FINDINGS **Your selected document**

▶ Methodological assessment of economic evaluations of alcohol treatment: what is missing?

Barbosa C., Godfrey C., Parrott S. Request reprint

Alcohol and Alcoholism: 2010, 45(1), p. 53–63.

If alcohol treatment is to compete for scarce healthcare resources, studies must adopt the same yardsticks of success as are used for healthcare interventions contends this team of UK-based health economists; prime amongst these are quality of life measures.

Summary This review of the methodology of economic evaluations of alcohol treatment offers research recommendations with a view to enhancing the consistency and harmonisation of such studies. Published full economic evaluations of alcohol treatment were retrieved using a systematic search. These can be classified as:
• cost-effectiveness analyses – based on a single, common health outcome such as mortality that may be achieved to varying degrees by the treatments included in the analysis;
• cost-utility analyses – quality-adjusted life years (QALYs) are a widely used measure of health benefits used in such analyses, based ideally on the values attached to different health states by the public. Cost per QALY estimates are particularly useful when comparing healthcare interventions which compete for the same pool of funding; or
• cost-benefit analyses – health benefits are measured in monetary units as are all other costs and consequences and a net monetary gain (or loss) or a cost/benefit ratio is calculated. Values are attached to benefits using approaches such as 'willingness-to-pay' for a certain degree of a certain benefit.

Results The search found 27 studies, most of which were primary studies providing new data (19 studies) and performed a cost-effectiveness analysis (18 studies). Another eight were modelling studies, which usually pool findings from primary studies and use models to estimate long-term health and economic consequences. Six of these were cost-effectiveness analyses and none were a cost-benefit analysis.

This set of studies exhibited the following limitations.
• A societal perspective has never been taken into full account and almost half of the

studies totally excluded society-level consequences from their analysis. Despite the relatively small contribution to economic totals of changes in health services use, this was the most widely measured society-level consequence. Some consequences of alcohol treatment at a societal level, such as the impact of treatment on the health-related quality of life of family and friends of the drinker, have never been considered in the economic analyses.

- The economic data were limited either by a short-term follow-up study or by retrospective collection methods. Clinical estimates were derived from studies with a follow-up of 12 months or less.
- Some studies used abstinence as the only endpoint of the economic evaluation.
- Most of the reviewed studies were cost-effectiveness analyses.
- Individual-level consequences were not consistently identified, measured and valued. There was no agreement regarding the individual health consequences used in the evaluations.
- Measures of health-related quality of life capturing life years and morbidity have not been extensively used in the alcohol field. Few studies present their results in terms of the costs required to achieve one extra QALY.

Recommendations Recommendations for future full economic evaluations of alcohol treatment include the following.

- Society-level consequences should be identified early-on in studies, divided into: criminal activity; road traffic accidents; workplace and productivity losses; health-related quality of life losses; general health care utilisation; other specific alcohol treatment utilisation; and social services and non-statutory care utilisation.
- Alcohol treatment has long-term health and social benefits which should be included in an economic evaluation.
- All full economic evaluations should include a measure of the impact of treatment on the individuals under treatment.
- A wider population with alcohol problems is eligible for treatment and confining treatment effectiveness to abstinence neglects other potential individual and social benefits.
- Cost benefit analysis and cost utility analysis, because they address the issue of outcome valuation, might be preferable as they allow an assessment of broader choices than a simple cost-effectiveness analysis.
- Healthcare providers and policy makers should use full economic evaluations to make decisions on the allocation of scarce resources between competing programmes. Outcome scales/tests should be replaced by a health measure that facilitates comparison between interventions and captures quality and quantity of life, such as QALYs.
- The variability in health-related quality of life is often greater than the variability in clinical endpoints. Drinking, for example, can be reduced without significantly affecting quality of life. If alcohol treatment is to compete with other healthcare interventions for limited resources, establishing the relationship between alcohol treatment outcomes and QALYs is of great importance so that there is a single, comparable outcome measure for alcohol and other healthcare interventions. It would be desirable to study the relationship between QALYs and indicators of drinking behaviour, the extent to which improvement in alcohol consumption can be linked with QALYs gained, and the time period for this to be detected. A longitudinal study would help answer these questions.
- Alcohol treatments are in general funded through healthcare mechanisms and cost-utility analysis techniques are increasingly being used to assess other healthcare

interventions, so we would currently recommend a cost-utility research design.

Thanks for their comments on this entry in draft to Carolina Barbosa of the University of York Centre for Health Economics. Commentators bear no responsibility for the text including the interpretations and any remaining errors.

Last revised 22 August 2011

▶ Comment on this entry • ▶ Give us your feedback on the site (one-minute survey)

Unable to obtain the document from the suggested source? Here's an alternative.

Top 10 most closely related documents on this site. For more try a subject or free text search

Alcohol-use disorders: Preventing the development of hazardous and harmful drinking REVIEW 2010

Reducing alcohol harm: health services in England for alcohol misuse STUDY 2008

The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms REVIEW 2010

Alcohol-use disorders: Diagnosis, assessment and management of harmful drinking and alcohol dependence REVIEW 2011

Identifying cost-effective interventions to reduce the burden of harm associated with alcohol misuse in Australia REVIEW 2008

The primary prevention of hepatitis C among injecting drug users REVIEW 2009

Prison health needs assessment for alcohol problems STUDY 2011

Independent review of the effects of alcohol pricing and promotion STUDY 2008

Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland STUDY 2009

Drug and alcohol services in Scotland STUDY 2009