# Knowledge, Attitude and Practice Assessment on Economic Evaluation among Dental Health Professionals in Dental Colleges of Maharashtra: A Cross Sectional Study

Kumar Gaurav Chhabra\*, Aishwarya Uikey, Yugashri Kalambe, Samiksha Nemade, Amit Reche, and Priyanka Paul Madhu

Department of Public Health Dentistry, Sharad Pawar Dental College and Hospital, Datta Meghe Institute of Medical Sciences, Sawangi (Meghe), Wardha, Maharashtra, India

#### Corresponding author:

Kumar Gaurav Chhabra, Department of Public Health Dentistry, SharadPawar Dental College and Hospital, Datta Meghe Institute of Medical Sciences, Sawangi (Meghe), Wardha, Maharashtra, India, E-mail: rajsushil.chhabra@gmail.com

#### **Abstract**

Background: In latestcenturies the economic evaluation of well being maintenance platforms has turn out to be extra essential and is at the present a conventional contrivance for the assessment of the same. From the lookout of specific beneficiaries of healthcare, healthcare workers or the public, the study may be accompanied and examiners from many unlikearenas including economists, medical scientists and clinicians, does these investigation. Economic evaluation is the course of organised documentation, amount and estimation of the ideas and effects of two different events, and the consequent relative study of these. It differs according to their intent and scope. Objectives: To seek the information through questionnaire about awareness amongst dental health professionals regarding health economic evaluations. To analyse the data obtained and to assess the knowledge, attitude and practices about health economic evaluation amongst dental health professionals. Methodology: A cross sectional questionnaire study will be carried out to assess the knowledge, attitude, and practice among dental health professionals in dental colleges of Maharashtra state. The questionnaire will be distributed to the post graduate students of Sharad Pawar dental college and hospital, their response will be recorded and the questionnaire will get validated. Questions will be asked by online platform to dental health professional with explanation of the purpose of the study. The questionnaire include close ended questions in it. **Expected Results**: The expected results of this study will conclude the knowledge, attitude and practice about the health economic evaluation among the dental health professionals in Maharashtra. Conclusion: Since the well-being of the people cannot be upgraded only by expense more currency on health maintenance, it is important to consider health economics to better enforce economic policies for improving health care. Therefore, for the establishment of quality health care, dental staff should have sufficient knowledge of the same to improve treatment, designing patient centred healthcare programs that can increase reaction times, decrease human fault, and save budgets besides improve the excellence of life. By encouraging health education and preventive health care principles, the management should finance in preventive and social medicine and should promote more and more research into economic analysis so that dental treatments will help to become even more available to the general public.

**Keywords:** Health economics; Health care services; Oral health care services; Decision-making

## Introduction

In currentages the economic evaluation of healthiness up keep databases has developed further significant and it is now a recognized apparatus for the appraisal of the same. From the perspective of different receivers of healthcare, healthcare earners or people, the study may be conducted and academics since several diverse pitches containing economists, medicinal investigators and practitioners, does these investigation. Economic evaluation is defined as 'The comparative analysis of alternative course of action in terms of their costs and

consequences'. Economic evaluation is the procedure of methodical records, dimension and estimation of the ideas and results of two unusual actions, and the successive proportional inquiry of these. It differs according to their intent and scope. [1]

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

**How to Cite this Article:** Bhadarge G, et al. Knowledge, Attitude and Practice Assessment on Economic Evaluation among Dental Health Professionals in Dental Colleges of Maharashtra: A Cross Sectional Study. Ann Med Health Sci Res. 2021;11:S3:168-171.

© 2021 Annals of Medical and Health Sciences Research

The analysis can be performed from the point of view of different beneficiaries of healthcare, health maintenance provisioners or culture, and examiners from various domains, including financial expert, medical investigator and doctors undertake this research. [2] Alongside other assessments, especially outcome studies, prospective economic analyses are best carried out. The economic components of research need not be too costly. [3] However, from the outset of a research planning phase, thereis benefit in reviewing the economic plan as results will influence the general plan of the review and the detail of information gathering. Before conducting a report, it is necessary to decide either a complete economic valuation is necessary or essential. The purpose is to help management, not a full foundation for management. A variability of particular approaches, like cost efficiency, cost benefit analysis, are covered by economic evaluation, which can be owned to answer the issue of either a program, task or interference provides great investment. The resources of health management are constrained by the overall available assets, as well as by antagonism with further sectors, such as lodging and training. This poses the problem of how to determine where the investment can be most efficiently distributed. Establishing the allocation of resources for health maintenance should be effective and also equitable. The foundation for economic evaluation is to seek productivity in the identification and reallocation of assets to those interventions in health maintenance that offer the highest earnings on health. Economic evaluation is critical since it is not viable to recognize applicable substitutions without systematic enquiry. [4] In India, there is an serious requisite to nurtureal ertness that economic assessment can update besides benefit policy-making, while by the equivalent time building the ability of health experts to recognize the economic concepts of the distribution system of health care. The government would have to enthusiastically inspire economists to concentrate on the health sector, which will go out there the health ministry and entail dialog with the education sector in India. [5]

