting with the 32% in Taiwan (13).

Obviously, the content of delusions is influenced not only by the religious background but also by cultural and political particularities. Political change and technological progress have an impact on the content of delusions. For example, since the year 1997 when Internet became available to the general public, cases of “internet delusions” are increasingly reported in the literature. Internet delusions are not considered as a new diagnostic entity but rather as a new type of delusional content for two well known delusions, i.e., delusion of persecution and delusion of control (14).

### **Religious delusions are not restricted to schizophrenia**

Delusional phenomena are not limited to patients with schizophrenia. They may be found in all diagnostic categories that involve delusional thought. Already in 1931 (15), a detailed statistical analysis of delusional content in manic-depressive disorders was presented. Religious delusions were found in 5 – 8 percent of manic-depressive patients as compared with 12 – 15 percent of schizophrenic patients.

In a more recent study in the USA, among psychiatric patients hospitalized in emergency ward, the rate of religious delusions was higher for patients with schizophrenia (36%), but these symptoms were also observed among patients with bipolar disorder (33%), other psychotic disorder (26%), alcohol or drug disorder (17%) and depression (14%) (16).

The content of delusions varies over diagnostic categories however. Delusional thought often seems to be more bizarre and linked to disorganized actions in schizophrenic disorders.

Case vignette:

A 30-year old man was arrested by the police when found lingering around an atomic power plant, being obviously disturbed. The man was not religious before the incident, but he reported that when visiting a church, he experienced an encounter with God in the shape of a light that shone through the stained-glass windows. He felt compelled to burn banknotes in the church. When he drove away, the oncoming cars and trucks gave him messages with their headlights. Finally he left his car with the ignition key on, and continued his pilgrimage on foot, spending two nights in the woods. He claimed to have received a mission from God to protect the people around the nuclear plant from harmful radiations. He therefore approached the fence around the power plant, carefully pacing up and down. Finally, he urinated into a bottle, depositing his urine in drops along the fence to create a protective wall.

In major depressive disorders with psychotic features the content is “mood congruent“, underlining the basic feelings of worthlessness, guilt and rejection.

Case vignette:

Sister Mary (not her real name), member of a Catholic women's order, had a history of bipolar illness. When she lapsed into a depressive state, she was directed to a psychoanalyst and received antidepressant medication. After two serious suicide attempts she was admitted to a clinic. “I developed feelings for my therapist which were not acceptable. It was infidelity against Jesus. I have fallen from grace. Bad things happen around me, and it is my fault. I have the terrible feeling of the evil using me. I am like a nuclear bomb, destroying and burning everything around me. I have no more right to live. It would be better to destroy my life than that of the community.”

**In some studies, religious delusions have been associated with a poor prognosis**

Religious delusions may lead to violent behavior. Aggressions and homicides have been perpetrated by religiously deluded people (17-19). Some religious deluded people have literally taken statements from the Bible to pluck out offending eyes or cut off offending body parts. This may lead to auto-castration (17). Approximately half cases of self-inflicted eye injury occur with psychotic preoccupations about sinfulness and higher deities (18). Self-injuries potentially lethal could be perpetrated under religious delusion, as a 30-years old man with paranoid schizophrenia reported: “One night, I was persecuted by voices, I drove a knife into my belly to kill the demons” and also a 23-year old man with paranoid schizophrenia reported “Once, during a crisis of anxiety, I was controlled by others, I believed myself to be in a relationship with God, I had to kill myself to save the children (playing in front of his house). It was an obligation. I took a leash to hang myself, the leash broke, I fell down, the children were still alive, and anxiety went away”.

Religious delusions have also been associated with poorer outcome. For example, in India, sexual, religious and grandiose delusions and flat affect at inclusion predicted a poor clinical outcome over a ten-year period (19). In the United Kingdom, patients with religious delusions appear to be more severely ill (20). In the USA, among inpatients with schizophrenia, people with religious delusions were also more severely ill; they had more hallucinations for a longer period of time (16). In a German study, the intensity of religious faith was associated with poorer outcome; however, religious delusions have not been differentiated from religious faith (21). Thus, the association between religious delusion and a poorer outcome seems at least controversial. Is such relationship an artifact, is it due to delusion, to religion, or is religious delusion in itself a marker of the severity of the pathology?

## Part 2. Models of delusion

### What is religious delusion?

To answer the question, we have to consider both concepts: the concept of religion and the concept of delusion. The following vignettes illustrate some of the questions involved.

A 40-year-old man suffering from paranoid schizophrenia for 14 years reported: "I am a Catholic. I believe in God, in paradise, in angels and also in the Sun God. Gods protect me. I listen to God, these are no voices. God gave me the mission to conquer a sacred land, for soon comes the end of the world. The Sun God gives me the power to do it. I have to prepare the war".

