

## Feature

## Is too much insight bad for you?

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## Summary

Insight in psychosis is associated with reduced psychotic symptom severity, less coercive treatment and better functioning. Controversially, it has been suggested that insight may lead to depression, higher suicide risk and worse self-perceived quality of life. Future clinical trials are warranted to address this 'insight paradox', particularly the direction of causality.

## Keywords

Insight; psychosis; positive outcomes; negative outcomes

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## Positive and negative effects of insight in psychosis: the insight paradox

Since the latter half of the 20th century, it has generally been assumed within the psychiatric establishment that the majority of patients with schizophrenia and related psychoses lack insight. But what do we mean by clinical insight in psychosis? Although some have criticised the rather reductive view of insight as simply agreeing with the doctor, most have attempted to uncover positive aspects of insight and have endeavoured to explore its psychological and social underpinnings. In the early 1990s, multidimensional models of insight – illness awareness, symptom relabelling and treatment compliance<sup>1,2</sup> – were proposed, which revived academic interest in the concept and initiated a three-decade period of fruitful research.<sup>3</sup> Based on similarities with anosognosia in neurological conditions, a neurocognitive deficit model of insight has been postulated.<sup>4</sup> The relationship between insight and cognitive ability, although meta-analytically confirmed, is surprisingly weak.<sup>5</sup> Later studies showed the greater contribution of metacognition to insight in psychosis.<sup>6</sup> As a result, insight in psychosis is widely viewed within the framework of metacognition and self-awareness rather than mere psychiatric labelling or as a simple deficit.

Although a version of the concept of metacognition has been studied since ancient times, the term was first introduced by Flavell in his 1979 seminal contribution,<sup>7</sup> in which metacognition was described as 'knowledge and cognition about cognitive phenomena' (p. 906). Twenty years later, Wells referred to metacognition as 'the ability to think of one's own and others' thinking'.<sup>8</sup> Hence, thinking about aspects of one's thinking such as beliefs, perceptions, and whether one is suffering from an illness – aspects of clinical insight – can also be viewed as a subspecies of metacognition. A deeper theoretical debate about the conceptualisation of metacognition and its role across psychology and behaviour is beyond the scope of this article. In short, metacognition in the cognitive science world refers to indices of confidence in decision-making and performance, whereas in social psychology it tends to be used to describe aspects of self and other knowledge and people's varying abilities in this regard. Some therapies have emerged in recent years which explicitly employ concepts derived from metacognitive theory (see ref.<sup>9</sup> for a review). We will return to this later.

Of relevance, the above concept of clinical insight (hereafter referred to as just insight) should be distinguished from the broader construct of cognitive insight, a metacognitive domain which was put forward by Beck and colleagues<sup>10</sup> and includes the ability to evaluate one's distorted beliefs and misinterpretations and receive external feedback (self-reflectiveness) and the tendency to have overconfidence in one's conclusions (self-certainty). Although cognitive insight was intended to shed light on insight

as a thinking style while avoiding issues such as treatment adherence, researchers have been surprised by the relatively weak relationship between the two forms of insight.<sup>11</sup>

Most importantly, insight in psychosis is generally linked to positive outcomes, namely reduced psychotic symptom severity,<sup>12</sup> less use of coercion within treatment services<sup>3</sup> and better psychosocial functioning.<sup>13</sup> On the other hand, concerns have been raised about the potential link between insight gain and some degree of demoralisation, including lower mood,<sup>12,14</sup> higher suicide risk<sup>15</sup> and worse self-appraised quality of life (QoL).<sup>16</sup> This conforms to the belief that, as Birchwood and colleagues stated in their summary of studies of 'post psychotic depression', 'psychosis is indeed what patients are depressed about'.<sup>17</sup> This dual nature of the relationship between insight and outcomes has been called the 'insight paradox'.<sup>18</sup> With this in mind, we will focus on the extent to which the aforementioned putative negative effects of insight are supported by evidence, particularly in terms of causation. We will also suggest some directions for future research.

## Does insight (really) lead to depression and suicidal behaviour?

Back in 1965, the British epidemiologist Bradford Hill taught us the fundamental difference between statistical association and causation. Although the relationship between mood and insight – greater insight, lower mood – is well-established in psychosis<sup>14</sup> as well as in other conditions, the direction of causality remains far from clear. On the one hand, developing insight into having a serious mental (or physical) illness could be thought to lead directly to feelings of hopelessness and other depressive symptoms, that is, demoralisation. On the other hand, the well-known cognitive biases associated with low mood tend to result in a more pessimistic way of thinking (e.g. about illnesses), which is sometimes attributed to the depressive realism model, i.e. lower mood giving rise to greater insight at the assessment. A prospective longitudinal approach would appear to be one way of teasing these effects out. However, the careful attempts of Iqbal and colleagues to do so using measures across at least four time points found that insight moved up and down in lockstep with depression during the course of psychosis<sup>19</sup> – it appeared that they were two sides of the same coin.

