



Research Article

KNOWLEDGE & AWARENESS OF PATIENT ON STREET DENTISTRY: A CROSS-SECTIONAL QUESTIONNAIRE STUDY TO CARE ABOUT DENTAL QUACKERY

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ABSTRACT

Aim: Quackery is harming the public confidence in dentistry and also causing degeneration in professional ethics and Quacks is an untrained person who has learnt dentistry either by assisting a dental surgeon or inherited it from his family and later on adopted it as a profession. The aim of this study is to evaluate the knowledge and awareness of patient about quacks and street dentistry.

Material & Methods: A descriptive questionnaire cross-sectional study was performed at satellite centre of private dental college in Kanpur from June to July 2018. Total 450 patients visited during study period and 355 with faulty prosthesis above 18 years of age of both genders were included in study. The study was then conducted by enrolling the patients and collected data were analyzed by using appropriate statistical software.

Results: Total 355 patients participated in study with 70.4% males and 29.57% were found to be above 40 years of age group. Pain in teeth with 29.57% was the main reason to visit dental quacks and extraction was most common treatment received 26.76%. 87.32% patients were unsatisfied with quack treatment and 74.64% were not aware of the practitioners qualifications.

Conclusion: Locality, age, level of education, low cost and unawareness significantly influenced the visits to dental quacks and are the major factors influencing such visits.

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INTRODUCTION

India is the largest democracy and the second most populated country in the world. However, more than 70% of the people of India are residing in the villages. Dental diseases are one of the most common of non-communicable diseases and though they are rarely life threatening, yet they do impact the quality of life. Dental problems can cause severe pain, loss of several days & morbidity; thus, they are an important public health concern. According to the World Health Organization (WHO), the prevalent oral diseases are dental caries, periodontal diseases & edentulous arches.¹ Dentistry, like medicine, is a traditional, science-based, highly regulated health care profession that serves increasingly sophisticated and demanding clients. Now a day, traditional dental practice is dealing with an array of challenges to the established professional system; these challenges are generally termed “alternate” or quackery. Some unconventional practices may be viewed as “the continuity of traditions, religious beliefs, and even quackery that non-specialists practice”.² But what impels quackery? It results when competent and trained practitioners are in short supply or when their charges appear prohibitive to a segment of the population. Then untrained

individuals step in to supply a genuine need. But the quack differs from the ethical practitioner in that the quack’s basic tools are incompetence and fraud.³ Half-educated people often become a gullible prey to the quacks and their number at times become indeed a majority.⁴

Quackery has been defined as “the fraudulent misrepresentation of one’s ability and experience in the diagnosis and treatment of disease or of the effects to be achieved by the treatment offered”.^{4,5,6} When dental professionals are disproportionately distributed to the private sector relative to the public sector that provides subsidized services, financial affordability also becomes a barrier in the care of the less well-off. More than 70% of Indian population is residing in rural areas and a major portion is below the poverty line. At present, India has one dentist per 10,000 populations in urban areas and for about 2.5 lakh persons in rural areas.^{5,7} The reasons for more inclination of patients towards quack can be high cost of dental treatment, illiteracy, lack of awareness, poor accessibility to dental clinics, and repeated dental appointments. Also, quacks guarantee his patients of painless and immediate treatment. The rural people go blindly for such treatments with immense faith in this unqualified medical healers.⁶ Many of the quacks claim to have learnt the art of dentistry from their ancestors; but there are some quacks who are practicing dentistry after seeing a

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professional work in the dental clinic or who have learnt some basic procedures, which work as assistants in dental office.^{8,9} These street dentists often visit places on their bicycle with a bag consisting of some pliers, screwdrivers, dividers, self acrylic materials, etc and provide services to the needy rural masses. The basic tools used by quacks are incompetent and fraud with no scientific basis.^{10,11} The procedures carried out by these quacks are very undesirable, harmful, and sometimes dangerous to the people. Street dentists practice dentistry in the form of dental extractions, fixing of teeth, filling of teeth, dental bleaching, excavation of dental caries with crude unsterilized & infected instruments.^{12,13,14}

The Indian government has pursued an unsuccessful war against quacks. In the state of Uttar Pradesh, quackery is becoming an increasingly big menace in rural areas and town slums. Uttar Pradesh does not have any stringent law to deal with quacks. The existing literature reveals a high prevalence of visits to dental quacks in developing nations. Studies conducted by Naidu *et al.* in Trinidad revealed a prevalence rate of 66%,¹⁵ the reported data are alarming, and stringent measures should be implemented to put an end to this malpractice at the earliest. Unfortunately, there are very less data available from India especially from Uttar Pradesh, even though this quackery is practiced in many rural and urban areas of the country, to recommend to the policy makers to frame a policy against such quackery and save the lives of the innocents.¹⁶

Hence, this research was undertaken with an aim to assess the perceptions regarding treatment by of dental quacks and self-rated oral health among the residents of Kanpur city. The objectives of the current study were as follows:

1. To estimate the knowledge and awareness of visits to dental quacks,
2. To describe the factors influencing the visits to dental quacks, and