A 40-year-old man suffering from paranoid schizophrenia for 10 years reported: "I have no problems in life. I am not sick. I have to put up with psychiatry because the good God does not forgive. Since I have done some stupid things, God has frozen my brain and made his puppet of me. From that time forward God speaks with me and I speak with him. It's great. I spend all of my time speaking with the good God. I would love to go to the movies, listen to music or find a woman, but I can't because God doesn't allow me and he is never silent."

Many researchers took the two terms of religion and delusion together in a rather pragmatic way, resulting in a variety of definitions of the construct, mainly influenced by the content of delusions. The heterogeneity of definitions is one of the factors influencing the disparity of reported frequencies. Many studies have been conducted with the Present State Examination (PSE), a widely used structured clinical interview developed in collaboration with the World Health Organization to assess psychiatric symptoms (22). This instrument was



constructed to provide a reliable and recognized description of symptoms of mental illnesses, irrespective of the language and the culture of doctor or patients. Religious delusion is one of the 140 symptoms listed, so defined: “Both a religious identification on the part of a subject (he is a saint or has special spiritual powers) and an explanation in religious terms of other abnormal experiences (e.g., auditory hallucinations) should be included.” A symptom called “sub culturally influenced delusions” includes “specific idiosyncratic beliefs held with conviction by small subgroups within the community, e.g., sects, tribes or secret societies, but not by the community at large (such as Voodoo, witchcraft or special religious beliefs). If the sub culturally derived beliefs are held with exceptional fervor and conviction, or are further elaborated by the subject, so that other members of the subgroup might well recognize them as abnormal, it is rated as severe.”

Some of the studies cited above took the symptom of religious delusion as defined by the Present State Examination (6, 9, 10, 19). In other studies, grandeur delusion and belittlement delusions with a religious theme were considered as religious delusions (8). In one study (12) “religious symptoms” were defined as any symptom with a religious content, such as: special knowledge or power from God, curse by black magic, control by an evil spirit, identification with a religious figure, relationship with a religious figure, being commissioned by God, possessed by an evil spirit, punished by God, a sinner, persecution related to religion, evil eye.

In a last study, nine forms of delusions were differentiated (nihilistic, poverty, somatic, grandiose, persecutory, ideas of reference, guilt, being controlled, jealousy) for 21 themes. Among those themes, “religious/supernatural” was separated from “possession” and from “I am God / Jesus / Buddha / a heavenly being”. Persecution by “religious leaders” and “supernatural beings” would also be identified as religious delusion (13).

### **Defining Religion**

There is no consensus in the literature as how to define religion, in spite of the many concepts to be found. In the present review, we favor a broad definition which includes both spirituality (which is concerned with the transcendent, addressing the ultimate questions about life's meaning) and religiousness (which refers to specific behavioral, social, doctrinal, and denominational characteristics). However, most studies have not used detailed inventories of personal religiosity such as the construct of religious centrality (23, 24). Rather, emotional and behavioral aspects of religious life are being descriptively used. Interestingly, Siddle et al. (25) report that the dichotomous self-categorization of being religious or not used in their study was as valid as the more complex measures. The broad definition of religion may include not only classical forms of religious life but also more exotic beliefs as described in the following case vignette:

A 50-year-old man with paranoid schizophrenia, who regularly attends the meetings of an UFO association, reported "I am a little strange. Since childhood, I have strange experiences. I regularly see UFOs. Once, I went too close to a saucer and was abducted by the aliens. This is why I have visions and I hear voices. These are not hallucinations. Since then I have a passion for UFOs, more than that – it is a priesthood I believe in God, but I prefer to call him 'a highest benevolent entity'. Beside God, there are benevolent alien entities, i.e., Christ alien entities, and malevolent alien entities, i.e., satanic entities. With those entities, one does not have any liberty of choice, they influence us".

Indeed, the growing rate of people believing in UFOs and alien abductions has been analyzed in terms of the emergence of a new religious movement (26).

In this context, the cultural background is important, being likely to influence both worldview and the contents of delusions. Thus a clear definition of what is religious delusion

is needed to allow the clinician to be sensitive to cultural diversity. For such a definition, we need to go back to the definition of what is a delusion per se.