Depression is a well-known major risk factor for suicide both in the general population and in schizophrenia and related disorders, particularly in early psychosis. In a systematic review, insight was weakly linked to suicide risk in individuals with schizophrenia spectrum disorders, but depression may mediate this association.<sup>15</sup> Consistent with this, three large independent first-episode psychosis cohort studies from the UK GAP ( $n = 112$ ) and AESOP ( $n = 181$ ) projects<sup>20</sup> and from the PAFIP programme ( $n = 397$ ) from

Spain,<sup>21</sup> with follow-up periods ranging from 3 to 10 years, failed to confirm a direct relationship between insight and suicide risk. An apparent association might be explained by two confounders, namely previous suicide attempts and depression, both of which were associated with baseline (higher) insight levels and emerged as the strongest predictors of future suicidal events in individuals with first-episode psychosis.

Suicidal behaviour, particularly suicide (completion), is a complex biopsychosocial phenomenon, hence unlikely to be explained by any single factor, including depression. One common theme in predictors of suicide in those with mental health conditions is dropping out of and non-adherence with treatment,<sup>22</sup> both of which are inextricably linked to decline in the insight that one has a disorder that might be amenable to treatment. To better understand the interrelationship between contributing factors (including depression and insight) leading to such a tragic outcome as suicide, long-term intervention studies are warranted. Contrary to the commonly held view among clinicians about the demoralising impact of insight, one might hypothesise that enhancing insight may reduce the long-term risk of depressive symptoms and suicidal behaviour via improved adherence to (effective) treatment and reduced hopelessness, although this remains to be established.

### Insight and Quality of Life: what do we know?

The World Health Organization defines Quality of Life (QoL) as ‘an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns’.<sup>23</sup> In other words, QoL is a subjective measure of one’s psychosocial functioning, which must include perception of illness. In keeping with this, the focus of psychiatric research, particularly intervention studies, has switched from objective outcome measures to so-called patient-reported outcome and experience measures, commonly known as PROMs and PREMs, respectively. QoL is thus likely to be the most important treatment goal for patients. The question arises: can (too much) insight negatively affect self-perceived QoL?

Among other determinants of QoL in schizophrenia and related psychoses, global insight has been found in meta-analyses to have a small negative effect – greater insight, worse QoL – which appears to be more relevant for those individuals who present with less severe symptoms.<sup>16</sup> One complication in interpreting this effect is the type of assessment of QoL (assessor-rated versus self-report), which influences the relationship between insight and QoL. In this regard, a re-analysis of data from the US multicentre CATIE study found that participants with poor insight more positively self-perceived their QoL compared with the corresponding QoL ratings from the treating physician, partially supporting the insight paradox notion<sup>24</sup> but raising uncomfortable questions about objectivity. Indeed, more insightful (and possibly more depressed) patients are more likely to develop thoughts on the negative consequences of their illness, which would naturally affect self-appraisals of QoL negatively. But this is incompatible with the well-established association between insight in psychosis and better objectively assessed global functioning<sup>25</sup> and highlights the different emphasis of the two constructs.

In order to improve patient QoL one might be tempted to counsel against making the patient aware of being ill. In clinical settings, it is not uncommon for family members to request that certain information, including a diagnosis of schizophrenia (or cancer, dementia, etc.), should be withheld from the patient, pitching legitimate concerns about welfare against autonomy and the patient’s right to be informed. The assertion that insight and knowledge about one’s illness are detrimental, even if found to be true to

some extent, would not necessarily justify the withholding of information. For example, it may be that an immediate blow to self-esteem was more than compensated for by the benefits of knowledge, openness and cooperation. In other words, knowing the truth, including confirmation of a diagnosis of a disabling illness, need not automatically lead to poorer QoL, at least in the medium and long-term, although this is a topic for empirical research.

### Above and beyond the insight paradox: other contributors

The potentially negative impact of insight on mood, suicide risk and QoL seems to be moderated by internalised stigma, which can be defined as the degree to which a person has endorsed societal negative stereotypes and stigmatising beliefs about having a mental illness. In particular, a cluster analysis of ( $n = 75$ ) individuals with schizophrenia spectrum disorders revealed that within the good insight group, those who rejected stigmatising beliefs achieved better functional outcomes than those who endorsed them.<sup>18</sup>

In addition, a cross-sectional study from Italy of ( $n = 89$ ) patients with schizophrenia aimed to investigate putative moderators and mediators of the association between depression and insight. The results showed socioeconomic status, symptom severity and adherence to treatment to moderate this association, which was more pronounced in individuals with lower socioeconomic status, more severe symptoms and poorer engagement with services.<sup>26</sup>

### What about causality? Looking forward to intervention studies

Although there is some evidence to support the so-called insight paradox, this is not to say that insight should not be improved in the clinical setting. Rather, we propose that efforts to enhance insight should be combined with measures to improve mastery over awareness-related psychological distress, to relieve low mood and decrease internalised stigma, including both psychological and pharmacological treatments. Moreover, early interventions regarding insight, along with measures to correct self-stigma, before the harmful secondary consequences of a psychotic illness have had time to develop, may result in better outcomes. In other words, interventions to improve insight should be delivered along with the development of coping strategies from a patient-centred approach. For example: ‘Yes, I have an illness, but I can see a path to recovery by working positively with my doctors/carers’. However, there is a lack of long-term studies examining the dynamic relationships among insight, depression, suicide risk and QoL, so that the key question we asked about causation remains unanswered.

