

Knowledge on History of Dentistry among Dental Graduates in Kerala, India

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Abstract

Background: Ailments pertaining to teeth and jaws were treated in a general manner, not requiring the services of a specialist. It is logical that progress in dentistry would go hand in hand with the progress of dentistry made in ancient civilizations. **Materials and Methods:** The present study was an online questionnaire-based survey among interns from six dental colleges across Kerala. The survey was conducted by a third party using a mobile application which consisted of nine questions in English. Two hundred and twenty-eight participants had responded by participating in the survey. The level of significance was set as $P < 0.05$. **Results:** A total of 228 participants were included in the study. Among the study participants, 87.7% of the participants were female and 12.3% were male. The present study showed that 57.1% of males knew the location of the world's first dental school when compared to females. The study revealed that only 36% of females and 14.3% of males knew when the first dental X-ray was performed in a patient. Only 57.1% of males and 48% of females knew the fact that Dr. GV Black is regarded as the Grand Old Man of Dentistry. **Conclusion:** The present study showed that the level of knowledge about history of dentistry among dental graduates was less. The levels of knowledge about dentistry among male and female students were almost similar.

Keywords: Dental school, dental students, history, Kerala

INTRODUCTION

Ailments pertaining to teeth and jaws were treated in a general manner, not requiring the services of a specialist. Hippocrates, the Father of Medicine, was the first to give a scientific basis to understanding and treating diseases, before which anomalies were mainly treated by sacerdotal medicine. Wherein, the cause of diseases was given a superstitious cause requiring sacrifices and rituals to please a supernatural power. One of the earliest cases was found in the Sumerian text which describes "tooth worms" as the cause of tooth decay.^[1] The Indus Valley Civilization has yielded evidence of dentistry being practiced as far back as 7000 BC.^[2] A site in Mehrgarh indicates that this earliest form of dentistry involved curing tooth-related disorders with bow-drills operation, perhaps, by skilled bead craftsmen.^[3] The earliest dental filling, made of beeswax, was discovered in Slovenia and dates from 6500 years ago.^[4] It is logical that progress in dentistry would go hand in hand with the progress of dentistry made in ancient civilizations. This study was conducted to identify the knowledge of interns about the history of dentistry, as understanding of the history of dentistry forms the basis for future developments in dentistry.

Till date, no studies have been conducted across the globe. Hence, this study aimed to identify the knowledge about history of dentistry among dental graduates in Kerala.

MATERIALS AND METHODS

The present study was a cross-sectional study conducted among interns of six dental colleges across Kerala. The survey was conducted during April–May 2018. The survey was conducted by a third party using a mobile application which consisted of nine questions in English. The questionnaire was standardized and tested in a sample of 30 participants. The questionnaire was then modified accordingly [Questionnaire 1]. In Kerala, currently, there are 26 dental colleges.^[5]

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A stratified random sampling methodology was employed in this survey. The state of Kerala is divided into three zones – South, Central, and North zone. There are eight dental colleges in South Kerala and nine dental colleges each in Central and North Kerala. Two dental schools were randomly selected from each zone by a computer software. A total of six dental colleges participated in the study. The survey mobile link was sent to 281 mobile numbers of interns in the six dental colleges. Two hundred twenty-eight participants had responded by participating in the survey. The response rate of the survey was 81.3%. Ethical approval of the study was obtained from the Institutional Ethics Committee prior to the start of the survey. The data were entered in Microsoft Excel software and analyzed using SPSS v 18 software (IBM, Chicago, IL, USA). The level of significance was set as $P < 0.05$. Statistical analysis was done using Fisher’s exact test.

RESULTS

Table 1 shows the distribution of the study participants based on gender. A total of 228 participants were included in the study. Among the study participants, 87.7% of the participants were female and 12.3% were male.

