

Insight in Psychosis: An Indicator of Severity of Psychosis, an Explanatory Model of Illness, and a Coping Strategy

K. S. Jacob

ABSTRACT

Recent studies related to insight, explanatory models (EMs) of illness and their relationship to outcome of psychosis are reviewed. The traditional argument that insight predicts outcome in psychosis is not supported by recent longitudinal data, which has been analyzed using multivariable statistics that adjust for severity and quality of illness. While all cognition will have a neurobiological representation, if “insight” is related to the primary psychotic process, then insight cannot be seen as an independent predictor of outcome but a part of the progression of illness. The evidence suggests insight, like all EMs, is belief which interacts with the trajectory of the person’s illness and the local culture to produce a unique understanding of the illness for the particular individual and his/her family.

Key words: *Culture, insight, outcome, schizophrenia*

INTRODUCTION

Insight is defined as “a patient’s capacity to understand the nature, significance, and severity of his or her illness.”^[1] It can range from an awareness of one’s context to a deeper intellectual understanding and emotional appreciation of issues. Recent evidence and arguments^[2] about the complexity of mental illness and our understanding of the explanations offered are briefly highlighted.

Insight and explanatory model of illness

“Explanatory models (EMs) are the notions about an episode of sickness and its treatment which are

employed by all those engaged in the clinical process.”^[3] From an EM perspective, insight in psychosis is the degree of congruence between patient and physician viewpoints. Good insight is inferred when the patient endorses physician perspectives by acknowledging awareness of illness, relabeling symptoms, and accepting the need for medical treatment.^[2] On the other hand, discordance between patient and physician point of view suggests poor insight.

Single and multiple explanatory models

Insight research often assumes that patients hold

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How to cite this article: Jacob KS. Insight in psychosis: An indicator of severity of psychosis, an explanatory model of illness, and a coping strategy. *Indian J Psychol Med* 2016;38:194-201.

Access this article online	
Website: www.ijpm.info	Quick Response Code 
DOI: 10.4103/0253-7176.183078	

Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India

Address for correspondence: Dr. K. S. Jacob

Department of Psychiatry, Christian Medical College, Vellore - 632 002, Tamil Nadu, India. E-mail: ksjacob@cmcvellore.ac.in

solitary beliefs about their illness. Many reports, which have systematically elicited EMs, have documented the presence of multiple and contradictory beliefs about illness across cultures.^[4-14] EMs are usually a conglomeration of emic and etic approaches involving ethnocultural, personal, and idiosyncratic beliefs and components from both within and outside culture. People with chronic and debilitating conditions seek help from diverse sources; they visit centers modern, traditional, and alternative medicine and faith healers simultaneously and sequentially in search for cure and healing.^[15]

Multiple and contradictory EMs of illness, considered the norm in low- and middle-income countries, have been demonstrated in Western populations.^[6,8] Pluralistic societies employ multiple approaches to health and illness.^[15] The fact that people with nonmedical beliefs regularly take psychotropic medication^[9-14] argues for the complexity of the response to chronic and disabling illness, which are not necessarily voluntary or rational.^[16]

Insight and psychopathology

The reciprocal relationship between insight and psychopathology^[9-11,16-19] suggests its association with delusional thinking and beliefs. However, severe delusional illnesses, by their definition, preclude alternative explanations in those with severe disease, especially at the height of their illness. Thus, people with severe illness will by definition lack insight as they will believe in the validity of their psychotic experience and will not be able to subscribe to a biomedical understanding for their condition. Therefore, people with milder forms of psychosis, who acknowledge disease within themselves rather than alternative explanations for their psychotic experiences, will be considered to have insight. Consequently, people with good insight will be those with milder disease, who are able to entertain and consider alternative biomedical explanations for their illness, which suggest disease and will, therefore, have better clinical outcomes compared to those with more severe psychotic states who firmly believe in their delusional convictions.^[2]

