Psychosis as a state of aberrant salience: A framework linking biology, phenomenology, and pharmacology in schizophrenia

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Abstract: Objective: The clinical hallmark of schizophrenia is psychosis. The objective of this overview is to link the neurobiology (brain), the phenomenological experience (mind), and pharmacological aspects of psychosis-in-schizophrenia into a unitary framework. Method: Current ideas regarding the neurobiology and phenomenology of psychosis and schizophrenia, the role of dopamine, and the mechanism of action of antipsychotic medication were integrated to develop this framework. Results: A central role of dopamine is to mediate the "salience" of environmental events and internal representations. It is proposed that a dysregulated, hyperdopaminergic state, at a "brain" level of description and analysis, leads to an aberrant assignment of salience to the elements of one's experience, at a "mind" level. Delusions are a cognitive effort by the patient to make sense of these aberrantly salient experiences, whereas hallucinations reflect a direct experience of the aberrant salience of internal representations. Antipsychotics "dampen the salience" of these abnormal experiences and by doing so permit the resolution of symptoms. The antipsychotics do not erase the symptoms but provide the platform for a process of psychological resolution. However, if antipsychotic treatment is stopped, the dysregulated neurochemistry returns, the dormant ideas and experiences become reinvested with aberrant salience, and a relapse occurs. Conclusions: The article provides a heuristic framework for linking the psychological and biological in psychosis. Predictions of this hypothesis, particularly regarding the possibility of synergy between psychological and pharmacological therapies, are presented. The author describes how the hypothesis is complementary to other ideas about psychosis and also discusses its limitations.

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