Review

Systematic reviews of the effectiveness of day care for people with severe mental disorders: (1) Acute day hospital versus admission; (2) Vocational rehabilitation; (3) Day hospital versus outpatient care

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Day care for people with psychiatric disorders

Executive summary

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Acute day hospital versus admission for acute psychiatric disorders

Background

Inpatient treatment is an expensive way of caring for people with acute psychiatric disorders. It has been proposed that many of those currently treated as inpatients could be cared for in acute psychiatric day hospitals.

Objective

The aim of this review was to assess the effectiveness and feasibility of day hospital versus inpatient care for people with acute psychiatric disorders.

Methods

Study selection

Eligible studies were randomised controlled trials of day hospital versus inpatient care for people with acute psychiatric disorders. Studies were excluded if they were primarily concerned with elderly people, children, or patients with a diagnosis of organic brain disease or substance abuse.

Data sources

We searched the Cochrane Controlled Trials Register, MEDLINE, EMBASE, CINAHL, PsycLIT, and the reference lists of articles. Researchers were approached to identify unpublished studies. Trialists were asked to provide individual patient data.

Data extraction

Data were extracted independently by two reviewers and cross-checked.

Data synthesis

Relative risk (RR) and 95% confidence intervals (CIs) were calculated for dichotomous data. Weighted or standardised means were calculated for continuous data. Day hospital trials tend to present similar outcomes in slightly different formats, making it difficult to synthesise the data. Individual patient data were therefore sought so that outcomes could be re-analysed using a common format.

Results

Nine trials met the inclusion criteria (involving 1568 randomised patients and 2268 assessed for suitability of day hospital treatment). Individual patient data were obtained for four trials (involving 594 people). A sensitivity analysis of combined data suggested that day hospital treatment was feasible for at worst 23.2% (n = 2268; 95% CI, 21.2 to 25.2) and at best 37.5% (n = 1768; 95% CI, 35.2 to 39.8) of those currently admitted to inpatient care. Individual patient data from three trials showed no difference in the number of days in hospital (combining day hospital days and inpatient days) between day hospital patients and controls (n = 465; weighted mean difference (WMD) = –0.38 days/month; 95% CI, –1.32 to 0.55). However, compared with controls, patients randomised to day hospital care spent significantly more days in day hospital care (n = 265; WMD = 2.34 days/month; 95% CI, 1.97 to 2.70) and significantly fewer days in inpatient care (n = 265; WMD = –2.75 days/month; 95% CI, –3.63 to –1.87). There was no difference between readmission rates for day hospital and control patients (n = 667; RR = 0.91; 95% CI, 0.72 to 1.15). Individual patient data from three trials showed a significant time–treatment interaction, indicating a more rapid improvement in mental state (n = 407; χ^2 = 9.66; p = 0.002), but not social functioning (n = 295; χ^2 = 0.006; p = 0.941) amongst day hospital patients. Four of five trials demonstrated that day hospital care was cheaper than inpatient care (with overall cost reductions ranging from 20.9% to 36.9%).

Conclusions

Acute day hospitals are an attractive option in situations where demand for inpatient care is high and facilities exist that are suitable for conversion. They are a less attractive option when demand for inpatient care is low and where effective alternatives already exist. The interpretation of day hospital research would be enhanced if future trials made use of the common set of outcome measures used in this review. It is important to examine how acute day hospital care can be most effectively integrated into a modern community-based psychiatric service.

Vocational rehabilitation for people with severe mental disorders

Background

People who are disabled by severe mental disorders experience high rates of unemployment, but most want to work. Prevocational training (PVT) is the traditional approach to helping such people to return to work. PVT assumes that a period of preparation is required before those with a severe mental disorder can enter into competitive employment. Supported Employment (SEm) is a new approach that places clients in competitive employment without extended preparation. Both PVT and SEm are widely practised, but it is unclear which is the most effective.

Objectives

The overall objective of this review was to assess the effectiveness of PVT and SEm relative to each other and to standard care (in hospital or the community) for people with severe mental disorders. In addition, the review examined the effectiveness of: (1) special types of PVT ("clubhouse" model) and SEm (individual placement and support model); and (2) modifications for enhancing PVT (e.g. payment or psychological interventions).

Methods

Study selection

Eligible studies were randomised controlled trials (RCTs) examining the effectiveness of vocational rehabilitation approaches (PVT and SEm or modifications) for people of working age and suffering from a severe mental disorder.

Data sources

Relevant trials were identified from searches of the Cochrane Schizophrenia Group's specialised register, MEDLINE, EMBASE, CINAHL and PsycLIT, and the reference lists of all identified studies and review articles. Researchers who were active in the field were approached in order to identify unpublished studies.

Data extraction

All data were extracted independently by two reviewers and cross-checked. Continuous data were excluded if they were collected by using an unpublished scale or were based on a subset of items from a scale.

Data synthesis

For all comparisons, the primary outcome was the number of clients who were in competitive employment at various time points. Secondary outcomes were: other employment outcomes, clinical outcome and costs. The relative risk (RR) and number-needed-to-treat (NNT) were calculated for the relevant categorical outcomes. Continuous data were either presented as in the original trial reports or, where possible, combined across trials as a standardised mean difference score.

