

## VIEWPOINT

# Going Upstream to Advance Psychosis Prevention and Improve Public Health

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**The idea that we can reduce** the incidence of psychotic disorders through detection and intervention in the prodromal stage of illness has generated increasing enthusiasm and research over the past 2 decades. This work has sought largely to identify individual-level changes in subjective experience, functioning, or brain volume or activity that immediately precede acute symptom onset. However, mental illnesses, including psychotic disorders, are particularly sensitive to the social, political, cultural, and economic context within which an individual lives.<sup>1</sup> Prioritizing approaches to psychosis prevention that fail to give these social determinants a central role ignores compelling evidence and misses an opportunity to identify specific ways to help vulnerable youth.

Consider the example of racism's pervasive detrimental association with the physical and mental well-being of disadvantaged people of color.<sup>2</sup> Institutional racism creates differences in the average group member's social, economic, and environmental circumstances, including living conditions in neighborhoods, work, and school. These social inequities distribute risk factors for mental disorders, such as exposure to violence, trauma, and chronic adversity and disadvantage, unevenly in the population in such a way that often disproportionately burdens group members with minority status (eg, people of color, poor people, and immigrants). In addition, the social experience of this oppression (ie, interpersonal discrimination) can further heighten the risk for mental illness because of the greater cumulative stress load associated with such lived experiences.

A growing body of US-based research has been providing data to inform our understanding of how social environmental inequities may enhance psychosis risk. For example, the association between social factors, such as racial discrimination<sup>3</sup> and adverse childhood experiences,<sup>4</sup> and the extended psychosis phenotype has been demonstrated in large national probability samples, developmental cohorts, smaller community-based samples, and even clinical high-risk studies. Despite this, the field's focus on the role these underlying conditions play in shaping the incidence, duration, and treatment responsiveness of psychosis remains limited and falls short of the importance that these factors play in the etiology and course of psychosis. There are many reasons why there is a paucity of research on social risk factors for psychosis. Federal funding priorities have been a factor, as have concerns among researchers about the nonspecificity of social risk factors and the daunting prospect of large-scale societal change as an intervention. However, we suggest that from a public health perspective, some of these concerns represent opportunities.

Consider nonspecificity using the following example. High levels of air pollution have been found to be associated with depression, anxiety, and psychosis.<sup>5</sup> This could indicate a common causal pathway among these 3 distinct syndromes through which pollution increases a disease process broadly (eg, inflammation), resulting in different possible outcomes. Air pollution could also contribute to the risk for depression in a way that is different from how it contributes to the risk for psychosis. We suggest that the significance of air pollution as a potential social determinant of mental illness remains regardless of whether it helps differentiate the risk of one disease from another. Moreover, it is not clear that a preferential focus on more microlevel foci (eg, genetic mutations) reveals evidence of such specificity of predictors.<sup>6</sup> It stands to reason that the benefits of reducing air pollution would be widespread, providing more general social benefits that align with evolving views of the pluripotent nature of the risk for mental illness. The risk itself, including social risk, may be fairly nonspecific.

The notion that large-scale societal change as an intervention is too big or outside psychiatrists' purview does not concord with the history of psychiatry, whose development has mirrored society's evolving understanding of illness in general. For example, the advent of psychopharmacological interventions in the 1950s shifted the field from a more psychoanalytic understanding of psychopathology toward a strong biological perspective. Such discoveries shaped and changed the way psychiatrists were trained and practiced as clinicians, how research was conducted, and how psychiatrists understood mental illness. Similarly, social change during the 1960s and 1980s contributed to the deinstitutionalization of psychiatric hospitals, increasing the degree to which psychiatry was practiced as part of a larger service team in community-based mental health centers. Psychiatry can continue to evolve and be shaped by a richer appreciation and study of social determinants.

## Conclusions and Recommendations

We propose a recalibration of priorities in which we focus on systemic, structural social risk factors with the same energy and investment that we apply to the search for individual-level signs, symptoms, and mechanisms, including physiological mechanisms. Thankfully, the association between social risk factors and physiological mechanisms does not have to be a zero-sum game. We have every reason to believe that moving upstream may demonstrate that these social risk factors operate with and via biological mechanisms to increase psychosis risk.<sup>7</sup> Identifying the potential causal role of social mechanisms more explicitly will

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also require continued advancement in our epidemiologic methods of causal inference. Increasing our attention toward these social risk factors may help us take the next big step in predicting and preventing psychosis, and in doing so, positively affect the incidence and expression of other mental illnesses. Perhaps most important, understanding how forces like racism, poverty, and social marginalization affect mental illness is a step on the way to becoming a society in which the health of vulnerable youth is considered as important as their health care.

How do we get there? We recommend the following research, education, policy, and clinical actions. For us to understand how social risk factors contribute to outcomes such as psychosis, we need funding priorities from grant-making agencies to include the examination of social, cultural, economic, and political associations with risk for serious mental illness without requiring a priori links to identified neural circuits. Large-scale, longitudinal studies of risk for serious mental illness should systematically oversample populations with high levels of social disadvantage so hypotheses regarding the association of social risk factors can be tested. We are encouraged by recent funding efforts from the National Institute on Minority Health and Health Disparities to study the social epigenomics that drive health dis-

parities. We believe psychosis risk should be included in such funding efforts.

Public mental health data quality and availability need to be improved. For example, we have had difficulty obtaining reliable stable estimates of clinical psychosis incidence at a population level across different socially constructed demographic groups (eg, racial groups with minority status) in national probability samples. Regarding the education of psychiatrists, training for clinicians should strive for structural competency, which includes cultural competency as well as facility in addressing other social, economic, and political factors that affect the lives of patients.<sup>8</sup> On a policy level, a shift toward value-based care (and away from fee-for-service) would be a step in the right direction. Enacting such a change requires routinely assessing social risk factors as part of treatment planning and robust partnership with social service agencies that are incentivized to address these social disadvantages. Ideally, all policy decisions across all levels of government should consider the question, "Would this policy make our constituents healthier or sicker?" Finally, from a clinical perspective, assessing and addressing social disadvantages should be the shared responsibility of professionals across systems of care and seen as a fundamental aspect of taking a whole-person or patient-centered approach to health care.

#### ARTICLE INFORMATION

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