

Publication trends in the journal of forensic dental sciences 2009-2012

Thorakkal Shamim*

Department of Dentistry, Government Taluk Head Quarters Hospital, Malappuram, Kerala, India

ABSTRACT

Background and Objective: Forensic odontology is an emerging specialty of dentistry and there is a paucity of information about publication trends about forensic odontology specialty in India. Journal of forensic dental sciences (JFDS) is the official publication of the Indian Association of Forensic Odontology, which publishes articles related to forensic odontology. The main objective of the following study is to analyze the efficacy of JFDS as a mirror of Indian forensic odontology by evaluating the type of articles published, the article content showing the relationship of forensic odontology with various dental specialties and the authorship patterns in the published articles. **Materials and Methods:** Bibliometric analysis was carried out by Web-based search during the period of April 2013. This article audits the publication in the journal JFDS over a 4-year period (2009-2012). It assesses the types of articles published, the article content showing the relationship of forensic odontology with various dental specialties and explores the authorship patterns in the publication. **Results:** Out of the total 81 published articles, original articles (57) and review articles (14) contribute the major share. Regarding the relationship of forensic odontology with various dental specialties, the maximum numbers of published articles were related to oral medicine and radiology (30) followed by oral pathology and microbiology (16), prosthodontics (14) and orthodontics (10) and community dentistry (5). The largest numbers of published articles were received from Meenakshi Ammal Dental College and Hospital, Chennai, Tamil Nadu (7) followed by Subharti Dental College, Meerut, Uttar Pradesh (4), M. R. Ambedkar Dental College and Hospital, Bengaluru, Karnataka (3), Vishnu Dental College, Bhimavaram, Andhra Pradesh (3) and Modern Dental College and Research Center, Indore, Madhya Pradesh (3). **Conclusion:** The data pertaining to forensic odontology articles in JFDS may not reflect the overall forensic odontology research output from India.

Keywords: Dental specialties, forensic odontology, India, Journal of Forensic Dental Sciences, publication trends

INTRODUCTION

Forensic odontology is an emerging field of dentistry, which deals with the proper handling and examination of dental evidence and with the proper evaluation and presentation of dental findings in the interest of justice.^[1] As you know forensic odontology has grown immensely in India in recent years with the formation of The Indian

association of forensic odontology (IAFO) in 2002 at Chennai.^[2] Journal of forensic dental sciences (JFDS) is the official publication of the IAFO, which publishes articles related to forensic odontology. The JFDS has been online since 2009 and it publishes articles semiannually.

The main objective of this article is to analyze the efficacy of JFDS as a mirror of Indian forensic odontology by evaluating the type of articles published, the article content showing the relationship of forensic odontology with various dental specialties and the authorship patterns in the published articles. This paper hopes to sensitize all forensic medicine experts and dental fraternity throughout the globe to contribute articles related to forensic odontology to this journal since India is the only nation from where a journal solely related to forensic odontology is published till date.

*Address for correspondence:
E-mail: shamu3duad@gmail.com

Access this article online	
Quick Response Code:	Website: www.jscires.org
	DOI: 10.4103/2320-0057.129003

MATERIALS AND METHODS

A total of four volumes of JFDS from 2009 to 2012 were analyzed. This was available on the journal website (www.jfds.org). (Last accessed April 1, 2013). The articles published were analyzed for type of article (editorial, review article, original article, case report and short communication). The section on journal reviews and conference proceedings in JFDS were excluded from the study. The article contents were scrutinized based on its relation with other dental specialties. The contents of the published article were grouped into nine individual dental specialty articles based on the new working classification proposed for forensic odontology.^[3] The dental specialties considered were oral pathology and microbiology, oral medicine and radiology, oral and maxillofacial surgery, pedodontics, periodontics, conservative dentistry and endodontics, prosthodontics, orthodontics and finally community dentistry. The articles were also checked for authorship trends. The institution of the first author was taken as the inclusion criteria to record the authorship pattern.

RESULTS

Over 4 years, JFDS published eight issues, comprising four volumes. These issues include a total of 81 submissions, comprising 8 editorials, 14 review articles, 57 original articles, one case report and 1 short communication [Table 1]. The article contents were scrutinized based on the relationship of forensic odontology with other dental specialties [Table 2].

The maximum numbers of published articles were related to oral medicine and radiology (30) followed by oral pathology and microbiology (16), prosthodontics (14), orthodontics (10) and community dentistry (5).