Table 2 depicts the distribution of responses based on gender. The present study showed that 57.1% of males knew about the location of the world’s first dental school when compared to females (50%). The difference was found to be statistically significant ($P = 0.042$). Majority of the female participants (89%) knew about the father of dentistry when compared to their counterparts (71.4%). Statistical significance was observed ($P = 0.021$). The study revealed that only 36% of females and 14.3% of males knew when the first dental X-ray

was performed in a patient. The difference was found to be statistically significant ($P = 0.029$). Only 57.1% of males and 48% of females knew the fact that Dr. GV Black is regarded as the Grand Old Man of Dentistry. Statistically significant difference was observed ($P = 0.043$). The present study showed that 42.3% of males and 38% of females knew when the oral health unit of the WHO was established. Majority of the male and female participants knew about the world’s first dental journal.

DISCUSSION

In the present study, majority of the participants were females. Majority of the male respondents were aware of the situation of the world’s first dental school when compared to their counterparts. About 89% of the female respondents knew about the father of modern dentistry when compared to the male respondents. Only 57% of males knew about the grand old man of dentistry compared to 48% of females. Nearly 85% of males knew about the world’s first dental journal compared to their female counterparts.

The limitation of the present study is the lack of literature pertaining to the assessment of knowledge of dental graduates about history of dentistry. This is the first study to our knowledge done to assess the knowledge of history of dentistry among dental graduates in the world.

CONCLUSION

The present study showed that the level of knowledge about history of dentistry among dental graduates was less. Both males and females had almost similar levels of knowledge. Dentistry has made tremendous progress at present due to the ongoing research which is based on the developments done by our predecessors. The present study shows that there is a need for dental students to understand the importance of history of dentistry.

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Table 1: Frequency distribution of the study participants

Gender	n (%)
Male	28 (12.3)
Female	200 (87.7)
Total	228 (100)

Table 2: Distribution of responses based on gender

Questions	Male		Female		P*
	Correct response, n (%)	Wrong response, n (%)	Correct response, n (%)	Wrong response, n (%)	
The world’s first dental school situated	16 (57.1)	12 (42.9)	100 (50)	100 (50)	0.042
Father of modern dentistry	20 (71.4)	8 (28.6)	178 (89)	22 (11)	0.021
First dental X-ray in a patient	4 (14.3)	24 (85.7)	72 (36)	128 (64)	0.029
Chief of toothers	4 (14.3)	24 (85.7)	84 (42)	116 (58)	0.0083
Grand old man of dentistry	16 (57.1)	12 (42.9)	96 (48)	104 (52)	0.043
First dental foot engine was developed	12 (42.3)	16 (57.7)	88 (44)	112 (56)	0.071
First dental journal in the world	24 (85.7)	4 (14.3)	140 (70)	60 (30)	0.040
Oral health unit of the WHO was established	12 (42.3)	16 (57.7)	76 (38)	124 (62)	0.045
World’s first training school for dental nurses	20 (71.4)	8 (28.6)	124 (62)	76 (38)	0.031

*Fisher’s exact test

Conflicts of interest

There are no conflicts of interest.

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QUESTIONNAIRE

Questionnaire 1: Questionnaire on knowledge of history among dental graduates in Kerala, India

1. Where is the first dental school in the world situated?
 - a. Alaska
 - b. New York
 - c. Ohio
 - d. Kansas
2. Who is considered as the father of modern dentistry?
 - a. GV Black
 - b. P Fauchard
 - c. TH Dean
 - d. TA Hunter
3. The first dental X-ray in a patient was performed in
 - a. 1896
 - b. 1898
 - c. 1894
 - d. 1892
4. Who is known as the chief of toothers?
 - a. T Hun
 - b. Hesy Re
 - c. Sung T
 - d. Resy He
5. Who is known as the grand old man of dentistry?
 - a. TH Dean
 - b. F Mackay
 - c. H Hayden
 - d. G Black
6. The first dental foot engine was developed by
 - a. C Greenwood
 - b. H Black
 - c. Mark Butler
 - d. Alfred Jones
7. Which is the first dental journal in the world?
 - a. Japan Journal of Dental Science
 - b. New Zealand Dental Journal
 - c. Canada Journal of Dental Science
 - d. American Journal of Dental Science
8. The oral health unit of the WHO was established in
 - a. 1932
 - b. 1939
 - c. 1943
 - d. 1956
9. Where is the world's first training school for dental nurses situated?
 - a. New Zealand
 - b. Canada
 - c. USA
 - d. India