MATERIAL & METHODS

This cross-sectional study was conducted for a period of June to July 2018 at satellite centre of private dental college in Kanpur. Ethical approval was taken from the University Ethical Committee and study was conducted after taking informed consent from the patients. Participation of the patients in the study was voluntary and all participants were assured of confidentiality. A Self-administered close-ended questionnaire was prepared in both English and Hindi which included patient's personal details, history, and awareness of the patient regarding dental treatment and concepts of dental quackery for both genders and clinical examination before and after faulty prosthesis removal was done. Total 450 patients visited during study period and 355 with faulty prosthesis above 18 years of age of both genders were included in study. The study was then conducted by enrolling the patients and collected data were analyzed by using the statistical package for social science (SPSS) version 17.0.

RESULTS

A total of 355 patients participated in the study, out which 105(29.5%) females and 250(70.45%) males were included in the study out of which 275 (77.46%) were from rural and only 80(22.53%) from urban areas.

Table-1 shows age group of 41-50years were most in number 105(29.57%) followed by 51-60years of age 100(28.16%) and 31-40years of age 55(15.49%) while 20-30 years age group was very less in number 45(12.67%) and above 60years of age were only 50(14.8%). While considering the educational status, 11.26% illiterate, 1.12% primary school, 15.49% middle school, 18.30% passed in high school, and 23.94 were passed in intermediate and 29.57% of study subjects had graduation while only 0.28% had post graduation. It was also revealed that the higher number of study subjects belonged to graduates 29.57% followed by unemployed 26.76%, shopkeepers 21.12%, unskilled 15.49% and less by professional 2.81%.

Table 1 Demographic distribution of patients

Gender	Frequency (n)	Percentage (%)
Male	250	70.4
Female	105	29.5
Education		
Illiterate	40	11.26
Primary school	04	1.12
Middle school	55	15.49
High school	65	18.30
Intermediate	85	23.94
Graduate	105	29.57
Postgraduate	01	0.28
Occupation		
Unemployed	95	26.76
Unskilled	55	15.49
Graduates	105	29.57
Shopkeeper	75	21.12
Semi-professional	15	4.22
Professional	10	2.81
Age (years)		
20-30	45	12.67
31-40	55	15.49
41-50	105	29.57
51-60	100	28.16
>60	50	14.08
Locality(area)		
Rural	275	77.46
Urban	80	22.53

Table -2 depicts patient's distribution according to chief complaints and pain during mastication 29.57% was the commonest chief complaint followed by extraction 26.76%, bleeding gums 14.08%, loose prosthesis and esthetics were at same ratio of 12.67%.

Table 2 Distribution of patient according to chief complaint

Chief complaint	Frequency (n)	Percentage %
Pain	105	29.57
Loose prosthesis	45	12.67
Extraction	95	26.76
Esthetics	45	12.67
Bleeding from gums	50	14.08
Others	15	4.22
Total	355	100

Table-3 shows distribution of patients as per their attitude to various aspects of quackery. 81.69% patients said no to maintain good oral hygiene with faulty prosthesis while 18.30% said yes for maintaining good oral hygiene. 76.05% patient stated that quackery should be stopped while only 23.94% were in favor of any punishment to quacks. 87.32% patients were not satisfied with their faulty prosthesis while 84.50% patient stated that they will not visit any quack again for any treatment.

Table 3 Distribution according to attitude to aspects of quackery

Attitude of patient	Frequency (n)	Percentage %
Patient is able to manage good oral hygiene with faulty prosthesis		
Yes	65	18.30
No	290	81.69
Opinion regarding quackery practice		
Punished	85	23.94
Stopped	270	76.05
Patient satisfaction with faulty prosthesis		
Completely satisfied	45	12.67
Not satisfied	310	87.32
Patient will visit again to quack		
Yes	55	15.49
No	300	84.50

Table-4 and Figure-1 relates awareness among the patient about dental practitioners, and only 25.35% were aware of dental practitioner’s qualifications while 74.64% were completely unaware.12.67% patients had visited quacks due to unavailability of qualified dental practitioners while 43.66% visited for reasonable cost of dental treatment by quacks and 25.35% low income group people visited to quacks.11.26% visited to quacks in seek of quick treatment and 2.8% visited because of quacks place were near to their residence and 4.22% gave a visit as they were following the referrals of their known people.