Assessment of insight

The instruments employed to assess insight focus only on the biomedical model of illness, with good insight corresponding with disease attributions and the acceptance of medical treatments.^[20,21] These instruments do not consider locally and culturally relevant attributions and help seeking as a measure of insight. Consequently, individuals who offer biomedical explanations for their illness score higher on measures of insight while those who subscribe to nonmedical beliefs

are considered lacking awareness. Therefore, people with milder episodes of psychosis, who acknowledge disease within themselves, will be reported to have good insight while those with severe illness, who solely believe in their delusional ideas, will be considered to lack such understanding.^[2]

Cross-sectional associations

Investigations have reported an inverse relationship between psychopathology and insight scores.^[9,11,17-19,22] Studies which examined nonmedical EMs of illness have demonstrated their negative relationship with insight scores.^[9,11] However, cross-sectional associations are often mistakenly assumed to have a directional relationship, with poor insight and nonbiomedical EMs predicting poor outcome and not the other way around (i.e., severe illness with poor outcome predicting “poor insight” and nonmedical EMs).^[2] Nevertheless, recent investigations that have systematically elicited prevalent EMs have reported that good insight has also been positively associated with the number of nonmedical EMs of illness.^[12,13] They also suggest that holding nonmedical EMs does not necessarily imply that they do not subscribe to medical EMs. Simultaneously holding multiple and contradictory EMs and concurrently seeking help from diverse sources of healing and cure seem to be the norm for many people with chronic illness.^[15,23,24]

Longitudinal correlations

Many studies which correlated good insight with better outcomes focused on cross-sectional and early illness data or failed to adjust for many illness characteristics known to be correlated with clinical outcomes.^[9,11,19,22,25] Consequently, they did not take into account factors (e.g., severity and duration of the psychosis, functioning, and sociodemographic variables) which confound the relationship between insight and clinical outcome.^[17] The relationship between insight and these standard predictors of clinical outcome results in insight being flagged as a predictor of course of the disease when in actual fact it is not directly related to clinical outcome but related to characteristics, which predict the progression of illness.^[2]

Recent studies which have examined known risk factors of poor outcome have suggested that they confound the impact of insight on illness course and progression.^[12-14] These studies have demonstrated that insight predicted clinical states later in the course of illness when examined in isolation. However, the relationship between insight and outcome became statistically nonsignificant, when the effects of known predictors of course and outcome of illness were adjusted using multivariable statistics.

Changes over time

While literature on EMs of mental illness has increased substantially in recent years, there is a dearth of studies which have examined EMs over the longitudinal course of chronic mental disorders. Investigations, which have examined the relationship between insight, psychopathology, and EMs overtime, document a complex reality.^[12,13] Serial assessments of insight, EMs, and psychopathology document different progressions. Psychopathology scores reduced overtime but plateaued as a significant number of patients had residual symptoms and disability. Insight improved over time but the scores also plateaued correlating with treatment-resistant symptoms and deficits in functioning. On the other hand, the total number of EMs reduced markedly with the initial reduction in psychosis but then increased as the illness seemed to stabilize with residual deficits.^[12,13] These findings demonstrated a fluctuation in the number of EMs, their reduction with the reduction in psychopathology and their subsequent increase as the improvement in schizophrenia plateaued, with persistent residual symptoms, disability, and unresolved livelihood issues.^[12,13] It supports the contention that EMs are not fixed and immutable but tend to be idiosyncratic, changeable, and heavily influenced by personality, cultural factors, response to interventions, and clinical outcomes.^[2]

Predictors of outcome

The simultaneous acceptance of multiple and contradictory EMs of illness coupled with the heterogeneity of psychopathology, clinical course, and outcome increases complexity of the relationship and demands caution in interpretation.^[2] Studies, which have examined the longitudinal relationships and have adjusted for common confounders of outcome, have demonstrated that early insight scores and EMs do not predict clinical outcome later in the illness.^[12,14] Pretreatment illness variables (e.g., urban residence, fluctuating course of the initial illness), improvement in functioning at 6 months improvement in functioning (e.g., Global Assessment of Functioning scores), and lower psychopathology scores (e.g., Brief Psychiatric Rating Scale scores) determined outcome at points in time before insight scores and EMs were significant associated with long-term outcome.

