Duration of untreated psychosis significantly associated with positive symptoms one year after treatment

Does the duration of untreated psychosis influence outcomes one year after initial treatment?

METHODS

- **Design:** Prospective cohort study.
- **Setting:** Early Psychosis Program, Calgary, Canada; timeframe not stated.
- **Population:** 200 people (mean age 23 years), out of the 278 people admitted to the Calgary Early Psychosis Program, who completed the one year follow up assessment. Eligible participants had experienced their first episode of psychosis (DSM-IV criteria using Structured Clinical Interview), had significant positive symptoms (rated >4 on Positive and Negative Syndrome Scale), and had received less than three months prior treatment.
- **Prognostic factors:** The duration of untreated psychosis was correlated with symptoms and social functioning on entering the programme and after one year. Whether or not the length of untreated psychosis independently predicted symptom outcome and quality of life was tested using linear regression.
- **Outcomes:** Duration of untreated psychosis (determined at the initial interview by assessing the length of time from the first significant positive symptom until the first effective treatment). Symptoms assessed using the Positive and Negative Syndrome Scale for Schizophrenia; social outcome assessed with the Quality of Life Scale.
- **Follow up period:** 12 months.

MAIN RESULTS

Mean duration of untreated psychosis was 84 weeks (median 28 weeks, range 1–780 weeks). One year after initial treatment, longer periods of untreated psychosis were significantly associated with higher levels of positive symptoms (p<0.001), but not negative symptoms. Longer periods of untreated psychosis were also associated with a lower quality of life (p<0.01). As a predictor of outcome after one year, the duration of untreated psychosis had a small effect on variance in quality of life (4%, p<0.001) and a moderate effect on positive symptoms (11%, p<0.001).

CONCLUSIONS

The duration of untreated psychosis is significantly associated with positive symptoms at one year, with a long duration associated with a lower quality of life. The duration of untreated psychosis should be reduced through timing and quality of treatment.

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NOTES

Only data from the one year assessment have been reported, as 41% of participants did not complete the two year assessments.

Commentary

This study by Addington et al provides another substantial advance in the burgeoning literature on the importance of the duration of untreated psychosis (DUP) in relation to outcomes in the early course of schizophrenia. For over a decade, the DUP has been studied as a potential predictor of a variety of outcomes. Although several studies have found the DUP to be predictive of initial response to treatment, negative results have been reported also in areas such as neurocognitive functioning. This study makes a significant contribution by demonstrating, using a methodologically rigorous longitudinal design, that the DUP independently contributes to the variance in positive symptoms and quality of life during the early course of schizophrenia. These findings are consistent with other recent research. For example, Keshavan et al found that outcome is significantly predicted by illness duration (from the onset of the prodrome), even when controlling for premorbid adjustment. The clinical and policy implications of this growing body of research are considerable.

Continued research in this area should further elucidate the independent impact of DUP on various outcomes. Because the DUP may be a modifiable predictor of outcomes, determinants of the wide variation in DUP must be identified in diverse patient populations. Research can then begin to test interventions to reduce the DUP, targeting these determinants. Recent work in Rogaland County, Norway, shows that an intensive early detection programme (including educational campaigns for the general population and targeted education for potential referral sources) is effective in reducing the median DUP. Additionally, advances in research on the prodromal period of illness promise to provide insights into early detection and intervention even before the onset of psychotic symptoms. The emerging paradigm of early detection and early intervention provides a secondary prevention perspective to the early course of schizophrenia, a paradigm of increasing interest to both researchers and clinicians. Now, more than ever, clinicians have evidence that early initiation of treatment improves outcomes, confirming the importance of engaging patients and their families in integrated psychosocial and pharmacological treatment as early as possible.

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