APPLIED MEDICAL ECONOMICS FOR DECISION MAKING: SOME BASIC PRINCIPLES

VIROJ WIWANITKIT[*]

ABSTRACT

Economics is an important knowledge that can be useful in decision making for appropriate use of the limited resource to achieve the best outcome. The application of economics in medicine is very interesting. The medical economics is the important medical science that helps decision making in medicine. In this short article, the author summarizes and discusses n the important concept of medical economics.

KEYWORDS: Medicine, Medical Economics.

INTRODUCTION

Economics is an important knowledge that can be useful in decision making for appropriate use of the limited resource to achieve the best outcome. The application of economics in medicine is very interesting. The medical economics is the important medical science that helps decision making in medicine. In this short article, the author summarizes and discusses n the important concept of medical economics.

THE APPRAISAL OF ALTERNATIVE MEDICAL OPTION BY MEDICAL ECONOMICS

To select a proper option in medical management is also an important step for medical personnel in clinical decision making. Sometimes, there are many alternative options for diagnosis or treatment and how to select is usually an interesting issue. In the era of limited resource, the application of medical economics becomes a useful tool for help decide [1-2]. The concept of decision making can be based on standard medical economics evaluation. Generally, the input and output of each option has to be investigated and compared. The way for comparison can be as the following:

COST IDENTIFICATION ANALYSIS

This is a classical way based on old concept. To select the cheapest option is the old idea for decision making. This means the identification of the unit cost (direct + indirect costs) for each alternative option and the final selection will be based on the option with the lowest unit cost.

COST EFFECTIVENESS ANALYSIS

This is the new idea. Sometimes, an option might have lower unit cost but it give poorer outcome. At present, the outcome is usually an important part for evaluation. The interpretation of the outcome as effectiveness has to be done.

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[*]Honorary Professor, Dr DY Patil University, India.
Correspondence E-mail Id: editor@eurekajournals.com

The effectiveness can be transformed into derived outcome cost. The cost of input per outcome can be calculated and the derived value, the cost effectiveness value, can be used for comparison. The option with the lowest input cost and highest outcome cost should be selected.

COST UTILITY ANALYSIS

This is based on the same concept as cost effectiveness analysis. Sometimes, it is very hard to calculate the cost of the outcome. The outcome might be determined in other ways such as years of disease free, percentage of correct diagnosis, etc. Those outcomes are called "utility." The calculation for the cost per utility can be done in the same way as already mentioned for the cost effectiveness analysis. The option with the lowest input cost pertargeted outcome should be selected.

Addition to those mentioned concept, the applied medical economics can sometimes help solve more complex situation. The use of path probability model to find the alternative path for a specific process is the good example. This technique is widely used for selection the alternative pathway for implementation of vaccination strategies and can be useful for public health policies making [3].

CONCLUSION

With the standard medical economics concept, one can find a proper alternative option in medical management. It can be seen that the medical economics is the useful tool in medicine in the era of limited resource.

CONFLICT OF INTEREST: None

REFERENCES

[1]. Kaplan RM. Health outcome models for policy analysis. Health Psychol. 1989; 8(6):723-35.

[2]. Porzsolt F, DruckreyE Assessment of medical measures. Strahlenther Onkol. 1995 Jul; 171(7):371-8.

[3]. Wiedermann G. Modern trends in vaccination policy: evaluation of benefits, risks and cost. Wien KlinWochenschr. 1979 Mar 2; 91 (5):143-50.