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The Need of Forensic Odontology in Dental Curriculum-The Student Perspective.

Thiru Kumaran[1], Dr.Gheena S[2]*, Dr. Abirami arthanari[3]

[1]Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai.

[2]Professor, Department of Oral Pathology Saveetha Dental College, Saveetha Institute of Medical and Technical Science Saveetha University, Chennai,India

[3]Department of forensic odontology, Saveetha Dental College, Saveetha Institute of Medical and Technical Science Saveetha University, Chennai,India

***Corresponding author**: Dr.Gheena S , Professor, Department of Oral Pathology Saveetha Dental College, Saveetha Institute of Medical and Technical Science Saveetha University, Chennai, India, Email: gheena@saveetha.com,

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ABSTRACT

Introduction: Forensic dentistry is a unique science dealing with the forensic technological know-how entailing the identification of deceased people through the assessment of ante- and autopsy records. From AD sixty six until date, dental identity has proved essential in figuring out deceased people, the primary case being normal with the aid of using the regulation withinside the 12 months 1849, currently forensic odontology has advanced as a brand new ray of wish in helping forensic remedy, however this essential and indispensable discipline of forensic remedy continues to be in a kingdom of infancy in India.

Aim: To know the importance of forensic odontology in dental curriculum.

Materials And Methods: The self-structured questionnaire was prepared to check the need of forensic odontology in dental curriculum. The questionnaire contained 10 questions. The sample size of this survey was 100. The filled responses were verified by two reviewers and the collected data was entered on the same day. The entered data was analysed using SPSS. Descriptive analysis was performed to calculate frequencies of categorical variables.

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Results: The association between gender and uses of oral cavity to obtain DNA was done using chi square test (Pearsons's Chi square test value : 0.304 ,DF value : 1 and p = 0.58 ; p> 0.05 which is found to be statistically not significant. In both genders there is a similar level of awareness.

Conclusion: Forensic medicine is a very important branch of the study of odontology that might assist in resolving cases of abuse and deaths. bigger information and awareness of rhetorical medicine among the dental practitioners would be needed within the growing field of drugs.

Keywords: *Forensic odontology, Innovation in dentistry, dental students, awareness, survey.*

INTRODUCTION

Forensic odontology is a subspecialty of dentistry that has at its crux the recognition of the identity of deceased persons[1,2]. Comparisons among postmortem findings and antemortem dental proofs had been proven to be the preeminent technique for identity in mass catastrophe situations. Forensic odontology brings understanding of orofacial structures, their variations among human beings of differing ancestry, and the consequences of dental treatment to the identity process[1–3]. Forensic odontology performs a key function in mass disaster victim Identification (DVI) when good antemortem (AM) dental records are available. Images along with radiographs, automated tomography (CT) information and 3-dimensional (3-D) experiment information are taken into consideration. Interpretation, transcription and evaluation of dental datasets are complicated strategies that ought to be undertaken by skilled dental professionals. The destiny of forensic odontology DVI strategies is probably to encompass the usage of 3-d datasets for evaluation. The essential responsibility of the forensic odontologist in a DVI operation is the establishment of identity of unknown deceased individuals[4,5]. This is accomplished with the aid of matching postmortem (PM) dental records of the deceased with the ante mortem records of suspects and might also require age estimation. It includes the constructing of a PM dental profile of the deceased with the aid of using dental exam which may also encompass bodily and radiographic exam of the enamel and paradental structures, computed tomography (CT) scanning and 3-dimensional (digital modelling. This PM profile is matched with an antemortem (AM) profile compiled from the dental facts of a lacking person, which may also encompass written remedy facts, images, 3 D datasets, casts of enamel or different dental objects that may assist individuate a person[6,7]. Forensic odontological evaluation is one of the 3 essential identifiers specified with the aid of using INTERPOL to be used in figuring out the sufferers of a multi-casualty incident. Its fantastic final results are taken into consideration enough to allow private identity without similarly guided methods from different methods[8–10].

MATERIALS AND METHODS

The self structured questionnaire was prepared to check the need of forensic odontology in dental curriculum. The questionnaire contained 10 questions. The sample size of this survey was 100. The questionnaire was reviewed and amendments were made to improve clarity of pertinent questions and eliminate ambiguous responses. The survey instrument was a structured questionnaire with both open and close ended questions. The participants did the survey voluntarily and no incentives were given to them. The study was approved by the institutional review board.

Informed consent from the participants were obtained. Only completely filled online forms were included in the study. The filled responses were verified by two reviewers and the collected data was entered on the same day. The entered data was analysed using SPSS. Descriptive analysis was performed to calculate frequencies of categorical variables.