The bivariate statistical association during the early course of illness between insight, EMs, and outcome lost their statistical significance when baseline and clinical variables were included in the multivariable analysis arguing that such relationships are confounded by illness characteristics.^[12,14] The fact that non medical beliefs and poor insight scores were associated only during the latter part of the illness suggests that people

with treatment nonresponse and poorer outcomes may select such EMs to cope with the devastating impact of their illness.^[2] Similarly, those whose illness with psychiatric treatment remitted would prefer biomedical models. In addition, there was interaction between medical and nonmedical models, with the presence of the disease model, and at least one indigenous model had a stronger association with remission than the disease explanation *per se*.^[12]

Insight and biology

Many areas of the brain are said to be associated with insight – cingulate, frontal/prefrontal cortex, precuneus, insula, parietal lobule, putamen, fasciculus, corona radiate, etc.^[26,27] Reddy, in this issue, also cites other areas of the brain as responsible for “insight.” However, the lack of consistency between reports, confounding by illness variables, and cross-sectional assessment prevents evaluation of the direction of the causal relationship making interpretation difficult. Even if consistent reports emerge and identify specific area of the brain associated with insight, it would be difficult argue that these are independent of the primary illness process. While all cognition will have a neurobiological representation, if “insight” is related to the primary psychotic process, then insight cannot be seen as an independent predictor of outcome but a part of the progression of illness. Areas of the brain said to be responsible for insight, which light up on newer scans, do not provide the direction of the cause-effect relationship neither do they document that the process is independent of the psychosis.

Explaining older associations

Many of the traditional associations of good insight and its inverse relation to psychopathology, and its direct relationship to better clinical course and outcome, treatment adherence and good response, cognitive and brain function can be explained by the severity and quality of the psychosis rather than insight *per se*. People with milder psychosis have better insight, clinical course, and outcome. The studies which have documented associations between insight and clinical outcome did not adjust for known predictors of outcome resulting in a false impression that insight determines illness progression.^[12-14]

Insight and EMs early during the course of illness did not predict clinical outcome,^[12] disability,^[14] or insight^[13] at follow-up. People with chronic mental illness simultaneously held multiple and contradictory EMs of illness and change in their beliefs over time. Pretreatment variables and trajectory of the illness determines outcomes and the complex and changing relationship between insight, EMs, and psychopathology argue that insight and EMs are

secondary to the course of illness rather than primary determinants of outcome.^[2]

The many reasons discussed suggest that insight, essentially the concordance with biomedical EMs, may be a coping strategy, like other nonmedical EMs, rather than an independent predictor of clinical outcome in chronic mental illness. It does not suggest that insight in psychosis is independent of psychopathology, course, and outcome of the illness but a complimentary part of it.^[2]

The comparison of poor insight to anosognosia, similar to that seen in organic brain diseases, is not be useful as its response to antipsychotic medication and change over time and limit such comparison. Similarly, the argument that insight is related to cognitive impairment is less than definitive as antipsychotic medication, which is not useful in improving cognitive deficits in schizophrenia, can “change” insight by altering the course of illness. The data suggest that EMs and “insight” may be coping mechanisms rather than independent predictors of clinical outcomes. The recent evidence discussed suggests that psychopathology and illness characteristics predict insight, EMs, and clinical outcomes in schizophrenia.^[2]

Alternative framework

The heterogeneity of clinical features, course, and outcome and treatment response in schizophrenia probably reflects different diseases, illnesses, and trajectories. The stigma associated with mental illness and their labels leads to much prejudice and discrimination across cultures. People with poor outcome schizophrenia with persistent and disabling symptoms and adverse medication effects despite good medication compliance require explanations, which go beyond the concept of disease. Nonmedical, supernatural, and external EMs seem to be preferred to disease explanations in people who have not recovered with treatment and have to cope with the devastation of the illness.^[2] These explanations seem to be culturally acceptable mechanisms to cope with residual deficits and incapacitating outcomes.

