## **INVITED EDITORIAL**

## Is mental illness migratory?

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## Felicity Ng

Department of Clinical and Biomedical Sciences, Barwon Health, University of Melbourne, Geelong, Victoria, Australia

Correspondence: Felicity Ng, Department of Clinical and Biomedical Sciences, Barwon Health, PO Box 281, University of Melbourne, Geelong, Victoria 3220, Australia.

Tel: +61 3 5260 3154; Fax: +61 3 5246 5165;

E-mail: felicitn@barwonhealth.org.au

Migration is an enduring phenomenon in the history of man, and it underlies the process of human evolution. It may arise from our species' territoriality and reward-seeking drive, which propels humans to strive for a better environment and to satisfy an intrinsic thirst for novel experiences and knowledge. From palaeontological to modern times, the patterns of and reasons for migration have altered in reflection of the evolving sophistication and demographics of the world. Regardless of the circumstances, whether this be enforced or voluntary, personal or political, opportunistic or survivalistic, solitary or collective, migration invariably engenders a multitude of stresses.

In psychiatry, such stresses associated with migration are often thought to contribute aetiologically to mental illness. This appears to be borne out anecdotally in clinical experience. The link between migration and mental illness is particularly relevant in a multicultural society such as Australia, on both clinical and service planning levels. However, there is a relative dearth of research on this subject. In particular, it is unclear which migrant characteristics are correlated with mental illness that arises in this population that is presumed to be vulnerable.

This paper aims to review the evidence of mental illness in migrants. Although refugees form a special subgroup, there is a body of research devoted to their psychiatric morbidities with a predominantly post-traumatic spectrum focus. In spite of their importance in clinical psychiatry, this paper will not focus on refugees but on migrants in general.

Despite widespread conjecture of migration as a risk factor for mental illness, few mental health epidemiological studies have primarily focussed on ethnic groups, and where they have been included, ethnicity is often limited to being a demographic confounding factor (1).

A number of studies have explored mental health in immigrant children and adolescents and yield varying findings although most identify some psychological difficulties among immigrant groups. An American report on the health of immigrant children concluded that first-generation immigrants had better mental health and less risk behaviours than their Anglo-American counterparts, although this apparent advantage disappeared over generations such that by the end of three generations, the reverse pattern held true (2). This has been called 'the immigrant health paradox'. However, this has not been replicated by a large-scale epidemiological study of Norwegian adolescents, which identified first-generation girls and second-generation boys to be particularly vulnerable to psychiatric problems (1). A Dutch study of a younger population of immigrant children found comparable levels of mental health problems between immigrant and native Dutch groups, but of interest, showed a differential perception of specific problem areas in these children by their parents and teachers (3). In a school-based study of refugee and immigrant children in the UK, greater psychological distress was found in comparison to native-born children, especially in areas of emotional difficulties and peer problems (4). Although the experiences of refugee and nonrefugee immigrant children are arguably difficult to compare, these studies support that young immigrants are a psychologically vulnerable group. The manifestation of their psychological

difficulties, however, may be sensitive to their stage of development, gender, functional setting and the level of vigilance of their carers.

In adult migrants, the prevalence of common non-psychotic mental disorders is unclear. Existing studies yield contradictory results, but these findings should be considered in the context of culture-bound manifestations of affective and neurotic disorders, especially somatization as a metaphor, and the influence of acculturation (5).

The most robust research finding in migrant mental health has been the correlation between migration and schizophrenia or psychosis.

Odegaard's (6) 1932 study reported higher hospital admission rates for schizophrenia among Norwegian immigrants in the USA compared with Native Americans and native Norwegians. This became a benchmark study for the association between migration and schizophrenia. Other studies have since affirmed this link (7). In addition, a delayed onset of about a decade among first-generation immigrants (6) and an increase in relative risk in second-generation compared with first-generation immigrants (8) have been reported.

A number of hypotheses to explain the increased risk of schizophrenia in migrants have been dismissed, including higher levels of morbidity in the countries of origin, a 'self-selection' process akin to the social drift phenomenon in schizophrenia, acute migratory stress and misdiagnosis (7). Current reviews in the field have tended to favour a primarily social rather than ethnogenetic explanation, based on the stress-diathesis model of illness. One sequelae of migration may be the creation of a chronically stressful environment with social, political and economic disadvantages, which may play a role in the precipitation of psychosis in those already vulnerable. Ethnic density, transition from a sociocentric to egocentric society, cultural congruity, unemployment and family dysfunction have been discussed as mediating social factors (7). Individual factors, such as identity confusion and discrepancy between ambition and achievement, may further compound the level of stress for migrants (9).

In their hypothesis to unify the biological and psychosocial aetiological theories of schizophrenia, Selten and Cantor-Graae proposed that social defeat, defined as 'a subordinate position or outsider status', could be an intervening mechanism. Using illustrations from animal models, they argued that chronic social defeat might result in sensitization and/or over-activity of the mesolimbic dopamine system, which could in turn effectuate the schizophreniform phenotype (10).

The current state of knowledge on migrant mental health remains incomplete with a paucity of consistent epidemiological data on the highprevalence disorders, although the increased risk of schizophrenia and psychosis is well established. The deficiencies in research may reflect the heterogeneity of migrants and cultural variation in the manifestation of affective and neurotic disorders. Nevertheless, a rich field of research remains unharvested, and further exploration of the association between migration and schizophrenia may advance our aetiological understanding of psychosis. Clinically, the available data suggest that migration poses a risk for a multitude of potential psychosocial issues that need to be borne in mind when assessing and treating patients.

## References

- 1. OPPEDAL B, RØYSAMB E, HEYERDAHL S. Ethnic group, acculturation, and psychiatric problems in young immigrants. J Child Psychol Psychiatry 2005;46:646–660.
- HERNANDEZ DJ, CHARNEY E. The health and well-being of children in immigrant families. Washington, DC: National Academy Press; 1998.
- VOLLEBERGH WA, TEN HAVE M, DEKOVIC M et al. Mental health in immigrant children in the Netherlands. Soc Psychiatry Psychiatr Epidemiol 2005;40:489–496.
- 4. LEAVEY G, HOLLINS K, KING M, BARNES J, PAPADOPOULOS C, GRAYSON K. Psychological disorder amongst refugee and migrant schoolchildren in London. Soc Psychiatry Psychiatr Epidemiol 2004;39:191–195.
- 5. Bhugra D. Migration and depression. Acta Psychiatr Scand 2003;108(Suppl. 418):67–72.
- ÖDEGAARD O. Emigration and insanity. Acta Psychiatr Neurol Scand Suppl 1932;4:1–206.
- Bhugra D, Arya P. Ethnic density, cultural congruity and mental illness in migrants. Intl Rev Psychiatry 2005;17:133–137.
- Cantor-Graae E, Selten J-P. Schizophrenia and migration: a meta-analysis and review. Am J Psychiatry 2005;162:12–24.
- Bhugra D. Migration and mental health. Acta Psychiatrica Scandinavica 2004;109:243–258.
- 10. Selten J-P, Cantor-Graae. Social defeat: risk factor for schizophrenia? Br J Psychiatry 2005;187:101–102.