Table 4 Awareness among the patient about dental practitioners

Awareness	Frequency (n)	Percentage %
Practitioner qualification		
Yes	90	25.35
No	265	74.64
Total	355	100
Unavailability of qualified dental practitioner	45	12.67
Reasonable cost	155	43.66
Low socio-economic group	90	25.35
Comparatively quick treatment at quacks	40	11.26
Proximity to residence	10	2.8
Referrals by others	15	4.22
Total	355	100

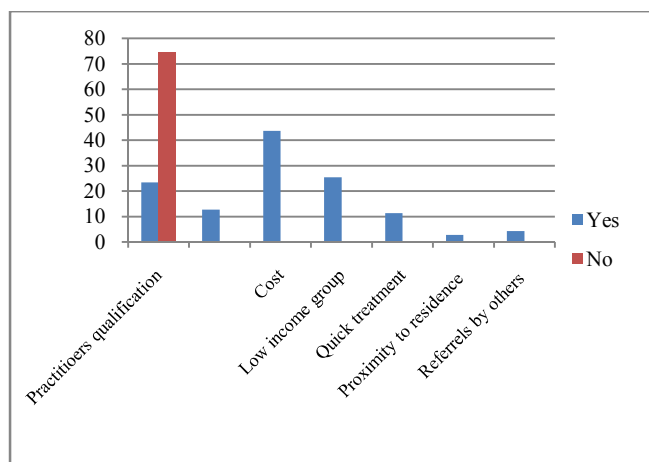


Figure 1 showing patients awareness regarding quacks

DISCUSSION

Dental quackery has become one of the most unethical practices misleading majority of the world population

especially those residing in underdeveloped and developing nations. Even though efforts were made by different researchers and government in different countries to advertise this act to gain the attention of policy makers and to put a pause to such quackery, the available literature from the Indian perspective is inadequate to understand the scenario and initiate firm action against the culprits. The existing literature all over world reveals that majority of the patients get attracted by dental quacks because of their publicity contrivance claiming a faster, cheaper and sure cure. Because of lack of firm action against the quacks, this activity has become pronounced in recent years resulting in complications for the innocent people and acting as an obstacle in providing quality dental care.

The present study was undertaken to assess the Knowledge and Awareness among the patients about dental quacks, in Kanpur city. 355 patients participated in the study, out which 29.5% females and 70.4% males were included which found to be almost similar 57.95% males in study done by Digra *et al.*¹⁷ Our findings on patients with pre-existing faulty prosthesis showed that the rural population 77.46% was more involved as similar to 55% of rural population in Gautam S *et al* study found trapped in the webs of unqualified dental practitioners or “quacks”.¹⁸ There were significant differences in occupation, and level of education. Those who had attended a dental quack were, less likely to have attended high school, graduates, and were more often in unskilled and graduates, which is same as found in study done by Naidu RS *et al*¹⁵, but age factor was more common above 40years of age like in present study 29.57% similar to study by Gautam S *et al.*¹⁸

We found that the most frequent reason for attending the dental quacks was toothache 29.57%,found similar to Kolli *et al*¹⁶, Digra *et al* 30.87%¹⁷ and Gautam S *et al*¹⁸ and the most common treatment received was tooth extraction.26.76% this finding is in line with that reported by Naidu *et al.*¹⁵

Satisfaction level of treatment in our study reveals that most of the subjects who had treatment from the quack was in category of not satisfy which was different from the other study done by Naidu RS *et al.*¹⁵ Our study found 87.32% patients were not satisfied with treatment by quacks which was almost similar to Dighra *et al*¹⁷ 48.14%, Gautam S *et al*¹⁸ 87.5%. 76.05% were in favor to stop quackery which was found similar to study done by Gautam S *et al*¹⁸ where 82.5% responded that quackery should be abolished. In present study 84.50% patients were agreed for not visiting quacks again which was found new than all existing studies.

Some authors have suggested that the cost for treatment and location of private practices may be a barrier to dental care for many people in developing countries.¹⁹ The present study found that lack of accessibility of dental care and lack of knowledge about dental quackery were the reasons to use of dental quack services. In the present study, reason for not using qualified dental services was lack of knowledge about dental quacks, 74.64% of patients were found to be unaware about quackery in dentistry, similar to studies done by Digra *et al*¹⁷ 40.87%, Guatam S *et al*¹⁸ 55% and Swapnil *et al*²⁰ 74.2% and Naidu *et al*¹⁵ whereas, in other study cost was quoted as the main reason for it. The reason for this may be the lack of knowledge and attitude of the subjects towards the dental treatment and availability of the professional dental care. In the present study 43.66% visited quacks for reasonable cost found

to be similar to Kolli *et al*¹⁶ 66%,Gautam S *et al*¹⁸ 45% and Naidu *et al* 53%.¹⁵ Only 4.22% visited to quacks following the referrals by others similar to study done by Kolli *et al*.¹⁶

Though this study was done in small number of patients in a remote area, there is a need of several other such type of studies and other health programs to increase awareness regarding oral health among Indian population. Though not life threatening, these types of practices may severely affect oral tissues and patients quality of life. Along with increasing awareness among people, these quacks should be punished & firm laws need to be reinforced and implemented at government level.

CONCLUSION

Quackery in India is cropping up at alarming rates because of unawareness and ignorance of the community towards oral health. Locality, age and education level are the major factors influencing the visits to dental quacks. Pain in tooth was the most widely acceptable reason for visiting quacks, and extraction was the most frequently received treatment and low cost was found most common factor among the patients using dental quack services. Most of patients were ready not to visit again to quacks for any treatment; India is developing nation with fastest growing financial resources and it is the time now when we can increase our dental care service all around the corners by using more supply of dental manpower.

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