Insight as narrative

Psychiatry, with its attempts at a universal understanding of mental disorders, dismisses the context of the illness and the personal narratives of patients. The focus on objective behavioral and symptom criteria has reduced the importance of patient experience.^[12,13,28,29] Nevertheless, illness narratives contextualize the patient describe the patient’s reality and his/her ways of coping and refocus the doctor–patient interaction.^[12,30]

The subjective dimension of insight has been conceptualized as a particular form of narrative production.^[12,13,31] It has been called narrative insight. Consequently, EMs of illness are narratives, which attempt to make sense of illness experiences, control them, and improve quality of life.^[12,32] They also convey illness experience, are often effective mechanisms of coping, particularly for treatment-resistant symptoms and incapacitating adverse effects of medication.^[2]

People with psychosis attempt to construct coherent accounts of themselves and their condition. There is evidence to suggest that ability to construct complex narratives of self and social context is variable and is dependent on social and metacognition.^[33] The ability to construct accounts of personal and social reality will necessarily play a role in developing EMs of illness. The presence of residual symptoms, persistent deficits, and incapacitating adverse effects of medication, despite good treatment compliance, demand the need to reconcile the simplistic biomedical model of disease and treatment with the patient’s reality.^[2]

Other issues also complicate the clinical scenario. Studies which have examined the relationship between insight, on the one hand, and quality of life^[34] and self-esteem,^[35] on the other, have suggested a negative relationship with greater insight associated with poorer quality of life and lower self-esteem. Internalized stigma and metacognitive abilities seem to mediate distress and depression seen in people with chronic psychosis.^[36]

Patients and their families employ multiple EMs to cope with the unexplained reality of disabling mental illnesses. Consequently, such narratives should not be devalued or dismissed. These attempts at integration will help translate experience and provide legitimate frameworks for patient–physician interaction. They create a language and interface for improved communication.^[12,28,29]

Framing insight

Like all EMs,^[37] insight also provides meaning. The challenges include explaining persistent symptoms and deficits, impaired social relations and difficult livelihood issues. The persistence of distress, impairment, disability, and handicap, despite regular and optimal treatment, calls for explanations which go beyond simplistic concepts of disease. Insight is not just the possession of distinct facts about the character of mental illness^[12,13] nor but only an acceptance of a particular experience as abnormal. It is also not an acknowledgment of a singular truth about the person and his/her life. An awareness of a mental illness is a narrative act in which people make personal sense of the many challenges they face.^[12,13]

“Insight” and other EMs about mental illness are based on sociocultural beliefs systems prevalent in the local culture and region. However, most societies are pluralistic and offer a wide range of beliefs including biomedical explanations (e.g., disease, degeneration, deficiency, etc.) on the one hand to supernatural ideas on the other hand (e.g., consequence of sin, punishment by God, black magic, evil spirits, karma, etc.).^[6,8,24,38] These beliefs systems interact with the trajectory of the person’s illness to produce a unique set of EMs of illness for the particular individual and his/her family. The choice of EMs is dependent on a complex interaction between the person’s persistent symptoms, current deficits, adverse medication effects, social relations, livelihood issues, and response to treatment on the one hand and available biomedical and cultural explanations on the other hand.^[2] People tend to choose EMs which are nonstigmatizing explanations and which seem to rationalize their individual concerns and contexts and are suited to their personality. These EMs seem to provide support and even offer worldviews. However, the frequent presence of multiple and contradictory EMs, often held simultaneously, suggest their pragmatic role in coping with the effects of mental illness.