#### **Rationale**

In health services research, economic evaluation has become an vitalelement in these recent years and in future it is assume that there is an increasing demands for judgment making in dental service area. [2] There is catastrophe to investigate economic traits of dental health service area because of limited resources within the health sector and it may consequence in unmanageable over spending or elimination or decrease of service area or properties in additional ranges of well-being repair. [6] To support decision making there are many techniques in economic evaluation. In dentistry, a quantity of cost-effectiveness readings has concentrated at diverse restorative materials. Progresses counting innovative recuperative ingredients, amplified practice of implantations, artistic sort dentistry (for example, difficult crown and bridge effort) and appraisals of mature and teenage orthodontic management are all zones which might be premeditated. In economic evaluation, two individualities of an intermediation must be studied; these are its effect and its rate to select between competing alternatives. The planners should select the most advantageous option. [7] A more efficient process of awareness should be there for a level of understanding of the knowledge, attitude and practice so that it will allow to create customized program for the need of community. [8,9]

## **Objectives**

To seek the information through questionnaire about awareness amongst dental health professionals regarding health economic evaluations. To analyse the data obtained andto assess the knowledge, attitude and practices about health economic evaluation amongst dental health professionals. A cross-sectional exploratory study was accompanied among teaching dental faculty of dental colleges in Maharashtra. Ethical clearance was achieved from the ethical review committee of the institutional review board. Thehead of the institution and tutors were wellversed about the perseverance of the study. The study population involved all the dental faculty of dental colleges in Maharashtra. The knowledge, attitude, and behavior of study subjects on economic evaluation were measured via a questionnaire method. The matters used forth is survey were created commencing four foundations: concept, examination, thought, and knowledgeable judgment. The questionnaire comprised of aentire of 30 things, with 14, 8, and 8 objects considering knowledge, attitude, and behavior, respectively. Attitude was evaluated on a five-point Likertscale: Definitely yes, yes, neutral, no, and definitely no. The reply options for behavior were as follows: <1 month, 1 month-6 months, 6 months-12 months, >1 year, and never and always, very often, often, rarely, never. A complete of 30 questions on Economic evaluationconcentrated on the knowledge, and its awareness amongst dentists. Questions related to attitude included about coordination with other health professionals in economic evaluation. The series of probable marks for knowledge, attitude, and behavior were 0-14, 8-40, and 8-40, correspondingly. Accurate responses for knowledge questions were specified a mark of "1" and incorrect replies were given a mark of 0. Attitude grooves oscillated from 5 (definitely yes) to 1 (definitely no), and behavior notches stretched from 5 (<1 month) to 1 (never) and 5 (always) to 1 (never).

The data collected (MS Excel, MS office ), and statistical test of Pearson's correlation analysis and chi square test will be used to calculate association of the knowledge, attitude and practice on economic evaluation among dental health professionals in the dental colleges of Maharashtra.

The expected results of this study will determine the knowledge, attitude and practice concerning the healthiness economic evaluation among the dental health professionals in Maharashtra.

### **Discussion**

In recent years, economic evaluation has grow into an important element of health facility inquiry, and rising requests for choice-creating in dental facilities are expected in the near future. [9] When other therapies are available, patients now prefer to choose the most cost-effective and validated results. Dental care economic evaluation is a relatively new concept. Given the expanding emphasis on preventative dentistry, it's not unexpected that the majority of the extant literature is focused on caries prevention. Recent evidence from the United Kingdom reveals, however, that dentists have significantly more discretion in determining how much restorative therapy should be performed and when

it should be administered than is commonly acknowledged. [10] These are precisely the kinds of decisions that may be assessed economically. Only one physician contributed in a one-day reeducation sequence on pharmaco finances for medical doctor, according to Rijkom et al. [11,12] Two general practitioner believed that they are knowledgeable regarding economic evaluations in fitnesscarefulnessover self-education, and some of them is at the present instruction health economics developments, whereas in a study showed by Hoffmann and Graf von der Schulenburg, only 1% of the participants were trained, and the willingness to undergo training was found to be statistically significant at 75%. It's possible that this is due to a lack of enthusiasm and knowledge about the issue. Willingness to engage in the study was exceedingly low in the study conducted by Savkar et al. Some limitations were identified, including the fact that dental professionals do not embrace economic evaluation studies as aapparatus, a lack of training, a lack of available economic evaluation studies, and a deficiency of money and time. In experiments undertaken by Savkar et al. [13,14] Rijkom et al. [15] Hoffmann et al., Eddama et al. and Ross. [16,17] similar barriers were discovered. Economic evaluation is aelement of oral health estimation that is underutilized if dentists are capable to express the utmost well-organized usage of finite strength incomes aimed at the advantage of the populace, we must be willing to employ basic economic evaluation principles. It is recommended that economic evaluation ideas and practical exercises be included in the curriculum dental undergraduates. This will help them understand the vast variation in cost across the numerous treatments available, as well as the indirect and intangible costs involved with the treatment. Second, continuing dental education, workshops, and symposiums in dental institutions, as well as national and worldwide conferences, are all excellent ways to raise awareness about health economics. It will assist healthcare providers in raising awareness, refreshing their knowledge, and updating their skills. Few of the related studies were reviewed. [18-22] There is clearly a lot of need for more exploration on the economics of dental attention and dealing.