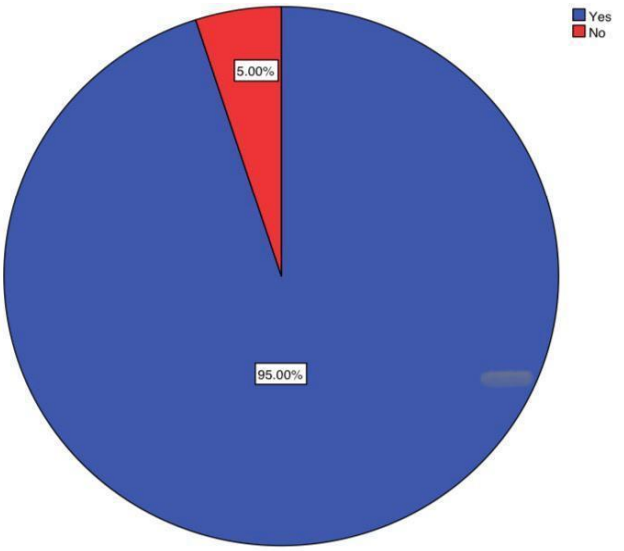

FIGURE 1: This pie chart shows the importance of forensic odontology in dental curriculum where 95% responded yes and 5% responded no.

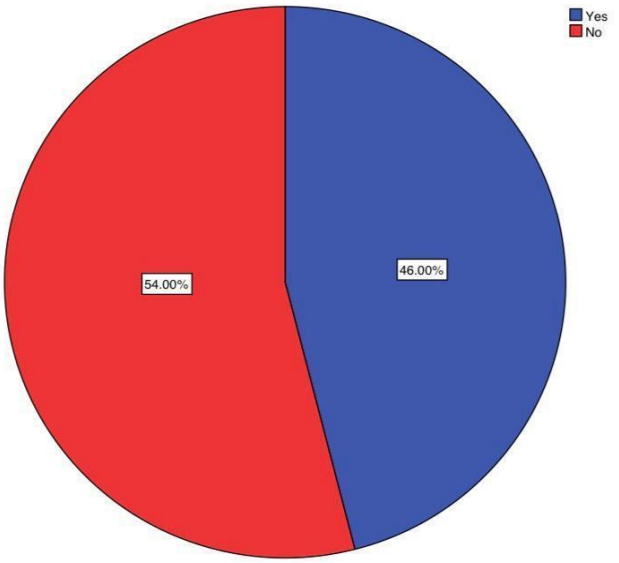

FIGURE 2: This pie chart shows the ideas of respondents about forensic odontology where 46% have ideas and 54% do not have any.

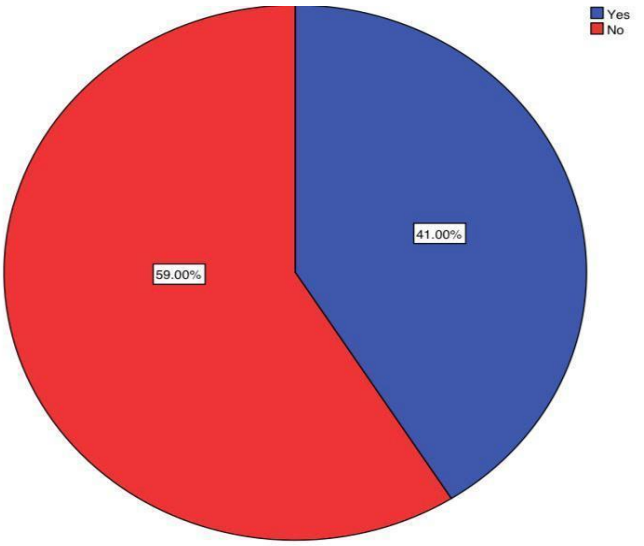

FIGURE 3: This pie chart shows the awareness of respondents on the importance of dentists in forensic odontology in which 41% were aware and 59% were not aware.