Pluralistic societies employ multiple approaches to health and illness. Disease models of causation are almost universal in rural India and in low- and middle-income countries for illnesses of short duration (e.g., fever, diarrhea).^[39,40] In fact, physicians are under pressure to provide immediate relief from symptoms. On the other hand, people employ multiple EMs of illness to explain chronic diseases, especially those with variable response to medical treatment, fluctuating course, and poor outcome.^[15] People with mental illness commonly combine modern medicine with complementary and alternative therapies for relief of symptoms and distress.^[41] Patients and their families seem to be comfortable with compartmentalizing their contradictory EMs and seek diverse forms of cure and healing. The simultaneous use of contradictory EMs suggests their use in coping with different aspects of these conditions. Modern biomedicine’s focus on singular beliefs, logical thought, and consistent action seems far removed from patient reality.^[2]

The patient’s narrative of the illness will vary according to complexity of the illness, context, and coping. The cultural context and the prevalent social stigma related to mental illness interact with the person’s illness to produce a specific understanding. Subscribing to multiple EMs of illness suggests that they are a pragmatic response to the devastation of chronic and residual psychosis. The complexity of issues mandates a nuanced framing of insight.^[2]

Clinical and research implications

The alternative approach to insight in psychosis has significant impact on clinical practice and is briefly highlighted.

Assessment of insight

The recent evidence argues for alternative conceptualization of insight.^[23,24] It suggests that insight should be assessed against local and cultural standards rather than universal biomedical definitions and criteria. Providing nondelusional and culturally acceptable explanations and attributions and seeking locally acceptable and available interventions should be the dimensions to assess insight.

The assessment of insight should be analogous to the assessment of other clinical phenomena (e.g., delusions), which involve comparison with local and cultural yardsticks.^[23,24] People with psychosis who are able to relabel their psychotic experience offer nondelusional explanations for changes in themselves, which correspond to beliefs about illness held by the subculture, admit to the need for restitution, and seek locally available help, can be said to possess insight.^[23,24]

The Indiana Psychiatric Illness Interview,^[42] a semi-structured interview, has been employed to elicit illness narratives. Other instruments to elicit EMs include EM interview catalog^[43] and short EM interview.^[6]

There is an urgent need to develop and refine instruments that study patient perspectives including “insight,” which can capture diverse beliefs about mental illness and elicit varied and multiple EMs of illness, their attribution and help seeking. The common reality of patients simultaneously holding contradictory models, seeking help from diverse sources of treatment, and healing needs to be systematically documented.^[2]

The assessment of insight should shift its focus from the sole elicitation of and the comparison with biomedical perspectives. It should attempt to elicit the multiple perspectives held by patients and their families and compare them to locally and culturally acceptable beliefs about illness, attributions, and actions.^[2]

Managing insight and explanatory models

The singular use of biomedical perspectives in the appraisal of response to complex diseases needs to be replaced with a broad-based approach and understanding of coping.^[2] The partial solutions currently on offer by individual systems of medicine (i.e., modern and indigenous), for complex and chronic diseases, force patients and their families to employ diverse and

multiple strategies to cope with distressing symptoms and intractable problems. Consequently, there is a need for a nonjudgmental approach to the EMs employed by people with mental illness. While psychotropic medication has a powerful impact on outcome in psychosis, the use of diverse approaches to cope with persistent impairment, disability, and handicap, even among those with clinical remission, suggests the need to allow patients to use multiple strategies to regain and maintain mental health.^[12,13]

Psychiatrists, trained in modern biomedicine, often tend to dismiss local cultural explanations and favor biomedical concepts when engaged in psychoeducation related to mental illness. Educational approaches, as part of routine clinical practice, should elicit patient and family EMs. They should present biomedical EMs as an alternative, without directly challenging nonmedical beliefs. They should not claim exclusivity or superiority of biomedical beliefs but discuss issues relating to symptoms, disease models, medication, and regular treatment.^[44] Allowing people to hold multiple beliefs about their illness, while introducing biomedical explanations, will permit patients and their families to co-opt diverse strategies to support their mental health, including the use of psychotropic medication and psychological interventions.^[2] The use of multiple approaches, which are mutually not exclusive, will help reduce symptoms and improve coping making it easier to discuss treatment compliance and improve outcomes.

