Schizophrenia polygenic risk score and psychotic risk detection – authors' reply

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We thank Michele Poletti and colleagues for their interest in our recent population study in which we investigated association between schizophrenia risk alleles and neurodevelopmental outcomes in childhood.[1] We agree that child and adolescent mental health services (CAMHS) are a good place to detect individuals at elevated risk for schizophrenia. We also agree that a developmentally-informed framework for risk assessment is important. Given that disorders such as schizophrenia can manifest as neurodevelopmental impairments earlier in life[2, 3] (which may index genetic liability[1]), conceptualizing early risk as only the presentation of psychotic-like features in adolescence and adult life is likely to be limiting. However, the majority of impairments found to precede schizophrenia are non-specific; cognitive, social, behavioural and emotional impairments have also been found to precede other psychiatric disorders, such as depression.[2, 3] Thus distinguishing individuals who are specifically at risk for psychosis is complex and there will be challenges in stratifying risk appropriately. Nevertheless, for children already at elevated risk of developing schizophrenia (e.g. who have a parent with the disorder), increased attention to early neurodevelopmental impairments may aid identification of those at ultra-high risk. Findings from our study and the work of others[4] suggest that before the typical age of illness onset, schizophrenia (genetic) liability may manifest as symptoms that do not resemble psychosis. Identifying those at risk in CAMHS is only of benefit if services are able to provide interventions that reduce risk but that is another challenge. Moreover accessing CAMHS services remains a major limitation in many countries. As we highlight in our paper[1] intervention studies that target early impairments would be useful to differentiate between impairments that are causally associated with later schizophrenia and those that reflect pleiotropy. However much more work is needed to identify interventions that are effective in reducing risk of future psychosis. Nevertheless, we agree with Poletti and colleagues - a first step towards this is to adopt a developmental conceptualization of schizophrenia.

We declare no competing interests.

References

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