

Assessment of Knowledge and Attitude towards Dental Insurance and Utilization of Dental Services among Insured and Uninsured Patients: An Epidemiological Study

Abdul Vakeel¹

¹Senior Lecturer, Department of Management Science, Yanbu University College, Yanbu, Kingdom of Saudi Arabia.

ABSTRACT

Background: Health insurance is a double edged sword having both pros and cons. On one side, health insurance decreases the financial threat for the insured and delivers access to health care that would otherwise be unaffordable. However; at the same time, it also elevates the cost factor due to added costs—the administrative and other expenses of the insurer—and moral hazard. Hence; the present study was undertaken for assessing the knowledge and attitude towards dental insurance and utilization of dental services among insured and uninsured patients. **Methods:** A total of 336 patients were enrolled in the present study. Out of 336 patients, 118 patients were insured under health insurance scheme while the remaining 118 patients were uninsured and comprised of patients who reported for routine dental check-up. A self-framed questionnaire was given to all the participants for assessing their knowledge and attitude towards dental insurance and utilization of dental services. All the results were summarized in Microsoft excel sheet and were analyzed by SPSS software. **Results:** 47.46 percent of the patients of the insured group and 52.54 percent of the patients of the uninsured group had knowledge of general health insurance plans. 29.66 percent of the patients of the insured group and 17.80 percent of the patients of the uninsured group had knowledge of dental health integrated general health insurance plans. 50 percent of the patients of the uninsured group were totally unaware of the dental health insurance policies. 80.51 percent of the patients of the insured group and 60.17 percent of the patients of the uninsured group had positive attitude towards dental insurance. **Conclusion:** In developing countries, people still have poor knowledge and attitude about dental insurance plans.

Keywords: Dental, Insurance, policies.

INTRODUCTION

Health has been professed as essential human right. Oral health is a fundamental component of general health and, hence, can be correctly regarded as the gateway of the body. The excessive cost of dentistry has been the foremost burden which divests patients of availing the facilities.^[1-3]

Health insurance is a double edged sword having both pros and cons. On one side, health insurance decreases the financial threat for the insured and delivers access to health care that would otherwise be unaffordable. However; at the same time, it also elevates the cost factor due to added costs—the administrative and other expenses of the insurer—and moral hazard. In regard to dental care, perhaps more so than in relation to other types of care, a choice is possible between cheaper basic treatments and more expensive ‘luxury’ treatments, which may result in substantial moral hazard.^[4-6]

Receiving dental services is mediated by a myriad of personal, cultural, and institutional factors, being dependent on provider, receiver, and practice. In addition to insurance status, other receiver-based factors should be taken into account. These include demographic factors, socioeconomic status, dental

conditions, and reason for visit, and attitudes towards health care.^[7]

Hence; the present study was undertaken for assessing the knowledge and attitude towards dental insurance and utilization of dental services among insured and uninsured patients.

MATERIALS AND METHODS

The present study was conducted in the visiting dental clinics in Nizambad, Telangana state and it included assessment of knowledge and attitude towards dental insurance and utilization of dental services among insured and uninsured patients. Ethical approval was obtained from institutional ethical committee and written consent was obtained from all the patients after explaining in detail the entire research protocol. A total of 336 patients were enrolled in the present study. Out of 336 patients, 118 patients were insured under health insurance scheme while the remaining 118 patients were uninsured and comprised of patients who reported for routine dental check-up. Complete demographic and clinical details of all the patients were obtained. A self-framed questionnaire was given to all the participants for assessing their knowledge and attitude towards dental insurance and utilization of dental services. Inclusion criteria for the present study included patients within the age group of 20 to 60 years and patients who were willing to give the informed consent. Modified Kuppusswamy scale was used for assessing the socio-economic status of the

Name & Address of Corresponding Author

Dr Abdul Vakeel
Senior Lecturer
Management Science Department
Yanbu University College
Yanbu, Kingdom Of Saudi Arabia
Email: - marvelviks@gmail.com

patients.^[8] All the results were summarized in Microsoft excel sheet and were analyzed by SPSS software.

RESULTS

In the present study, a total of 118 subjects with dental insurance and 118 subjects without dental insurance were analyzed. Mean age of the subjects of the insured group and uninsured group was 43.2 and 44.1 years respectively. 49 patients of the insured group and 52 patients of the uninsured group belonged to the age group of 30 to 45 years. There were 68 males and 50 females in the insured group and 63 males and 5 females in the uninsured group respectively. 59 patients and 46 patients of the insured group belonged to the middle class and upper class respectively. 61 patients and 34 patients of the uninsured group belonged to the middle class and upper class respectively. 31 patients of the insured group and 27 patients of the uninsured group were of rural residence respectively.