### **What is a delusion?**

Defining delusion is not an easy task. The diagnostic approach sets up qualitative differences between delusions and other beliefs. According to the DSM-IV-TR (27), a delusion is a false belief based on incorrect inference about external reality, which is firmly sustained despite what almost everyone else believes and despite what constitutes incontrovertible and obvious proof of evidence to the contrary. The belief is not one ordinarily accepted by other members of the person's culture or subculture (e.g., it is not an article of religious faith). When a false belief involves a value judgment, it is regarded as a delusion only when the judgment is so extreme as to defy credibility.

Delusional conviction occurs on a continuum and can sometimes be inferred from an individual's behavior. It is often difficult to distinguish between a delusion and an overvalued idea (in which case the individual has an unreasonable belief or idea but does not hold it as firmly as is the case with a delusion). Contents of delusion may include a variety of themes (e.g., persecutory, referential, somatic, religious or grandiose).

This definition of delusion has largely been criticized. The falsity criterion of delusions has been dismissed for being not applicable, hardly solved or even solved in the sense that the content of the delusion was in fact true (28). Especially, delusional religious beliefs lack any clear empirical content (29). Indeed religious beliefs are, like delusions, lying outside the realm of objective falsifiability, subjective certainty and incorrigibility (30). The level of conviction may change with time (31). Individuals can group and form a community based on delusional beliefs (32). Notwithstanding, the categorical nature of the diagnostic approach underlines a core psychopathological feature indicative of substantial break with reality, which holds widespread clinical acceptance and shows reliable (33).

The discontinuity between pathology and normality has been challenged by epidemiological studies with standardized diagnostic instruments which demonstrate the presence of delusions in the general population without psychiatric disorders. It has been shown that 10 to 28% of the general population present delusions (depending on the broadness of criteria), whereas the prevalence of psychosis varies around 1% (34-36). This leads to consider delusions not as discrete discontinuous entities, but a complex and multi-dimensional phenomenon. Assessing the presence of a delusion may then best be accomplished by considering a list of dimensions, none of which is necessary nor sufficient, but which, when adding one to the other, result in greater agreement on the presence of a delusion. For instance, the more implausible, unfounded, strongly held, not shared by others, distressing and preoccupying a belief is, the more likely it is to be considered a delusion (37). The number and the nature of dimensions varies across studies, the most common retained dimensions being conviction, preoccupation, pervasiveness, negative emotionality and action-inaction (38).

When comparing delusions in depression and in schizophrenia, the criterion Mood-congruent versus Mood-incongruent delusional beliefs appeared as a specific dimension, “incongruence with affective state”. The other dimensions were behavioral and emotional impact of delusional beliefs, cognitive disintegration, delusional certainty and lack of volitional control. Delusions in depression displayed the same severity as delusions in schizophrenia as concerns delusional certainty and behavioral and emotional impact (39).

A questionnaire – the “Peters Delusions Inventory (PDI)” – was created to investigate delusions in general and in psychiatric populations (40). This scale scans for a set of beliefs, questioning if people hold them and how much they are convinced, worried and distressed by them. Those beliefs were mainly drawn from the symptoms list of the Present State Examination (22) and the Schneiderian’s first rank symptoms of schizophrenia (41). Several studies have been conducted with this scale, comparing delusional ideations in healthy and psychiatric populations. For example, in a study among primary-care patients without lifetime history

of psychiatric disorder, the range of held delusional beliefs extent from 5% to 70% (42). Of course, compared to deluded psychiatric inpatients, healthy adults appeared to endorse fewer of those beliefs, to be less distressed, preoccupied and convinced. Nevertheless, it is important to acknowledge the fact that, on average, healthy adults endorsed one third of those delusional beliefs. Moreover, 11% of healthy adults endorsed more delusional beliefs than deluded psychiatric inpatients (43). One study of special interest for religious delusion is the comparison between deluded psychotic in-patients, New Religious Movements' members (Hare Krishna's and Druids) and two control groups (non-religious and Christian). The New Religious Movements' members seem to endorse as much religious ideation as psychotic patients, with the same level of conviction, but with levels of preoccupation and distress as low as the control groups (40).

Another way to tackle the manifold beliefs is to differentiate initial beliefs which are directly linked to observation and theoretical beliefs based on introspection and judgments. By comparing delusions among inpatients with schizophrenia and a religious belief ("God exists") of highly religious Christians acting as a control group, it appeared that the religious beliefs and delusions did not differ on levels of conviction, falsity, affect, nor influence on behavior (44). Those studies point out that assessing the contents of beliefs is of little use to differentiate religious beliefs from delusions.

