Psychosis High Risk Research – Local Scene

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Rationale for Early Intervention for People with High Risk of Developing Psychosis

Psychotic disorders (including schizophrenia and its related disorders) involve complex neurobehavioural dysfunction, influenced by genetic and environmental factors affecting up to 3% of the population\(^7\). They constitute one of the highest disease burden globally and locally. Schizophrenia and its related psychotic disorders ranked globally amongst the top ten leading causes of disability-adjusted life years (DALYS)(WHO 2001). The conditions inflict devastating consequences for youths and adults at the most productive years in their lives. It is estimated that each year 1000- 2000 individuals in Hong Kong develop a psychotic disorder for the first time in their lives. Despite progress in the development of medications with fewer side effects, the treatment often cannot alleviate the disability associated with this chronic form of illness. Deficit symptoms and cognitive impairment, which appear to be the greatest determinants of disability, remain largely beyond the reach of current forms of treatment. The treatment outcome is often poor and associated with extensive cost, burden, morbidity and mortality. Identification and treatment of psychotic disorders is a priority for most public health services worldwide.

Emerging evidence suggests that much of the disability associated with psychotic illnesses, particularly schizophrenia, develops long before the onset of frank psychosis. This pre-onset or prodromal period is characterised by non-specific symptoms such as depressed mood and anxiety as well as sub-threshold symptoms\(^5,23\). Cortical changes during this period are associated with cognitive, social and motivational dysfunctions\(^8\), and are difficult to reverse even if the first psychotic episode is successfully treated\(^9,10\). The prodromal period is therefore potentially important for early intervention and the possible prevention of the development of the psychotic disorders.

However, a major challenge has been to prospectively identifying the prodromal phase, particularly given the non-specific nature of prodromal symptoms\(^5,25\). Subjective cognitive impairment disturbances known as “basic symptoms” have been described by the German Early Detection Team and found to be good predictors for onset of psychosis\(^4,16\). McGorry et al. introduced the term “At Risk Mental State”, implying that the sub-threshold syndrome can be regarded as a risk factor for the subsequent development of psychosis, but that the onset of psychosis is not inevitable\(^21,22\). The operationalised “at risk mental state” described 3 subgroups: (1) genetic risk in combination of functioning decline, (2) attenuated positive psychotic symptoms, and (3) transient psychotic episode. Several studies conducted internationally in recent years using the criteria yielded an average 1 year conversion rate of 36.7% in high risk subjects who did not receive antipsychotic treatment\(^15\).

Several clinical trials have been conducted to evaluate the efficacy of interventions in reducing the transition rate to psychosis over the recent few years. The interventions used included the combined cognitive behaviour therapy and antipsychotic medication\(^11\), antipsychotic medication alone\(^9\), cognitive behaviour therapy alone\(^14\) and essential fatty acids\(^1\). These studies demonstrated that psychiatric symptoms and psychosis onset can be delayed by specific intervention. Several clinical trials on the high risk samples have been initiated recently. The intervention agents use of these ongoing studies include antidepressants, mood stabilisers, methyglycine Ethyl-EPA, case management, cognitive training and cognitive behavioural therapy\(^3\).

Increasing evidence has demonstrated high rates of psychotic like experiences exist in community cohorts\(^18\) and reduction in the transition rate to psychosis internationally\(^22\). These findings and consequently higher false positive rates mean that safer and more benign interventions must be offered as the first line treatment to these high risk people.

Local Scene-Clinical Aspects

Early Assessment Service for Young People with Psychosis (EASY) was established in Hong Kong in 2001. It is a population wide early intervention service with an annual average of 600 new cases targeted at age 15-25\(^2\). The referrals are open and direct, derived from educational settings, youth services, adolescent medical centres, primary care, general health services, mental health professionals and hotlines. Among the EASY referrals, those with first episode psychosis will receive phase specific intensive comprehensive treatment; those who are not frankly psychotic, but are judged to be “high risk” by the assessing psychiatrist will receive non-specific need based treatment while being monitored regularly. Up until this stage, the EASY does not have an operationised inclusion criteria for the “high risk” cases. The defined “high risk” cases are based on clinical assessment by the individual psychiatrist in the EASY team.
Local Scene-Research Aspects

A naturalistic prospective study was conducted in 2002 in one of the EASY centre (EASY-KCH Clinic) with the aim to assess the rate of transition to psychosis in a high risk group. Between 1st June 2002 and 30th April 2003, there were a total of 256 referrals made to the EASY-KCH Clinic, among which 153 were psychotic and they were treated accordingly. With the remaining 103 subjects, 67 met the operationalised CAARMS “At risk Mental State” criteria, and 62 of them consented to participate in the project. Over a 6 month follow up period, 18 subjects (29%) met the criteria for a psychotic disorder. In addition, significant differences were found in the intake symptomatology and functioning scores between the group that ultimately became psychotic and the group that did not. At two-year follow up, 45% of the group made transition to psychosis.

The study results indicate that it is possible to identify a sub-sample of the Hong Kong population with a high rate of transition to psychosis (29%) within 6 months and 45% of the identified high-risk subjects developed psychosis within two years. The identified high risk subjects had moderate levels of functional decline and psychopathology at the study intake. A lengthy delay was found between the onset of symptoms and the study intake from 11 days to 6.6 years.

Challenges and Ethical Issues on Pre-psychotic Intervention

With the worldwide vast growing enthusiasm in pre-psychotic identification and intervention over the past decade, people working in the field need to be aware of the obstacles and ethical issues surrounding this area. Many of these arise from the genuine problems associated with defining the onset in psychiatric disorders. The lack of a clear boundary between normality and psychotic disorders is especially relevant during onset as syndromes emerge and progress from origins which are indistinguishable from normal experiences.

Misunderstanding the implications of a positive diagnostic test may lead to negative outcomes including inappropriate stigmatisation, discrimination in employment, and difficulties in obtaining life insurance. Communicating one’s risk status to others can deprive social and occupational opportunities in several ways including overt discrimination; self stigma presents another potential hazard to the subjects’ psychological and social development. Self stigma was seen related to low self esteem, diminished self-efficacy and abandonment of developmental challenges and occupational goals. In addition, growing concerns regarding long term and short term consequences of exposing a developing brain to drugs need to be considered. The problems raised by false negatives are less frequently mentioned. However, being wrongly reassured may also be a harmful consequences of early detection.

References