The topics covered under oral pathology and microbiology include isotope study on teeth (editorial), deoxyribonucleic acid (DNA) profiling (3 review articles), identification using enamel rod endings (2 original articles), neonatal line in age estimation (original article), Oral pathologist in forensic odontology (original article), DNA profiling (2 original articles), translucency of dentin (original article), histological assessment of cellular changes in gingival epithelium (original article), cemental incremental lines (2 original articles), effect of acids on the teeth (original article) and sex determination using exfoliative cytology using acridine orange confocal microscopy (original article).

Table 1: Type of articles published in JFDS 2009-2012

Type of article	Volume 1	Volume 2	Volume 3	Volume 4	Total
Editorial	2	2	2	2	8
Review article	3	6	2	3	14
Original article	15	10	15	17	57
Case report	0	0	1	0	1
Short communication	1	0	0	0	1
Total	21	18	20	22	81

JFDS=Journal of Forensic Dental Sciences

The topics covered under oral medicine and radiology include dental identification (5 editorials), cheiloscopy (review article), identification (2 review articles), maintenance of dental records (review article), cheiloscopy (12 original articles), eruption and formation of mandibular third molar (3 original articles), maintenance of dental records (original article), dental identification (original article), Age estimation using radiographic method (2 original articles), secondary dentin formation (original article) and pulp/tooth area ratio of teeth (original article).

The topics covered under pedodontics include child abuse (review article) and Demirjian's method (original article). The topics covered under conservative dentistry and endodontics includes the effect of heat on restorative materials (2 original articles).

The topics covered under prosthodontics include dentures and prostheses and denture marking (3 review articles), palatal rugoscopy (9 original articles), bite mark analysis (original article) and denture marking (case report). The topics covered under orthodontics include cephalometrics (4 original articles) and sexual dimorphism (6 original articles).

The topics covered under community dentistry include dentist's role in mass disasters (editorial), bioterrorism as mass disaster (review article), dental fraud and malpractice (review article), elderly abuse (original article) and jurisprudence (short communication) and the topic, which is classified under miscellaneous section include forensic entomology (review article) and forensic odontology in India (editorial).

The articles were also checked for authorship trends according to the institution of the first author [Table 3].

The largest numbers of published articles were received from Meenakshi Ammal Dental College and Hospital, Chennai, Tamil Nadu (7) followed by Subharti Dental College, Meerut, Uttar Pradesh (4), M. R. Ambedkar

Table 2: The coverage of various dental specialties with forensic odontology in JFDS 2009-2012

Dental specialties	Editorial	Review article	Original article	Case report	Short communication	Total
Oral pathology and microbiology	1	3	12	0	0	16
Oral medicine and radiology	5	4	21	0	0	30
Oral and maxillofacial surgery	0	0	0	0	0	0
Pedodontics	0	1	1	0	0	2
Periodontics	0	0	0	0	0	0
Conservative dentistry and endodontics	0	0	2	0	0	2
Prosthodontics	0	3	10	1	0	14
Orthodontics	0	0	10	0	0	10
Community dentistry	1	2	1	0	1	5
Miscellaneous	1	1	0	0	0	2
Total	8	14	57	1	1	81

