Pharmacoeconomic evaluation of antipsychotic therapy for schizophrenia
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Record Status
This is a critical abstract of an economic evaluation that meets the criteria for inclusion on NHS EED. Each abstract contains a brief summary of the methods, the results and conclusions followed by a detailed critical assessment on the reliability of the study and the conclusions drawn.

Health technology
Antipsychotic therapy.

Type of intervention
Treatment.

Economic study type
Cost-effectiveness analysis.

Study population
Schizophrenia, schizophreniform or schizoaffective sufferers.

Setting
The practice setting was the community. The economic analysis was carried out in the USA.

Dates to which data relate
Effectiveness and resource date were obtained between 1995 and 1996. 1995 prices were used.

Source of effectiveness data
Evidence for final outcomes in the treatment of schizophrenia using olanzapine compared with haloperidol was derived from a single study.

Link between effectiveness and cost data
Prospective costing was undertaken on the same patient sample as that used in the effectiveness study.

Study sample
817 patients, 18 years or older, with a DSM-111-R diagnosis of schizophrenia residing in the USA were chosen for analysis. They also had a Brief Psychiatric Rating Scale (BPRS) total score of 18 or more, or were no longer tolerating current neuroleptic therapy (except haloperidol). Exclusions centred around other serious unstable illnesses, recent experience of DSM-111-R substance use disorders or organic mental disorder, or having poor communication skills around study personnel. At baseline there were no significant differences in demographic or clinical characteristics between the olanzapine group (n = 551) and the haloperidol group (n = 266).

Study design
The study was a double-blind randomised clinical trial. The initial study period was 6 weeks followed by an additional
46 weeks of analysis for eligible subjects.

**Analysis of effectiveness**
The analysis of the clinical study was based on intention to treat. The primary outcome mentioned in the study was the Clinical Global Impression (CGI) severity of illness scale score.

**Effectiveness results**
CGI scale scores were not fully reported in this paper. The authors indicated, however, that all patients included in the economic evaluation qualified for the extended 46 week period and as such achieved CGI severity of illness scale scores of 3 or a decrease of 3 or more and a maximum score of 3 in the CGI adverse events scale.

**Measure of benefits used in the economic analysis**
The authors considered only the subset of patients which qualified for the second phase of treatment (responders). As both groups met the inclusion criteria for this, the benefits were expressed in terms of cost reductions. As such a cost-minimisation analysis was performed.

**Direct costs**
Direct costs centred around medical service consumption including physician time, inpatient facility usage, day hospital usage, emergency room visits, outpatient visits, medication costs, visits to other physicians and mental health care providers, etc. Most costings were obtained from what the authors described as a standard list of costings (reference not supplied).

**Statistical analysis of costs**
Not performed.

**Currency**
US dollars ($).

**Sensitivity analysis**
No sensitivity analysis was performed.

**Estimated benefits used in the economic analysis**
Benefits were expressed in terms of cost reductions.

**Cost results**
Total intervention costs were not reported. The total cost of health care for the olanzapine group was reduced by an average of $431 per month in comparison with the haloperidol group during the initial 6 weeks of treatment within the study. Over a 12 month period this figure was reduced to $345.

**Synthesis of costs and benefits**
Not performed.

**Authors' conclusions**
Olanzapine treatment for schizophrenia treatment may reduce overall medical care costs.
CRD COMMENTARY - Selection of comparators
The selection of haloperidol and olanzapine for the treatment of schizophrenia was justified by the authors.

Validity of estimate of measure of benefit
The estimates of benefits used in the economic analysis were limited to those considered eligible (responders) for the second phase of treatment according to CGI scale scores. As such the economic evaluation was limited to a cost-minimisation analysis.

Validity of estimate of costs
The estimates within the study were reported in a global sense. As costs and quantities were not reported separately the generalisability of the results may be somewhat diminished.

Other issues
No power calculations were reported in the determination of the study sample nor were any details provided of the demographic and clinical characteristics of the study sample (to be reported elsewhere by the authors). Study subjects were analysed on an intention to treat basis which allowed for the inclusion of all data from study subjects regardless of whether they completed the follow-up period of analysis or not, thus giving a more complete picture of the effectiveness of each treatment regimen analysed. Also, primary outcomes (CGI) scores were not reported. The authors provided an informative and useful appraisal of the methodology of conducting an economic evaluation and the issues raised in meeting the study design required to accommodate both clinical and economic analyses.

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