In the present study, 47.46 percent of the patients of the insured group and 52.54 percent of the patients of the uninsured group had knowledge of general health insurance plans. 29.66 percent of the patients of the insured group and 17.80 percent of the patients of the uninsured group had knowledge of

dental health integrated general health insurance plans. Only 19.49 percent of the patients of the insured group and 16.95 percent of the patients of the uninsured group had knowledge of reimbursement plans in relation to dental insurance. 50 percent of the patients of the uninsured group were totally unaware of the dental health insurance policies. 80.51 percent of the patients of the insured group and 60.17 percent of the patients of the uninsured group had positive attitude towards dental insurance. According to 70.34 percent of the patients of the insured group and 67.80 percent of the patients of the uninsured group, dental insurance plans should be made mandatory in India.

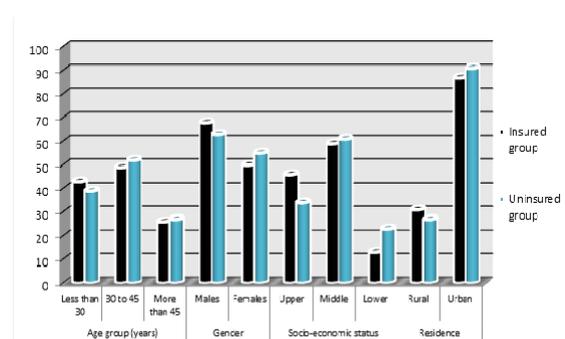


Figure 1: Demographic data

Table 1: Assessment of knowledge of the participants to the insurance plans

Knowledge based questions	Insured group		Uninsured group		
	Number	%	Number	%	
Knowledge of general health insurance plans	Yes	56	47.46	62	52.54
	No	62	52.54	56	47.46
Knowledge of dental health integrated general health insurance plans	Yes	35	29.66	21	17.80
	No	83	70.34	97	82.20
Knowledge of social insurance policies	Yes	118	100	19	16.10
	No	0	0	99	83.90
Knowledge of reimbursement plan	Yes	23	19.49	20	16.95
	No	95	80.51	98	83.05
Knowledge of multiple schemes	Yes	37	31.36	14	11.86
	No	81	68.64	104	88.14
Totally unaware of dental health insurance policies	Yes	0	0	59	50
	No	118	100	59	50

Table 2: Assessment of attitude of the participants to the insurance plans

Attitude based questions	Insured group		Uninsured group		
	Number	%	Number	%	
Can dental insurance be helpful to you	Yes	95	80.51	71	60.17
	No	23	19.49	47	39.83
Should dental insurance plans be mandatory in India	Yes	83	70.34	80	67.80
	No	35	29.66	38	32.20
Will dental treatment become affordable with lowered insurance premiums	Yes	79	66.95	72	61.02
	No	39	33.05	46	38.98
Should subsidization of insurance premium be done by the government for persons who cannot afford them	Yes	96	81.36	83	70.34
	No	22	18.64	35	29.66

DISCUSSION

In developing countries like India, fee for service is still the major type of payment mechanism. Very few people can afford to utilize this service regularly. Most of the people will visit dentists only for curative services occasionally.^[7-9] Hence; the

present study was undertaken for assessing the knowledge and attitude towards dental insurance and utilization of dental services among insured and uninsured patients.

In the present study, mean age of the subjects of the insured group and uninsured group was 43.2 and 44.1 years respectively. There were 68 males and 50

females in the insured group and 63 males and 5 females in the uninsured group respectively. 59 patients and 46 patients of the insured group belonged to the middle class and upper class respectively. 61 patients and 34 patients of the uninsured group belonged to the middle class and upper class respectively. 31 patients of the insured group and 27 patients of the uninsured group were of rural residence respectively. In a previous study, Inge R explored some of those decisions and offer some guidance on how to decide wisely. Dental insurance now is a permanent fixture in the delivery of dental care. Each dentist must decide if participation with a dental insurance company is in his or her best interest. To make this decision, a dentist must have as much information as possible to evaluate each specific dental plan. If a dentist does decide to participate, the dentist must know the rules. Participation with a dental insurance company may influence the dentist-patient relationship.^[10]