### **Formation and conservation of delusions**

Another approach to better understand delusions is to focus on their formation and conservation. Three types of theoretical models try to explain the formation of delusions, based respectively on motivation, cognitive deficit and perceptual anomalies. Theories based on motivation view delusion as having a defensive, palliative function, being an attempt to relieve pain, tension and distress. In this view, delusions provide a kind of psychological ref-

uge and are understandable in terms of the emotional benefits they confer. Theories based on deficit view delusions as the consequence of fundamental cognitive abnormalities. A set of theories emphasize the cognitive biases and cognitive deficits that have been found in deluded people, such as the jumping to the conclusions; an external attribution style; an attention bias for threatening stimuli; source monitoring deficits; and deficits in theory of mind.

Thus, delusions constitute disorders of beliefs. For example, the formation of the delusion of persecution has been explained by a motivational factor (to preserve self-esteem) and a cognitive factor (attributing negative events to external causes). The delusion of persecution is then upholding by a selective attention for threatening stimuli and a recall bias of threatening stimuli (45). A third type of theoretical model is based on the interpretation of abnormal perceptions or experiences: delusions are therefore normal and rational explanations of such phenomena (46). This model postulates that the mechanisms of formation of delusional beliefs are the same as those of non-delusional beliefs.

Like any other beliefs, delusional beliefs aim at giving meaning to events, they are personal theories. Those personal theories are needed in front of unexpected events. The data not fitting with theory will be then either ignored or reinterpreted. So, unusual beliefs are understandable in the personal and cultural context of the individual, and his/her way to give meaning to his/her experiences.

For Freeman et al. (47), the formation and the maintenance of the delusion of persecution goes as follows: the delusion emerges after a precipitating event which occurs often in a context of anxiety and depression. For individuals prone to psychosis, stress induces confusion between internal and external events, which leads to abnormal experiences (for example hallucinations, imposed thoughts and actions). The individual needs to explain those abnormal experiences. In this search for meaning, previous beliefs about self, others and the world will be activated. Those explanations are also influenced by cognitive bias associated with psychosis.

The conservation of the delusion is explained by the reduction of the cognitive dissonance (selective bias for data confirming the delusion and avoidance of other data) and the disturbed affect associated with delusion (anxiety and depression). In summary, three components have been found in the formation and the conservation of delusion: cognitive deficits and bias, abnormal experiences and emotions. However, there is no consensual model which explains the role of those dimensions in delusion, even if they are all necessary. Indeed, some authors consider abnormal perceptual experiences as indispensable for the formation of delusion, whereas the necessity of cognitive bias and deficits depends on the level of truthfulness the individual attributes to his/her perceptual experience (48). For other authors, while cognitive bias and deficits are essential for the formation of delusions, it is not the case of perceptual abnormal experiences (45).

The role of emotion in the formation of delusion is conceptualized either as a defense to preserve self-esteem (45) or as an emotional state of anxiety and depression which contributes to delusion by a cognitive bias (for example by the anticipation of the threat) and behavioral reinforcement (for example by safety behaviors) (47). For Morrison (49), delusions and hallucinations result from intrusions into consciousness of thoughts, perceptions, bodily sensations that are misattributed to an external source, due to such thoughts being inconsistent with the person's beliefs about his or her own mental processes (metacognitive beliefs). This is this interpretation that causes despair and dysfunction. The root of negative metacognitive beliefs about self and others lay often in childhood traumatic events. Indeed, a robust association has been found between childhood negligence and abuses and the onset of psychosis (50).

### **Hallucinations and the role of abnormal perceptual experience**

The debate about the necessary or contingent character of abnormal perceptual experience in delusion is still open. However, abnormal perceptual experiences, like delusional beliefs, are not restricted to psychiatric patients. For example, in an epidemiological study con-

ducted in the USA with 15'000 adults, 4.6% have had auditory hallucinations, with a third of them meeting the criteria for a psychiatric diagnosis (51). Similar results were drawn from the United Kingdom: the annual prevalence of auditory or visual hallucinations is 4% in the general population, with only one out of eight people with hallucinations meeting criteria for a psychiatric diagnosis (52). When taking into account hallucinations in the domains of sight, sound, taste, touch and smell, about 11% of the general population scored above the psychotic inpatients (53). Many delusional patients report abnormal perceptual experiences, yet not all of them (54). So, it is time to focus on hallucinations.

