

Economic evaluation of child and adolescent mental health services: preliminary results of a systematic review

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Introduction

A comprehensive review of the international literature a few years ago revealed no more than a handful of economic evaluations of interventions for mental health problems in childhood and adolescence, and most were found to be methodologically weak (Knapp, 1997). To assess recent developments in the economic evaluation literature since this review, a systematic search was undertaken and some preliminary findings are reported here.

Search strategies

A range of electronic databases were searched using a predefined search strategy. Published evaluations of services for children or adolescents with mental health problems were included in the review if they included assessment of both costs and outcomes or costs alone.

Findings

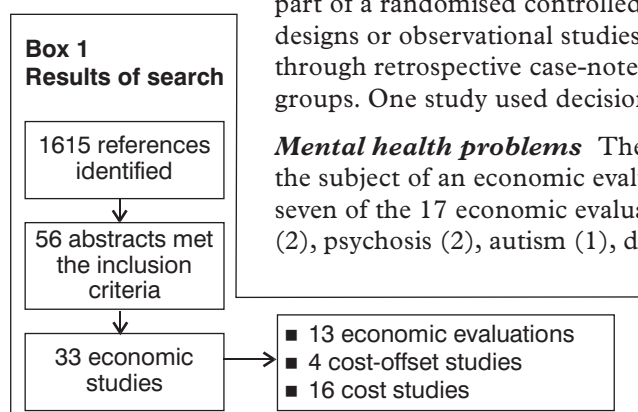
The search results are summarised in box 1. From the 56 abstracts that met the inclusion criteria for the study, 33 papers were found to include assessment of both costs and outcomes or costs alone.

Method of economic evaluation Seventeen studies included assessment of both costs and outcomes. Thirteen could be classified as full economic evaluations, most commonly cost-effectiveness analyses employing a large range of different disease specific scales. Cost-utility analysis, which involves measuring outcomes in terms of quality adjusted life years gained, was only undertaken in one study.

Four studies were classified as cost-offset studies, which involve the comparison of costs and outcomes that are easily converted into monetary valuations. For example, the total cost of a new intervention may be compared to the savings that result from changes in proxy outcomes such as inpatient stays or crimes committed. These studies tend to ignore user-focused outcomes, such as clinical status, quality of life, or wellbeing, and thus cannot be classified as full economic evaluations. Cost-offset studies are often incorrectly classified as cost-benefit analyses, where *all* costs and outcomes are valued in monetary terms.

Study design Four of the seventeen economic evaluations were carried out as part of a randomised controlled trial. More common were quasi-experimental designs or observational studies, carried out prospectively (seven studies) or through retrospective case-note review (five studies), often with matched control groups. One study used decision analysis to model costs and benefits.

Mental health problems The most common mental health area found to be the subject of an economic evaluation was behavioural disorders, the focus of seven of the 17 economic evaluations. Other areas included depressive disorders (2), psychosis (2), autism (1), developmental disorders (1), psychosomatic disorders (1) and co-morbid substance use (1). The remaining studies evaluated services that were not specific to one particular condition.



Interventions A large range of interventions were evaluated, including drug therapies, psychological therapies, skills development, parent training, social work support, psychoeducational services and electroconvulsive therapy. A number of alternative methods of delivering interventions were evaluated including individual versus group, hospital versus community, home versus community and day versus residential care. Two studies evaluated alternative methods of delivering child and adolescent mental health services in general, rather than specific interventions, and one study looked at different methods of influencing the motivation of therapists.

Common methodological problems Many of the economic evaluations included in this review suffered from methodological limitations. The majority involved observational study designs, often using data collected retrospectively from case notes, increasing the possibility of biased sampling and inaccuracy in the data. Although matched control groups were common, this method of reducing bias may not always be as successful as randomisation. Sample sizes were generally small and unjustified, thus increasing the danger of having inadequate statistical power to detect meaningful differences as significant in statistical analysis. The chosen perspective of many of the studies was narrow, often limited to the service provider, ignoring the impact of interventions on the cost of services provided by other agencies or sectors in society or the impact on patients and their families. Finally, few studies included any assessment of quality of life, thus making it impossible to compare the results across a broad range of services, which would better inform resource allocation decisions.

Conclusion

This review of economic evaluations of services for children and adolescents with mental health problems shows that an increasing number of such evaluations are being undertaken, but that numbers are still small and studies are still suffering from a number of methodological weaknesses. Detailed results of the systematic review will be available later in the year.

Reference

Knapp, M. (1997) Economic evaluations and interventions for children and adolescents with mental health problems, *Journal of Child Psychology and Psychiatry*, 38, 1, 3–25.

Further publications in the economics of child and adolescent mental health care

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