**HEALTH ECONOMICS**

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**ABSTRACT**

Health economics is concerned with the alternative uses of resources in the health services sector and with the efficient utilization of economic resources such as Human resource, material and financial resources. Every health worker needs to acquaint him/ herself with the basic concepts of economics and its application to the health sector in order to manage health institutions and health delivery system efficiently.

 Health economics is a rapidly growing sub-discipline which provides scientific evidence for informed policy choices and market decisions concerned with health and health care. The progress in medicine brings new opportunities, however, the cost-effectiveness of the new technologies needs time to be properly verified which often turns out to be difficult in the presence of strong interest groups pressing for their rapid adoption.

**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.
* It is expected to bring significant improvement to the entire health system and, in particular, to long-neglected rural areas and to especially vulnerable groups (such as mothers and children) that would benefit from the expansion of health services.
* The focus will be on the health conditions that contribute to the burden of diseases in India. Yet, with the challenges we are facing today and will in the near future, it seems that health economists will have even more to do to improve the well-being of nations.
* The equity of access and efficiency of resource allocation in health systems is a great challenge in the era of the economic crisis experienced worldwide.
* With still growing proportion of GDP devoted to health care and tight budget constraints which health policy makers face, it is of crucial importance to convince the general public that the money spent on health is rather an investment than a cost.
* The role of health economics is to identify these actions which allow the use of scarce resources efficiently and equitably.

**REFERENCES**

* Blanaid Daly. Essential dental public health. Oxford publishers.
* Pine Cynthia M; Community Oral Health. First Edition. K. M. Varghese Company. 1997.
* Antczak et al. Methodolgical considerations in the analysis of cost effectiveness in dentistry. J Public Health Dent 1989; 49: 215-22.
* Bouckoms et al. Cost effectiveness analysis of periodontal disease control. J Dent Res 1987; 66: 1630-5.
* Klock B. Economic aspects of a caries preventive program.
* Community Dent Oral Epidemiol 1980; 8: 97–102.
* Morgan MV et al. Economic evaluation of a pit and fissure dental sealant and fluoride mouthrinsing program in two nonfluoridated regions of Victoria, Australia. J Public Health Dent 1998; 58: 19–27.