### **What is a hallucination?**

According to DSM-IV-TR (27), “hallucinations are distortions of the perception. Hallucinations may occur in any sensory modality (e.g., auditory, visual, olfactory, gustatory and tactile), but auditory hallucinations are by far the most common. Auditory hallucinations are usually experienced as voices, whether familiar or unfamiliar, which are perceived as distinct from the person’s own thoughts. Certain types of auditory hallucinations (i.e., two or more voices conversing with one another or voices maintaining a running commentary on the person’s thoughts or behavior) have been considered to be particularly characteristic of Schizophrenia. The hallucinations must occur in the context of a clear sensorium; those that occur while falling asleep (hypnagogic) or waking up (hypnopompic) are considered to be within the range of normal experience. Isolated experiences of hearing one’s name called or experiences that lack the quality of an external percept (e.g., a humming in one’s head) are also not considered to be hallucinations characteristic of Schizophrenia. Hallucinations may also be a normal part of religious experience in certain contexts.” So, the DSM (27) defines delusion as false beliefs and hallucinations as false perceptions. How is it possible to experience false perception?



The origin of false perception may be attributed to biological deficits in brain functioning which produce psychotic experiences. Indeed, for Frith (55), the basic mechanism would lie in the incapacity to differentiate an internal from an external source of action (i.e. confusion of the source of intended actions). Hence, people do not feel they control their own actions. Moreover, the incapacity to understand the mental state of other people (theory of mind) leads to the incapacity to understand them, to confusions in relationships, and then wrong inferences and suspicion.

For Hemsley (56), hallucination results from a confusion between memory and perception. The subject is unable to differentiate essential elements from accessory elements in a situation. As thoughts are automatically retrieved through memory, when these are alien to his or her expectancies, they are attributed to an external source. For Slade and Bentall (57), five factors are required to produce a false perception: stressful events, cognitive deficits, external stimuli, reinforcement by the reduction of emotional tension and expectancies (the subjects hallucinate what they know).

Indeed, raised anxiety was found in the antecedence of a hallucinatory report, as well as a decrease of anxiety while hallucinating. Mood state reduction is then experienced as rewarding and increases the frequency of hallucinations (58). Several hypotheses come from cognitive psychology to explain the misattribution of an internal event to an external source. For Bentall (59) the ability to distinguish between interior and exterior, between reality and imagination, is a meta-cognitive ability. Some individuals would slide easier from interior to exterior, and then would interpret internal stimuli as external. Garety and Freeman (60) explained the phenomenon by a data-gathering bias (no use of situational and cognitive clues) and by motivational factors (avoidance of negative affects and need to give meaning to incomprehensible events).

For Morrison (49), meta-cognitive beliefs concerning both positive beliefs about worry and negative beliefs about uncontrollability and danger associated with thoughts lead the

subject to attribute intrusive thought to the exterior; the hallucinatory experience is therefore favored by the reduction of cognitive dissonance.

The most common type of hallucination is auditory. About 60% of patients with schizophrenia experienced auditory hallucinations (57). However most people experiencing minor auditory hallucinations have no psychiatric disorder and are not in need of psychiatric treatment (51, 61, 62).

So, what are the factors that differentiate voice hearers with psychiatric disorder from non-patient voice hearers? Two related factors are at stake: the characteristics of auditory hallucinations and how the subject reacts toward them. Romme and Escher developed a therapeutic approach for voice hearers based on the differential functioning of patients and non-patients voice hearers. As for the characteristics of the hallucinations, both patients and non-patients hear positive and negative voices. But the big difference between them is the effect of the voices. Non-patients feel their experience as mainly positive, whereas patients are scared, upset and disrupted in their daily life by those voices. For patients, they present a social-emotional problem that they are not able to solve. This leads to emotional distress, social isolation and behavioral problems. Voices-hearers produce many different theories to explain their experience, which vary according to their own view on life and religion, and their cultural background. Psychiatry and psychology consider the voices as proper to the person. But to the hearers, it better describes their experience to say the voices lay outside their personality. Some may view them as a symptom of disease, but for other, they come from other living people, from spiritual entities (God, ghosts, angels, evil spirit) or may indicate special spiritual powers (gift of medium, telepathy). The attribution of the source of voices leads to specific coping strategies. Some of those theories are shared by various subcultures (63).

According to Chadwick and Birchwood (64), auditory hallucinations are a trigger, the person gives a meaning to his/her hallucination which then leads to emotional and behavioral

reactions. What causes despair and maladjusted behavior is a dysfunctional meaning attributed to the voices in terms of malevolence and omnipotence.

### **Association of delusions and hallucinations**

Delusions and hallucinations go often together both in patients and in the general population (65). This association may be partly due to some delusions generated in order to give meaning to hallucinations. Another hypothesis for this association lies in their common underlying psychological mechanisms: a basic cognitive disturbance leads to an anomalous conscious experience (e.g., heightened perception, actions experienced as unintentional, racing thoughts, thoughts appearing to be broadcasted, thoughts experienced as voices, two unconnected events appearing to be causally linked). Such anomalous experiences are puzzling and associated with anxiety and depression, they required explanations. Those explanations are influenced by cognitive bias and meta-beliefs. Hence, delusions are dysfunctional attempts to make sense of anomalous perceptual experiences (66). For Morrison (49), meta-cognitive beliefs are an underlying factor for both delusions and hallucinations.