In the present study, 47.46 percent of the patients of the insured group and 52.54 percent of the patients of the uninsured group had knowledge of general health insurance plans. 29.66 percent of the patients of the insured group and 17.80 percent of the patients of the uninsured group had knowledge of dental health integrated general health insurance plans. Only 19.49 percent of the patients of the insured group and 16.95 percent of the patients of the uninsured group had knowledge of reimbursement plans in relation to dental insurance. 50 percent of the patients of the uninsured group were totally unaware of the dental health insurance policies. Bayat F et al assessed the relationship between insurance status and type of service received among dentate adults in a developing oral health care system. Four trained interviewers collected data using a structured questionnaire. Of 1,531 subjects answering the phone call, 224 were <18 years; of the remaining 1,307, 221 (17%) refused to participate, and 85 (6%) were excluded as edentate or reporting no dental visit, leaving 1,001 eligible subjects in the sample. Of the subjects, 71% had a dental insurance. Those with no insurance were more likely to report tooth extractions (OR=1.5) than those with an insurance coverage; for all other treatments no differences according to the insurance status appeared. Among the insured subjects, extractions were more likely for those reporting a problem-based dental visit (OR=6.0) or having a low level of education (OR=2.3). In a country with developing oral health care system, dental insurance had only a minor impact on dental services reported.^[11]

In the present study, 80.51 percent of the patients of the insured group and 60.17 percent of the patients of the uninsured group had positive attitude towards dental insurance. According to 70.34 percent of the patients of the insured group and 67.80 percent of the patients of the uninsured group, dental insurance

plans should be made mandatory in India. Millar WJ et al examined socioeconomic differences in insurance for dental services among Canadians aged 15 or older and factors associated with the use of dental services. The data on dental insurance coverage and use of dental services are from the cross-sectional file of Statistics Canada's National Population Health Survey. Logistic regression analysis was used to model variables related to dental insurance coverage and to dental visits in the past year. A weighted bootstrap resampling procedure was used to derive variance estimates. 53% of the population aged 15 or older reported having dental insurance, and 59% said they had visited a dentist in the past year.^[12]

CONCLUSION

From the above results, the authors conclude that in developing countries, people still have poor knowledge and attitude about dental insurance plans. There is urgent need of adequate awareness programs for increasing the knowledge and attitude of general population about benefits of dental insurance plans and policies.

REFERENCES

1. Manski RJ, Goldfarb MM. Dental utilization for older Americans aged 55–75. *Gerodontology*. 1996;13:49–55.
2. Berliner B. Limits of insurability of risks. Englewood Cliffs: Prentice-Hall; 1982.
3. Brennan DS, Spencer AJ. Influence of patient, visit, and oral health factors on dental service provision. *J Public Health Dent*. 2002;62:148–157.
4. Rothschild M, Stiglitz J. Equilibrium in competitive insurance markets: an essay on the economics of imperfect information. *Q. J. Econ*. 1976;90(4):629–649.
5. Capilouto EI. The impact of insurance on charges for dental care. *J Dent Educ*. 1987;51:631–638.
6. Van Winssen KPM, van Kleef RC, van de Ven WPMM. The demand for health insurance and behavioural economics. *Eur. J. Health Econ*. 2016;17(6):653–657.
7. Sweet M, Damiano P, Rivera E, et al. A comparison of dental services received by Medicaid and privately insured adult populations. *J Am Dent Assoc*. 2005;136:93–100.
8. Mishra D, Singh HP. Kuppuswamy's socioeconomic status scale—a revision. *Indian J Pediatr*. 2003;70:273–4.
9. Thaler R. Mental accounting and consumer choice. *Mark Sci*. 1985;4(3):199–214.
10. Inge R1. The ins and outs of dental insurance. *J Am Dent Assoc*. 2005 Feb;136(2):204-9.
11. Bayat F, Murtomaa H, Vehkalahti MM, Tala H. Does dental insurance make a difference in type of service received by Iranian dentate adults?. *Eur J Dent*. 2011;5(1):68–76.
12. Millar WJ1, Locker D. Dental insurance and use of dental services. *Health Rep*. 1999 Summer;11(1):55-67(Eng); 59-72(Fre).

How to cite this article: Vakeel A. Assessment of Knowledge and Attitude towards Dental Insurance and Utilization of Dental Services among Insured and Uninsured Patients: An Epidemiological Study. *Ann. Int. Med. Den. Res*. 2016;2(3):170-72.

Source of Support: Nil, **Conflict of Interest:** None declared