#### Conclusion

Since the well-being of the people cannot be upgraded only by expense more currency on health maintenance, it is important to consider health economics to better enforce economic policies for improving health care. Therefore, for the establishment of quality health care, dental staff should have sufficient knowledge of the same to improve treatment, designing patient centred healthcare programs that can increase reaction times, decrease human fault, and save budgets besides improve the excellence of life. By encouraging health education and preventive health care principles, the management should finance in preventive and social medicine and should promote more and more research into economic analysis so that dental treatments will help to become even more available to the general public.

# References

- 1. Cunningham SJ. Economic evaluation of healthcare-is it important to us? Br Dent J. 2000;188:250-254.
- 2. Forbes JF, Donaldson C. Economic appraisal of preventive

- dental techniques. Comm Dent Oral Epidemiol. 1987;15:63-66.
- Buck D. Economic evaluation and dentistry. Dental Update. 2000;27:66–73.
- Prinja S, Chauhan AS, Angell B, Gupta I, Jan S. A systematic review of the state of economic evaluation for health care in India. Appl. Health Econ Health Policy. 2015;13:595-613.
- Sollenius O, Petrén S, Björnsson L, Norlund A, Bondemark L. Health economic evaluations in orthodontics: a systematic review. Eur J Orthod. 2016;38:259-265.
- Morgan M, Mariño R, Wright C, Bailey D, Hopcraft M. Economic evaluation of preventive dental programs: what can they tell us? Dent Oral Epidemiol. 2012;40:117-121.
- Rajesh G, Chhabra KG, Shetty PJ, Prasad KV, Javali SB. A survey on disaster management among postgraduate students in a private dental institution in India. Am J Disaster Med. 2011;6:309-318.
- 8. Wang R, Yang Y, Chen R, Kan H, Wu J, Wang K, Maddock JE, Lu Y. Knowledge, Attitudes, and Practices (KAP) of the relationship between air pollution and children's respiratory health in Shanghai, China. Int J Environ Res Public Health. 2015;12:1834-1848.
- Kaliyaperumal K. Guideline for conducting a Knowledge, Attitude and Practice (KAP) Study. 2004.
- Musareth VA, Murthy AK, Malavika J, Das M. Perception and practice of application of economic evaluation among teaching dental faculty of Bengaluru City, India. J Indian Assoc Public Health Dent. 2017;15:354.
- 11. Yule BF, Amerongen BM, Schaik MC. The economics and evaluation of dental care and treatment. Soc Sci Med. 1986;22:1131-1139.
- 12. Datta D, Sujatha A, Narayanan MA, Kumar SR, Leena A. Health economics-oral health care perspective. Scholars. J Dental Sci. 2017;4:177-185.
- 13. Sugden R, Williams A. The principles of practical cost-benefit analysis. Oxford University Press.1978.
- 14. Hoffmann C, Graf von der Schulenburg JM. The influence of economic evaluation studies on decision making. Basic Appl Med Res. 2014;3:135-141.
- 15. Rijkom JE, Leufkens HG, Busschbach JJ, Broekmans AW, Rutten FF. Differences in attitudes, knowledge and use of economice valuations in decision-making in the Netherlands. The Dutch results from the EUROMET project. Pharmacoeconomics. 2000;18:149-160.
- 16. Ross J. The use of economic evaluation in health care: Australian decision makers' perceptions. Health Policy 1995;31:103-110.
- 17. Elderton RJ, Nuttall NM. Variations among dentists in planning treatment. Br dent J. 1983;154:201.
- Gondivkar, Shailesh M, Rahul RB, Amol RG, Rima S, et al. Impact of socioeconomic inequalities on quality of life in oral submucous fibrosis patients. Future Oncol. 2019;15:875–884.
- 19. Jaiswal KA, Pachava S, Sanikommu S, Rawlani SS, Pydi S, Ghanta B. Dental pain and self-care: a cross-sectional study of people with low socio-economic status residing in rural India. Int Dent J. 2015;65:256-260.
- 20. Rao KR, Samapth KN, Eshwar S, Deolia S. Cognitive ability as a determinant of socioeconomic and oral health status among adolescent college students of Bengaluru, India. J Clin Diagnostic Res. 2016;10:62-66.
- 21. Mahafroz K, Khatib MN, Ahmed M, Saxena D, Unnikrishnan B, Gaidhane S, et al. Protocol on causal chain analysis and health

economic modelling of childhood anaemia interventions in developing countries. JEMDS. 2019; 8:3899-3903.

22. Amit RM, Nagpure SP, Sangwan PD, Jjodiya C, Nimbulkar GC,

Deolia SG. Relationship between nutritional status, socio-economic and dental caries status of rehabilitated children of age 4 years-14 years in central India. Medical Science. 2020;24:575-581.