All psychiatric and psychological theories of hallucinations postulate the misattribution of an internal event to an external cause. In that, clinicians, like voice-hearers, develop strong convictions about the meaning of such experiences – meaning rooted in their culture. The DSM-IV-TR (27) points out the role of culture in the definition of hallucination (“Hallucinations may also be a normal part of religious experience in certain contexts”) and delusion (“The belief is not one ordinarily accepted by other members of the person’s culture or sub-culture (e.g., it is not an article of religious faith)”). Now, it’s time to integrate those studies into a concept of religious delusion.

### **Part 3. Clinical implications: how to deal with religious delusions**

#### **Does religion make you crazy? - Disentanglement of religion and psychopathology**

A number of studies have tried to establish the influence of premorbid religiosity on the formation of religious delusions. Thus, Getz et al. (67) examined patients from Catholic, Protestant and non-religious backgrounds regarding the frequency of religious delusions. They did not find any difference in the severity of religious delusions across the various groups, then their conclusion: “Religious affiliation may influence the frequency of religious delusions ..., but religious affiliation appears to be independent of religious delusion severity”. Siddie et al. (20) found 68 percent of their patients to have some sort of religion, but only 23 percent showed some form of religious delusion.

From the studies on delusions and hallucinations, we have emphasized the continuity between normality and psychopathology, the multi-dimensional character of those symptoms, and their common ground due to the key role of beliefs for giving meaning to strange experiences. Sometimes, this meaning takes a religious flavor. Culture provides a framework of symbols that allows for meanings to be created, and among them religious symbols. Religion has even been reduced to a system of meanings (68). Then the clinician is confronted to a sensitive problem: how to distinguish a religious belief from a religious delusion.

#### **Delusion as a dysfunctional belief**

Sims (69) gave three criteria to distinguish a religious belief from a religious delusion:

- 1) The experience reported by the patient gives the impression of a delusion,
- 2) Other psychiatric symptoms are presents and
- 3) The outcome of the experience seems more like the evolution of a mental illness, rather than a life enhancing experience.

For studying religious delusions in patients with schizophrenia, the acceptability of the beliefs by their religious community had to be added. However, this criterion is not sufficient in itself.

Magico-religious beliefs are a major source of confusion for the clinician. Two examples from different cultural backgrounds may illustrate this fact. About a third of Protestant Christians in Australia endorse a demonic etiology of major depression and schizophrenia (70). Among religious Protestant patients in Switzerland, 82% with psychotic disorders believed in the possible causation of their problems by the influence of evil spirits. But also 50% of patients with non-psychotic disorders (mood disorders, anxiety disorders, personality disorders and adjustment disorders) attribute their disorders to demonic influences (71).

Similar figures have been found in a study in North India in a non-Christian context, where the ancient belief in magic is embedded in the prevailing religious context. In a study of magico-religious beliefs in schizophrenia conducted in India (72), the authors found a high prevalence of magico-religious beliefs (75 % of schizophrenic patients). However these were not taken in the sense of delusional conviction but rather as a guideline to treatment. Belief in supernatural influences was common in patients' relatives (even from an urban background and with adequate education), and treatment based upon such beliefs was sought to a considerable extent.

Hence the belief in demons or magical forces as the cause of auditory hallucination is not sufficient to define a religious delusion. It has to go along with other signs of mental illness, e.g., disorganized behavior and other behavioral features which are not seen in those who may share some odd religious convictions. Moreover, such demonic attributions to symptoms may even have some beneficial effect, albeit in a rather unusual way as the following vignette illustrates:

A 33-years old man with paranoid schizophrenia who was a "born again" Christian, giving Christ a central position in his life, reported "I am a schizophrenic. I have to

take regularly my medication, otherwise I speak with trees. I still hear voices, but I have the discernment. As I believe in God, I believe in evil. I know that voices are from the enemy who wants to destroy me with insults and belittlements. I don't listen to those voices, while the evil is a liar. There is nothing true in it. So I pray Jesus who heals my soul. Sometimes, I hear the voice of God. He gives me strength, peace and courage".