While patients and their families should be encouraged to seek culturally appropriate help, they should also be urged to consider psychotropic medication as it has a significant impact on psychosis. Education about the biomedical model, without dismissing local beliefs systems, will allow for the use of antipsychotic medication over time and will result in improvement in the psychosis, reduction in its severity, and better outcomes. However, the residual and treatment-resistant symptoms commonly seen in many people with schizophrenia suggest the need for multiple approaches to mental health.^[2]

These issues fit in well with the recovery model of mental illness.^[45] Recovery-oriented approaches offer a transformative conceptual framework for mental health practice and service delivery. They focus on the lived experiences and insights of people with mental illness and their families. The concepts affirm personal identities and highlight journeys beyond the constraints imposed by psychiatric diagnosis. They recognize the value of combining such experience with expertise of mental health professionals to provide holistic care. They also challenge the notions of professional power and focus on the needs of people with mental health

issues. They emphasize the interconnectedness between personal and clinical recovery. The recovery models highlight four processes: Finding and maintaining hope, re-establishing a positive identity, building a meaningful life, and taking responsibility and control.^[46] They support importance of collaborative working alliances with consumers, fostering personal responsibility, promoting shared decision-making, supporting the development of motivation, self-management, and self-empowerment, and being responsive to families.^[2]

Implications for research

The argument that insight is actually an EM of illness, which allows people to cope with the impact of chronic and disabling mental illness, means that it is rooted and supported by local sociocultural belief systems. The complexity of local and regional belief systems would suggest the need to study cultural contexts, ideas, and philosophies that will reduce stigma related to mental illness, help in the acceptance and amelioration of disabling symptoms, and encourage adherence to treatments.

Recent intervention programs to alter EMs incorporating many of these concerns are being currently tested, for example, REFLEX-a brief psychosocial intervention to improve insight in schizophrenia,^[47] narrative enhancement/cognitive therapy,^[48] and meta-cognitive reflection and insight therapy.^[49]

CONCLUSION

The current discourse on insight is captive to the belief that insight is not related to psychopathology.^[2] The sole focus of research on insight as separate and independent predictor of outcome has resulted in an echo chamber, reinforcing firmly held academic beliefs. The fact that those holding a biomedical EMs (i.e., with good insight) have a less severe disease allowing them to hold an alternative view of the reality of their psychosis is not considered. Consequently, insight is then shown to be related to cross-sectional functioning and longitudinal outcome, when in fact illness variables (e.g., severity, duration, quality, and progression of the psychosis) determine clinical outcomes.

The complexity of the issues related to insight emphasizes the need for a nuanced understanding.^[2] The course and outcome of illness, cultural context, acceptable cultural coping mechanisms, and the prevalent social stigma interact to produce a multifaceted understanding of the illness for the person involved. The complex issues related to disease, illness, context, and culture call for a nuanced framing of insight. Patient experience and perspectives, currently devalued and delegitimized by canonical authority, needs to be reemphasized and

integrated into clinical practice. There is a need to foreground patient experience to affect the mainstream psychiatric discourse.^[28,29]

While the traditional view within psychiatry is that insight is independent of psychopathology and predicts the course and outcome of psychosis, recent evidence suggests that it that “insight” and EMs of illness are secondary to psychopathology, course, and outcome and their interaction with the socio-cultural context. They are probably dependent on the trajectory of the person’s illness, are not independent of the condition. The recent findings suggest that “insight,” essentially an EM of illness,^[2] may be an attempt at coping with the devastating effects of mental disorders. It calls for multifaceted and nuanced understanding of the issues.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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