Recovery from schizophrenia – a meta-analysis

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KEY MESSAGES

- Outcome studies of schizophrenia do not usually report the percentages of recovery
- In the literature recovery from schizophrenia is not very common (median 15.6%)
- Recovery percentage is lower in studies using DSM diagnostic criteria and in non-western samples

BACKGROUND

- In their meta-analysis Hegarty et al. (1994) presented that good outcome occurs for 40% of schizophrenia subjects. • When using broad definition of recovery, its rates vary from 0 to 50%. • The comparison of results of outcomes and especially recovery in schizophrenia is difficult because of varying diagnostic systems, differences in samples, and lack of adequate definition of outcomes. • Earlier in Northern Finland 1966 Birth Cohort we found that recovery from schizophrenia, at least at relatively young age, is rare (1.7% fully and 3.4% partially recovered, Lauronen et al. 2005).
- Our aim was to collate studies related to this topic and to synthesize these data with meta-analytic techniques.

METHODS

- By using electronic databases (PsycINFO, Pubmed, Ovid, Web of Science, Elsevier Science Direct, EBSCOhost, CINAHL - Nursing & Allied Health) and manual literature search the studies reporting rate of recovery in schizophrenia were searched.
- As a title search we used keywords “schizo” or psychotic or psychos*s” and “recovery or remission or outcome or course or prognosis or longitudinal or follow-up”. The second search in abstracts included keywords “schizophrenia” and “recovery or remission”. All abstracts and articles were critically analysed by two authors (EL and JMi).
- The articles included to analyses should meet the following criteria:
  - sample included individuals with schizophrenia, schizophreniform, schizoaffective or delusional disorder
  - follow-up and data about some outcome measure at least for 2 years
  - subjects not selected a priori for good or poor outcome
  - number of cases at least 15
  - criteria including both clinical and social dimensions
  - English language article
  - Not drug or other trial

Statistical methods:

- Recovery rates are presented by using forest plot. The rates are pooled using random effects. Meta regression is used to estimate effect of year of publication, diagnostic system, and length of the follow-up.

The analyses were done with STATA 9 programme.

RESULTS

- The search from databases identified 6950 unique articles. So far all the studies published 1995-2004 and a random sample (~50%) of other articles have been evaluated. From these 27 articles have met all our criteria, and we have also received unpublished data from 13 WHO cohort centres (Hopper et al. 2007). For the recovery percentages in the 40 studies see the Figure.
- Based on these studies, between 0% to 52% of the subjects ‘recovered’ (mean 17.8% and median 15.6%). In the nineteen older studies (published 1943-1994) on average 18.6% of the subjects recovered, while in the 21 more recent studies (published 1995-2007), 17.1% of the subjects recovered.
- Recovery percentages were 11.0% in studies using DSM diagnostic system (7 studies), 19.6% in ICD (17 studies), and 19.0% in other studies (16, mainly older studies). In the 24 studies with at least 10 year follow-up the recovery percentage was in average 19.2% and in studies with shorter follow-up it was 16.0%. Recovery percentages were larger (p=0.006) in studies from Asia, Africa and South America (25.7%) than in studies from Europe and North America (15.2%).

DISCUSSION

- Recovery from schizophrenia does occur, but the recovery from schizophrenia seems to be relatively uncommon. The proportion of patients meeting recovery criteria appears lower in studies from non-western countries and in studies using DSM diagnostic criteria.
- Despite many studies on recovery, this systematic review has identified a relative paucity of primary data. Various conceptual and methodological pitfalls cause challenges when studying the course and recovery in schizophrenia. Thus, more accurate reporting of multidimensional recovery is needed.

References: See the other side, please.

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