In this case, the patient's religious frame of reference provides him with effective religious coping strategies, such as selective attention to positive voices and reduction of the emotional impact of the negative voices. Voices-hearers often give meaning to their voices, not as auditory hallucinations, but as a form of communication with another plane, with spiritual realm, an access to different levels of consciousness (63). Belief in demons as the cause of mental health is not restricted to Christianity. Intensive religious practices are often associated with increased religious delusion rates (40, 67), however they are not necessary for the onset of religious delusions(20)

The first step to disentangle religious beliefs from religious delusions lies in the functionality of the belief. If the religious belief is a source of emotional distress or impaired behavior and social functioning, then it is a delusion. This perspective is documented by studies on content-free dimensions of delusions. This approach allows to distinguish a religious belief from a delusion, but does it mean that the delusion, when it is, is "religious"?

### **Religious delusion: a confusing category for clinicians**

We have already seen that the category of religious delusion includes or excludes the same contents depending on the classification criteria. The list of themes of delusions is infinite, with some delusions specific to subcultures. New delusions appear in relationship with socio-political events and new technologies.

The general themes of delusions (such as persecution, grandiosity or belittlement) can be filled with a diverse set of cultural and idiosyncratic content. Religion is one of the many sources of “color”. In factor analysis “delusion of persecution” is a factor by itself (73). However, typical themes of religious delusions are persecution (often by the evil or demons), grandiosity (believing to be God, Jesus, an angel), belittlement (to have committed some unforgivable sin) and being controlled (possession). Then religious contents may be found in delusions of influence (possession), self-significance delusions (to be Jesus, to have committed the unforgivable sin) and delusion of persecution (by the evil or demons).

So, in order to disentangle religious beliefs from religious delusions one has to substitute the category “religious delusion” by a more valid typology of delusions (as for example delusions of influence, self-significance delusions and delusion of persecution), and specify the presence (or not) of religious content. This approach reverses the way to handle religious delusion by identifying first the presence of a delusion by its severity, then the type of delusion and finally the presence or absence of religious content.

As an illustration of this strategy, we may cite a study focused on the content of persecutory delusions, that showed that in 19% of cases the agent of persecution was a spiritual entity (74). The content of grandiose delusion was of religious nature in 55% of the cases (75). The agent of control in delusions of influence may be another person, an anonymous collective, a non-human device such as a satellite or computer, but also a supernatural entity (76).

### **Religious delusion: a stigmatizing category for patients**

Suppressing the category of religious delusion will not only lead to a better understanding of the psychopathology of delusion, but also to a more respectful attitude toward the spirituality and religiosity of the persons involved. To label a delusion as “religious” leads to a suspicion of pathology of the spiritual and religious life of the patients: this labeling is in-

deed stigmatizing. Like many people who turn towards religion to cope with stressful events in their life, psychiatric patients often lean up on religion to cope with their symptoms and the consequences of their illness (24). However, the spiritual needs of psychiatric patients are often neglected (77). But it is not because someone displays at times some delusions with religious content that all his/her spiritual and religious life is symptomatic of psychiatric illness.

### **Functional impact of delusions**

According to Pierre (30), whether some religious experience is pathological is to be judged by its functional impact on the individual (if it causes distress and dysfunction). “Delusional” therefore refers not to the content of a belief per se, but how a belief is held (i.e., with excessive preoccupation, conviction, emotional valence, and resulting in functional impairment). When looking for the content-free dimensions of delusions (conviction, pervasiveness, preoccupation, action, inaction and negative affect) across types of delusions, delusions with religious content seem to be accompanied by more intense symptoms than other forms of delusions.

Do those approaches, focused on the dimensions of delusions and the process of formation and conservation of delusion, imply that the content may be ignored? Definitely not. The great variation of delusional themes across cultures is evidence to their importance for the individual. Culture gives words and images for the expression of suffering. The content of delusions is also related to the personal history.

### **Psychodynamic considerations**

Therapy of delusions and hallucinations with religious content requires a broad understanding of the underlying processes. It is not enough to give medication to dissolve the pathological symptoms. Understanding the delusional person in the initial phase of the disorder is equally important.



In a Swiss study (78), four functions of delusions with religious content were described: Explanation, context, exculpation, and wish fulfillment / significance.

Explanation refers to the interpretation or cognitive reframing of threatening hallucinations, psychotic experiences and delusional perceptions. What is vaguely perceived as an evil, life threatening and overwhelming threat to a person's existence, gets a new significance if it is labeled "demonic". "Why me?" is one of the most tormenting questions of the delusional person. Whereas normal life would give no explanation for singling out an individual in such a destructive way, the events receive significance in the light of religious writings, where the just is threatened and attacked, even in the absence of personal wrong-doing. But the study also describes positive connotations, such as identifying a comforting voice as the voice of Jesus or an angel in the midst of puzzling and threatening events.