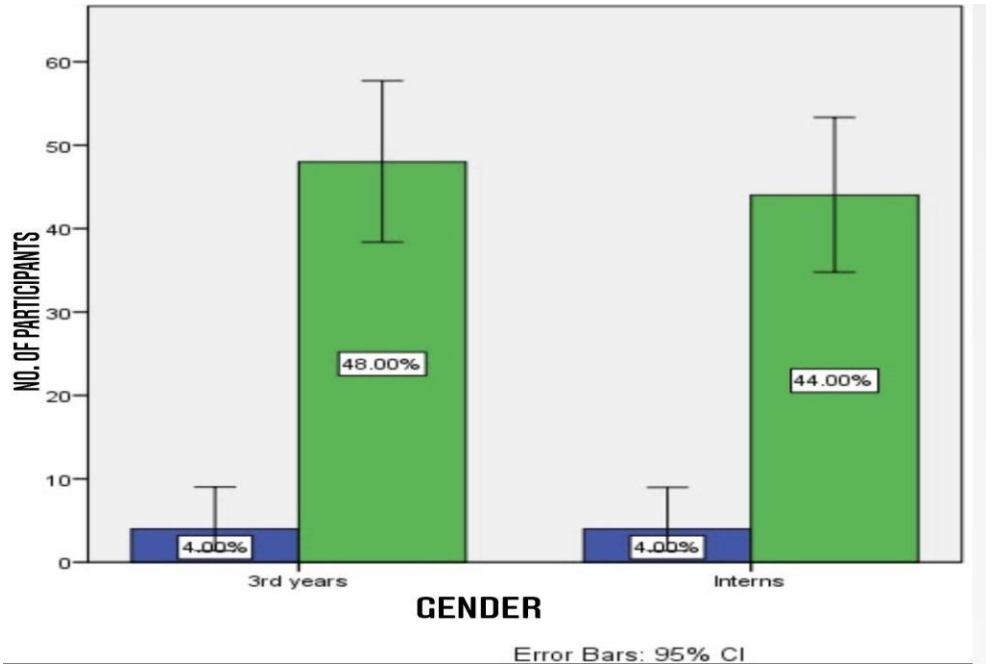

FIGURE 4: This graph represents the awareness about oral tissues which can yield DNA. X axis represents the gender and y axis represents the number of participants, green represents the people who answered yes and blue represents the people who answered no. The association between gender and uses of oral tissues to obtain DNA was done using chi square test . Pearsons's Chi square test value : 0.304 , df value = 1 and p = 0.58 ; p> 0.05 which is found to be statistically not significant though 3rd year undergraduates were more aware.

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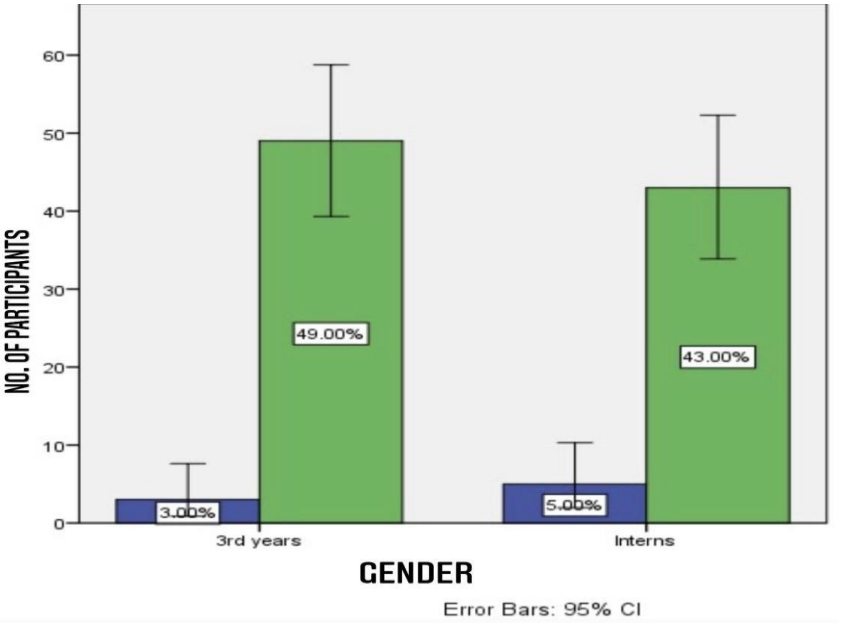

FIGURE 5: This graph represents the association between 3rdyear and intern dental students who have interest in studying forensic odontology and X axis represents the gender and y axis represents the number of participants , green represents the people who answered yes and blue represents the people who responded no. The association between 3rdyear and intern dental students was done using chi square test (Pearsons's Chi square test value : 0.407 , df value : 1 and p = 0.60 ; p< 0.05) which is found to be statistically insignificant though females more than males are interested in learning Forensic Odontology.

DISCUSSION

Forensic medicine is a very important branch of the study of odontology that might assist in resolving cases of abuse and deaths. bigger information and awareness of rhetorical medicine among the dental practitioners would be needed within the growing field of drugs. Teeth have tried to be a really useful adjunct in rhetorical odontology. They supply a large quantity of knowledge within the field of DVI, missing persons, unidentified persons, abuse, force, and age estimation. A good quantity of analysis is being done presently that would yield extraordinarily helpful leads in the long run. rhetorical odontologists study gross anatomy and interpret radiographs, pathology, dental materials, and biological process abnormalities to see identities of victims.As a result of teeth area units thus robust, odontologists will use them to spot the deceased even once the body has been destroyed.

Rhetorical medicine that's the branch medicine has established itself as a very important and indispensable service in medico legal matters toward the creation of a simple and secure society for the long run inhabitants.[11–17][18,19][20]

CONCLUSION

Forensic medicine is a very important branch of the study of odontology that might assist in resolving cases of abuse and deaths. The study pointed to the females desiring to learn Forensic Odontology more than males and having more awareness of the type of oral tissues to be examined for DNA yield whereas males were more aware of the importance of Forensic Odontology in crime finding. Its necessity in the Dental Curriculum is also emphasized.

AUTHOR CONTRIBUTIONS

Author 1 (Thirukumaran), carried out the study by collecting data and drafted the manuscript after performing the necessary statistical analysis. Author 2 Dr.Gheena.S aided in conception of the topic, has participated in the study design, statistical analysis and has supervised the preparation of the manuscript. All the authors have discussed the results among themselves and contributed to the final manuscript.

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CONFLICTS OF INTEREST

The authors declare that there were no conflicts of interest in the present study.

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