Results

Eighteen RCTs of reasonable quality were identified: PVT versus hospital controls, three RCTs, $n = 172$; PVT versus community controls, five RCTs, $n = 1204$; modified PVT, four RCTs, $n = 423$; SEm versus community controls, one RCT, $n = 256$; and SEm versus PVT, five RCTs, $n = 491$). The main finding was that, on the primary outcome (number in competitive employment), SEm was significantly more effective than PVT at all time points (e.g. at 12 months, SEm 34% employed, PVT 12% employed; RR of not being in competitive employment = 0.76, 95% confidence interval 0.69 to 0.84, NNT = 4.5). Clients in SEm also earned more and worked more hours per month than those in PVT.

Conclusions

The main finding was that SEm was more effective than PVT for patients suffering from a severe mental disorder who wanted to work. There was no evidence that PVT was more effective than standard community care or hospital care. The implication of these findings is that people suffering from mental disorders who want to work should be offered the option of SEm. Commissioning agencies would be justified in encouraging vocational rehabilitation (VR) providers to develop more SEm schemes. From a research perspective, the cost-effectiveness of SEm should be examined in larger multicentre trials, both within and outside the USA. There is a case for countries outside the USA to survey their existing VR services to determine the extent to which the most effective interventions are being offered.

Day hospital versus outpatient care for patients with psychiatric disorders

Background

This review considers the use of day hospitals as an alternative to outpatient care. Two types of day hospital provision are covered: "day treatment programmes" and "day care centres". Day treatment programmes are day hospitals that are used to enhance the treatment of patients with anxiety or depressive disorders who have failed to respond to outpatient care. Day care centres are day hospitals that offer structured support to patients with long-term severe mental disorders who would otherwise be treated in an outpatient clinic.

Objectives

There were two objectives: first, to assess the effectiveness of day treatment programmes versus outpatient care for people with non-psychotic disorders; and, secondly, to assess the effectiveness of day care centres versus outpatient care for people with severe long-term disorders.

Methods

Study selection

Eligible studies were randomised controlled trials comparing day hospital care (either a day treatment programme or a day care centre) with outpatient care. Studies were ineligible if they were largely restricted to patients who were aged under 18 or over 65 years or who had a primary diagnosis of substance abuse or organic brain disorder.

Data sources

Relevant trials were identified from searches of the Cochrane Controlled Trials Register, MEDLINE, EMBASE, CINAHL, PsycLIT, and the reference lists of all identified studies and review articles. Researchers were approached to identify unpublished studies. Trialists were asked to provide individual patient data.

Data extraction

All data were extracted independently by two reviewers and cross-checked.

Data synthesis

Relative risks and 95% confidence intervals were calculated for dichotomous data. Standardised mean differences were calculated for continuous data.

Results

There was evidence from two of the five trials identified suggesting that day treatment programmes were superior to continuing outpatient care in terms of improving psychiatric symptoms. There was no evidence to suggest that day treatment programmes were better or worse than outpatient care on any other clinical or social outcome variable or on costs. There was no evidence that day care centres were better or worse than outpatient care on any clinical or social outcome variable. There were some inconclusive data on costs suggesting that day care centres could be more expensive than outpatient care.

Conclusions

There was some limited evidence to support the use of day treatment programmes for patients with anxiety or depression who have not responded to standard outpatient treatment. Future research should address the feasibility of day treatment programmes and how far they are cost-effective against other alternatives, such as outpatient cognitive behavioural therapy. There was no evidence to support the use of day hospitals as day care centres.

Publication

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NHS R&D HTA Programme

The NHS R&D Health Technology Assessment (HTA) Programme was set up in 1993 to ensure that high-quality research information on the costs, effectiveness and broader impact of health technologies is produced in the most efficient way for those who use, manage and provide care in the NHS.

Initially, six HTA panels (pharmaceuticals, acute sector, primary and community care, diagnostics and imaging, population screening, methodology) helped to set the research priorities for the HTA Programme. However, during the past few years there have been a number of changes in and around NHS R&D, such as the establishment of the National Institute for Clinical Excellence (NICE) and the creation of three new research programmes: Service Delivery and Organisation (SDO); New and Emerging Applications of Technology (NEAT); and the Methodology Programme.

This has meant that the HTA panels can now focus more explicitly on health technologies ('health technologies' are broadly defined to include all interventions used to promote health, prevent and treat disease, and improve rehabilitation and long-term care) rather than settings of care. Therefore the panel structure has been redefined and replaced by three new panels: Pharmaceuticals; Therapeutic Procedures (including devices and operations); and Diagnostic Technologies and Screening.

The HTA Programme will continue to commission both primary and secondary research. The HTA Commissioning Board, supported by the National Coordinating Centre for Health Technology Assessment (NCCHTA), will consider and advise the Programme Director on the best research projects to pursue in order to address the research priorities identified by the three HTA panels.

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The views expressed in this publication are those of the authors and not necessarily those of the HTA Programme or the Department of Health. The editors wish to emphasise that funding and publication of this research by the NHS should not be taken as implicit support for any recommendations made by the authors.

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Reviews in *Health Technology Assessment* are termed 'systematic' when the account of the search, appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

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