Context refers to the ultimate human desire to understand individual suffering in a larger framework of reference. Culture is a major source for such contextualization. For the religious person, accounts in the Bible, the Koran or other holy books can serve as the overarching scenario for his or her personal revelations, sensations and fears. The end of the world, the apocalypse is a common theme, but so is the advent of a new era or of a savior. In grandiose religious delusions, the person ascribes such meaning to herself, which is logical for her in the delusional context but offensive to the religious surroundings, resulting in rejection and social isolation. Delusional context can serve as a coping mechanism in persecutory delusions: the more powerful the subjects feel in face of their persecutors, the less depressed they are and the more self-esteem they hold (74).

Exculpation or "Dis-egoification" refers to the psychodynamic mechanism of guilt reduction. Some patients report sexual desires and erotic sensations which they would never acknowledge in their healthy ego defenses. The delusion of Jesus coming to them in their sultry dreams exempts them from guilt. Others may commit self mutilations or aggressive acts against their family – if it was ordered by an evil (delusional) power or a (delusional) logical

necessity, it is not their fault. Thus the religious delusion helps them to keep some ego-stability, albeit fragile and deceptive, in the midst of personal failure and a behavior which would not be compatible with their healthy religious convictions.

Finally, wish-fulfillment and significance may come out of delusional experiences. In a study on the stressful events preceding the initial onset of psychosis, grandiose delusions were often triggered by loss (79). Schizophrenic patients often are socially isolated, poor and rejected. Delusions, however can give them significance beyond their external misery. Thus, a single woman, living on a farm together with the family of her brother, developed the delusion of pregnancy. She was convinced that she had conceived the baby from the Holy Spirit. Now she was a worthwhile woman, soon to have a baby like her sister-in-law, even more than that – a chosen woman like the Virgin Mary. Unfortunately, the pleasant delusion was accompanied by sleeplessness and disorganized behavior which finally required the patient to be hospitalized.

### **Treatment considerations**

In this context, clinicians need cultural sensibility, to be respectful and to differentiate between functional and dysfunctional beliefs. The question is not if the belief is true or false, as this is not the central question in delusions with religious content. Rather the clinician has to decide if the behavior associated with the delusions and hallucinations requires care or not. In other words, is the belief a source of suffering; does it increase distress, impaired social and occupational functioning? If so, the treatment of the delusional condition has to be standard treatment for such symptoms, including medication, psychotherapy and social support. Psychotherapy can draw upon the psychodynamics described above, helping to find out what the belief is meaning to the person in his or her current life situation.

Religious beliefs (but also ecological convictions and other prejudices) can be an obstacle for the acceptance of medication and professional help. Delusions with religious con-

tent have been associated with a poorer outcome which could be associated with greater refusal of psychiatric treatment (20). Religious beliefs – delusional or not – may be in contradiction with psychiatric care (80). Patients may prefer to seek help in a religious context, e.g. miraculous healing, visiting the grave of a prophet or a religious shrine. Others are brought to magical practitioners or exorcists by their relatives – often without sufficient improvement (71, 72). Wisdom is needed to convince patients and their families to accept medical treatment. This wisdom may come from the religious community, as illustrated in the two following vignettes:

A 24-year-old man with paranoid schizophrenia reported “Two years ago, I began to hear voices of demons; I believed I was Jesus Christ. I escaped from the psychiatric clinic to consult an exorcist priest for an exorcism. He told me that I could not be Jesus Christ and he taught me the gospel. Since that time, I met him every week. The voices told me not to take any medication. He told me not to listen to them, while demons are liars. He told me that the medication could help me. Since then, I’ve agreed to take it”.

A 20-year-old man with paranoid schizophrenia reported “I didn’t trust the psychiatrist; I believed I had no mental disorder but rather some supernatural power, being able to see and hear people others could not. Those hallucinations had meaning. So I went to consult a Buddhist monk to get his advice. The Buddhist monk told me it was only my imagination and he taught me how to meditate. He also told me that he could not heal me and that I had to go to a psychiatrist. It’s he who led me to adhere to the Western biomedicine.”

Social support should also include relatives or peers which must be informed about the nature of delusional disorders. Respect for religious beliefs and traditions could be combined with an explanation of neurobiological processes leading to a distortion of otherwise func-

tional religious beliefs. Winning the trust of family and peers is a major source for long-term compliance and recovery.

But more is needed in regard for the role of spirituality and religiosity in patients' lives. In patient-centered care, the clinician needs to proceed with a spiritual assessment (see chapter 4). Hence, the clinician will know if the patient belongs to a religious community, if his/her religious beliefs are shared by other people, how salient religion is in his/her life and for coping, if there are unmet religious needs and if he/she may benefit from religious support.

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