To this end, longitudinal clinical trials, which may aid in untangling causality, are needed. In particular, it is worth noting that both depression and insight can evolve over time. Hence, the study of this complex interplay requires follow-up studies in which putative confounders and mediators are controlled for, such as in the context of randomised clinical trials. More specifically, if an insight improving intervention was shown to reduce the risk of depression and/or suicidality, let alone not worsen them, a conclusion might be drawn that insight can be good for you and the close association between insight and depression/suicidality could be picked apart.

So far, interventions for improving insight, including psychoeducation, psychoanalytically oriented therapies, cognitive-behavioural therapy, video-recorded self-observation and antipsychotics, have yielded modest results.<sup>27</sup> Certainly, the management of poor insight in psychosis represents both a research gap and a major unmet clinical need. Thanks to meta-analyses,<sup>28</sup> a newly developed metacognitive

intervention, metacognitive training (but not other metacognitive-oriented therapies such as metacognitive therapy and metacognitive reflection and insight therapy), has emerged as an evidence-based treatment for changing insight in psychosis. These findings are in full agreement with the metacognitive model of insight, according to which lack of insight in psychotic disorders may be attributable to psychosis-related metacognitive deficits – hence, insight could be enhanced via improving metacognitive performance.<sup>3</sup> Although the maximum follow-up period of the meta-analysed trials was 6 months, no negative effects on mood were observed.<sup>28</sup> Longer-term, it remains unclear whether these benefits for insight are sustained and whether the insight improvement comes with demoralising effects.



Future large-scale long-term clinical trials should therefore include insight measures (as the primary outcome) and symptom severity, mood, suicidal behaviour, functioning and QoL (as secondary outcomes). From a statistical point of view, structural equation modelling techniques may offer a better understanding of the putative dynamic causal associations of insight with depression and suicide risk, as they can address latent variables as well as multiple observable variables (see ref.<sup>29</sup> for a review). Previous literature has yielded inconclusive results on the efficacy of antidepressants for the management of depression in schizophrenia, although their combination with antipsychotics has been found to result in greater effects on negative symptoms.<sup>30,31</sup> Regrettably, insight data from selected studies were not meta-analysed; hence, these studies of antidepressants for psychosis represent a missed opportunity to test the insight paradox. Nevertheless, depression in psychosis remains under-recognised in routine clinical practice and under-researched. This is of concern given its high prevalence among people with schizophrenia, which has been recently estimated at 32.6%,<sup>32</sup> and the strong association with increased suicide risk, particularly in early psychosis.<sup>20,21</sup>

Turning to high-risk studies, we can ask whether interventions aimed at reducing depression in people at risk of psychosis (or in the early stages of the disorder) lead to worsening of measures of insight (and probable worsening of positive psychotic symptoms). The latter does not seem to be the case,<sup>33</sup> but we know of no studies that have measured insight specifically. Alternatively, patient-initiated treatment discontinuation, which is linked to impaired insight and might be regarded as a proxy measure, tends to be more commonly looked at in clinical trials, particularly in psychopharmacological research. Notably, the impact of antidepressant treatment on depressive symptoms in schizophrenia, although relatively small, did not affect treatment discontinuation rates.<sup>31</sup> In other words, in contrast to what one may expect based on the insight paradox, improvement in depressive symptoms after antidepressant treatment does not seem to be associated with poorer insight in psychotic disorders, yet this remains a hypothesis worthy of direct testing.

## Conclusion

The insight paradox predicts that insight and depression (and hence suicidality) are locked together like conjoined twins, but it is possible that insight and depression, while appearing to be correlated, are potentially dissociable. In particular, if – as appears to be the case thus far – any insight-improving interventions, while they may or may not be effective in their primary aim, do not have a negative impact on outcomes (including mood) over time, this would undermine the generalisability of the insight paradox assertion. Although pending future confirmation, the same seems true for depression-alleviating treatments – that is, they do not appear

to worsen insight. So one may eventually reach the conclusion that ‘too much insight is not (necessarily) bad for you’.

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## Data availability

The data availability statement is not applicable to this article since no new data was created or analysed for the preparation and writing of this feature.

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## Author contributions

Both authors contributed equally to the paper.

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## Declaration of interest

None.

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