

# Religiosity and Psychosis

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Religion and spirituality (RS) have been integral aspects throughout human history, possibly being observed as far back as 500,000 years ago in the ritual treatment of skulls during the palaeolithic period (1). Today, despite the growth in relatively secular societies, almost 90% of the world has some RS affiliation. Interestingly enough, mental health has historically been interlinked with RS. Family and adoption studies show that a family history of psychosis is correlated with intense interest in RS (2). Furthermore, the association between Postictal psychosis, a common complication of epilepsy, with religiosity is well documented (3,5,6). It is conceivable that this association led to epilepsy being historically linked with the divine, demonic and supernatural. In fact, there is ample evidence to suggest that many historic religious figures had epilepsy and psychosis (4,7). In clinical practice - and in broader society - the incidence of religiosity in epilepsy patients is likely underestimated (4,6). While postictal psychosis symptoms range in RS intensity, it is not uncommon for patients to have severe RS delusions and even convert after episodes (3,5).

## HOW CAN WE DISTINGUISH RELIGIOSITY BETWEEN A PSYCHOTIC EPISODE AND THAT OF AN RS EXPERIENCE?

To answer this question, we must first examine the similarities and differences between the two conditions.

There are many similarities between psychosis and RS experiences. Delusions of reference in psychosis may be analogous to the ideas held by RS believers that mundane experiences have a special and significant purpose (2). Furthermore, there are underlying commonalities between neurological pathways of RS experiences and the mechanisms of psychosis. A decrease in orbitofrontal cortex volume, for example, has been implicated in both people who fear God or in people with psychotic symptoms (1). Other associated areas include the medial frontal cortex, precuneus, posterior cingulate cortex and the caudate nucleus (1). More broadly, studies suggest that the right hemisphere is implicated in experiential and personality features related to the RS self, with the right temporal lobe involved in the experience of intense RS phenomena and the right frontal lobe involved in elements of personality, such as social, political and RS values (3). There is also evidence that implicates temporolimbic dysfunction in psychosis, especially with paranormal or spiritual events (8).

## IS RELIGIOSITY AN EXPRESSION OF PSYCHOSIS?

Not quite. A major difference between RS experiences and psychosis is a matter of insight. Ng (2007) suggests that psychosis may arise from varying contributions of abnormal perceptual experiences and abnormal interpretation of normal experiences, and RS is a common theme due to its intrinsic and cultural significance to humans (8). Thus, certain neurological pathways activated in a brain undergoing psychosis may trigger areas that experience and store RS information. Episodes of 'RS psychosis' triggered by major life events, psychoactive substance use or repetitive environmental stimuli tend to involve the deautomatization of habitual stimulus selecting and organising mechanisms (9). Analyses of autobiographical accounts from patients with mystic RS experiences indicated increased sense of inward attention, enhanced perception, and feelings of union with supernatural and divine powers while auditory hallucinations and thought disorder, common in psychosis, were not characteristic features (9). Therefore, a hallucination during a RS visionary experience is associated with a positive prognosis if insight is not lost because even though there may be a perception disorder, there is no associated judgement disorder (9,10). Similarly, Dein & Littlewood (2011) postulate that a difference between RS cognition and psychosis lies in the ability to attribute mental states to other people, enabling the individual to understand the behaviour of others and themselves (2). These findings would help explain

the association between postictal psychosis and religiosity: some neuropathological process stimulates the areas responsible for RS. Furthermore, these studies suggest that a major difference between psychosis and RS experience has to do with the individual's level of introspection and insight.

## IS RELIGIOSITY A PATHOLOGICAL FINDING IN PATIENTS WITH PSYCHOSIS?

Religiosity is one of the few enduring themes observed across cultures in postictal psychosis, however it appears that they have become less frequent over the last century, possibly reflecting a societal shift towards an increasingly secular world (8). These findings make sense when we consider that RS feelings exist within the psychosocial context of where individuals live (4,6). There is evidence that mental health professionals often overdiagnose psychosis during routine examinations of individuals with RS problems (9). RS can be a resource for enriching health and well-being. Among psychiatric patients, healthy RS practices and beliefs may reduce the fear, isolation and loss of control experienced during a psychotic episode (4). Koenig (2009) argues that religiosity is a powerful coping behaviour through which people can make sense of the world, their suffering and of the forces of nature - all while promoting social rules that facilitate cooperation and social support (4). Menzes and Moreira-Almeida (2010) suggest criteria in which a RS experience may be considered non-pathological: if there is an absence of psychological suffering, an absence of social or occupational impediment, the experience is of a short duration, there is a critical attitude regarding the experience, there is some compatibility of the experience with some RS tradition, the individual gains a more enriching understanding of their life and the individual is concerned with helping others (7).

The link between psychosis and religiosity leads us to many interesting questions that touch at a core part of the human experience. It would be fascinating to delve into the implications of RS regions in the brain and the complex interplay between RS as external factors that influence our internal thoughts and development, and in turn this internal development feeding back into the broader societal RS consciousness. RS, along with any modern ideologies, is likely part of the same evolutionary process that gave rise to abstract thought in homo sapiens that enabled their global dominance. Ideologies provide a framework for broader societal cooperation, the major advantage of our species. The triggering of an altered state of consciousness may provide diversity for selective pressures to act on and shape the course of history. What we can say for certain is that RS exists as an integral part of humanity and postictal psychosis and RS have numerous historical and biological associations with the same brain regions likely implicated in both

processes. However, a major difference between RS experiences and psychosis is the unimpaired insight seen in the RS experiences, which may be a possible mechanism behind the benefits associated with RS experiences.

Finally, it is also important to mention that RS beliefs and delusions are increasingly difficult to define, which has implications on psychiatric practice. The rise in alternative spiritual movements, multicultural influences, new age mysticism and spiritual-but-not-religious attitudes make it difficult to access normality from false beliefs.<sup>9</sup> It is, however, vital for psychiatrists to differentiate harmful beliefs from benign or beneficial RS to avoid harmful medicalization that can lead to stigmatisation. Clinicians should be aware of the RS lives of their patients and differentiate normative practices beneficial for healthy social functioning from distorted beliefs that limit the patient and contribute to their pathology (4,7). Fortunately, modern day attitudes in psychiatry towards RS have begun to shift, and some training schemes now incorporate training on RS factors that influence psychological development (4). Hopefully this trend continues as further research into the associations between psychosis and RS helps in the treatment of patients and in uncovering the bewitching complexities of the mind.

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