**HEALTH ECONOMICS**

**CONTENTS**

* Introduction
* Basic concepts
* Appropriateness of economic evaluation?
* Data regarding Input and Output
* Classification of economic evaluation
* Stages of economic analysis
* Limitations of economic evaluation
* Conclusion
* References

**INTRODUCTION**

Health economics is the monetary utilization aspect of health services.

**Relationship of economic theory of health care?**

Too many resources are being spent without improvement in overall health (Fuchs, 1993). Health economics is about resource management.

**ECONOMIC EVALUATION AND ITS APPROPRIATENESS?**

Feasibility in real life situation

Availability to the population

**To make comparisons**

Alternatives need to be compared.

**INPUTS – resources consumed**

Direct costs

Indirect costs

Intangible costs

**Changes in health**

Natural units (tooth surfaces saved)

Utility measures (life-years gained by an intervention)

Monetary units

**COST MINIMIZATION ANALYSIS**

Identify and compare the costs of alternative health programmes, without explicitly estimating concomitant health consequences.

**DECODING COST EFFECTIVENESS ANALYSIS**

Use measures of health effects for the valuation of health consequences

**DECODING COST UTILITY ANALYSIS**

Final effects are measured than intermediate effects.

**STAGES OF ECONOMIC ANALYSIS**

Health intervention under consideration has to be defined and the perspective of analysis has to be specified.

* + Are dental sealants worth the cost?
  + Is a programme of dental sealants worth as compared to follow up preventive programmes?

**2. Identification of alternatives**

Cost-effectiveness analysis compares the costs and consequences of two or more alternative programmes.

**Evaluation determines the relevance of questions.**

**3. Identification of value costs**

Averted costs are also important from a patient's perspective. *E.g.-* any savings that may be attributable to prevent disease. Societal costs generally include all costs associated with a programme, regardless of the person or organization.

***An important caveat in estimating health care costs is the distinction between costs and charges.***

**SOURCES OF COST DATA**

Sources are variable depending on the type of programme being evaluated and the perspective.Cost estimates for medical services often come from third-party databases (public and private). But public and private insurance coverage for dental services is limited in most of the countries. Consequently, data sources that may be available for estimating costs of certain medical procedures or services provided in institutions such as hospitals may not be available for estimating the cost of dental services.

**4. Identification of health consequences**

Effectiveness data should be available as with the cost, assessment of health consequences is also dependent on analysis. Health consequences may include the community; Subpopulations within a community that may be designated by age, gender, race, race-ethnicity, income level or other socio-demographic and economic variables; Individuals within a community.

**SOURCES OF EFFECTIVE DATA**

Ideally, data would be available from an experimental study design, such as a randomized clinical trial, that evaluates the effectiveness of two or more alternative strategies. However, randomized clinical trials are often not available and data must be obtained from other sources.Discussion of methods for meta-analysis and conduct and evaluation of clinical research is beyond the scope of this chapter and is available in other texts.

**5.Future costs and effectiveness**

Over a 1O-year period, costs would occur or recur over time, the benefits attributable to the two programmes, as measured by caries incidence rates, quality-adjusted tooth years, may occur differentially during the time period. Some individuals may not develop caries during the entire period.

**6. Addressing issues related to ethics**

**8. Present and interpret results**

Presentation of the results may be in many ways. Ratio of marginal cost to marginal effectiveness.

**LIMITATIONS OF ECONOMIC EVALUATION**

Ethical issues are not addressed

Economic evaluations require resources (there is no minimum level of expenditure or health impact above which an economic evaluation should always be done and below which should never be done)

**CONCLUSION**

* It is difficult to consider the cost and consequences of these alternative programmes without quantitative methods.
* Economic evaluation is necessary to produce the best health care and maximum benefit with minimum cost to the community based on available resources.

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