JFDS=Journal of Forensic Dental Sciences

Table 3: Institutions of first authors of JFDS 2009-2012

Institutions	Editorial article	Review article	Original article	Case report	Short communication	Total
Krupa Dental Clinic, Bengaluru, Karnataka	1	0	0	0	0	1
M. R. Ambedkar Dental College and Hospital, Bengaluru, Karnataka	0	0	3	0	0	3
KM Shah Dental College and Hospital, Vadodara, Gujarat	0	0	2	0	0	2
Dr. Syamala Reddy Dental College Hospital and Research Centre, Bengaluru, Karnataka	0	0	1	0	0	1
University of Delhi, Delhi	0	0	1	0	0	1
Genesis Institute of Dental Sciences and Research, Ferozpur, Punjab	0	0	1	0	0	1
K. D. Dental College and Hospital, Mathura, Uttar Pradesh	0	0	1	0	0	1
Government Medical College, Nagpur, Maharashtra	0	0	1	0	0	1
Krishna School of Dental Sciences, Satara, Maharashtra	0	1	0	0	0	1
Inderprastha Dental College and Hospital, Sahibabad, Uttar Pradesh	0	2	0	0	0	2
Yenepoya Dental College, Mangalore, Karnataka	0	1	0	0	0	1
Forensics International, Bengaluru, Karnataka	1	0	0	0	0	1
Pacific Dental College and Hospital, Udaipur, Rajasthan	0	0	1	0	0	1
Vishnu Dental College, Bhimavaram, Andhra Pradesh	0	0	3	0	0	3
Meenakshi Ammal Dental College and Hospital, Chennai, Tamil Nadu	2	1	4	0	0	7
Bapuji Dental College and Hospital, Davanagere, Karnataka	0	0	2	0	0	2
D. J. College of Dental Sciences and Research, Ghaziabad, Uttar Pradesh	0	0	1	0	0	1
M.M. College of Dental Sciences and Research, Mullana-Ambala, Haryana	0	0	1	0	0	1
Sree Mookambika Institute of Dental Sciences, Kulashekham, Tamil Nadu	0	1	0	0	0	1
Rural Dental College, Loni, Maharashtra	0	0	1	1	0	2
Manipal University, Manipal, Karnataka	1	0	0	0	0	1
Amrita School of Dentistry, Kochi, Kerala	0	0	1	0	0	1
ITS Dental college, Muradnagar, Uttar Pradesh	0	0	1	0	0	1
A.B. Shetty Memorial Institute of Dental Sciences, Mangalore, Karnataka	0	0	1	0	0	1
G. Pullareddy Dental College, Kurnool, Andhra Pradesh	0	0	1	0	0	1
Peoples College of Dental Sciences and Research Centre, Bhopal, Madhya Pradesh	0	0	1	0	0	1
Sri Venkateswara Dental College and Hospital, Chennai, Tamil Nadu	0	2	0	0	0	2
Malabar Dental College and Research Centre, Edappal, Kerala	0	0	1	0	0	1
Subharti Dental College, Meerut, Uttar Pradesh	0	1	3	0	0	4
Jaipur Dental College, Jaipur, Rajasthan	0	1	0	0	0	1
M.G.V's K.B.H Dental College and Hospital, Nasik, Maharashtra	0	1	1	0	0	2
Saveetha Dental College, Chennai, Tamil Nadu	1	0	0	0	0	1
Modern Dental College and Research Center, Indore, Madhya Pradesh	0	0	3	0	0	3
Government Dental College and Hospital, Jaipur, Rajasthan	0	0	1	0	0	1

Contd...

Table 3: Contd...

Institutions	Editorial article	Review article	Original article	Case report	Short communication	Total
H.P. Government Dental College and Hospital, Shimla, Himachal Pradesh	0	0	1	0	0	1
Kothiwal Dental College and Research Centre, Moradabad, Uttar Pradesh	0	0	1	0	0	1
K.V.G. Dental College, Sullia, Karnataka	0	1	0	0	0	1
S.D.M. College of Dental Sciences and Hospital, Dharwad, Karnataka	1	1	0	0	0	2
Sharad Pawar Dental College and Hospital, Wardha, Maharashtra	0	0	1	0	0	1
AECS Maruti College of Dental Sciences and Research Centre, Bangalore, Karnataka	0	0	1	0	0	1
National University of Cordoba, Cordoba, Argentina	0	0	1	0	0	1
Government Dental College, Mumbai, Maharashtra	0	0	1	0	0	1
JSS Dental College and Hospital, Mysore, Karnataka	0	0	1	0	0	1
Darshan Dental College and Hospital, Udaipur, Rajasthan	0	0	1	0	0	1
Medico Legal Expert and Legal Advisor, Maruti Galli, Belgaum, Karnataka	0	0	0	0	1	1
Manipal College of Dental Sciences, Mangalore, Karnataka	0	0	1	0	0	1
Rama Dental College, Hospital and Research Centre, Kanpur, Uttar Pradesh	0	0	1	0	0	1
Dental Anthropology and Forensic Dentistry Research Line of the Dentistry School, University of Valle, Colombia	0	0	1	0	0	1
Sri Ramachandra Dental College, Chennai, Tamil Nadu	0	1	0	0	0	1
Tagore Dental College and Hospital, Chennai, Tamilnadu	1	0	0	0	0	1
Division of Oral Radiology-oral Diagnosis, College of Dentistry, King Khalid University, Abha, Saudi Arabia	0	0	1	0	0	1
Kamineni Institute of Dental Sciences, Narketpally, Nalgonda, Andhra Pradesh	0	0	1	0	0	1
Teerthankar Mahaveer Dental College and Research Centre, Moradabad, Uttar Pradesh	0	0	1	0	0	1
K.S.R. Institute of Dental Science and Research, Lucknow, Uttar Pradesh	0	0	1	0	0	1
VSPM Dental College and Research Centre, Nagpur, Maharashtra	0	0	1	0	0	1
Indira Gandhi Institute of Dental Sciences, Pondicherry, Tamil Nadu	0	0	1	0	0	1
Biological Anthropology Department, Medical Research Division, National Research Centre, Egypt	0	0	1	0	0	1
Navodaya Dental College, Raichur, Karnataka	0	0	1	0	0	1
Sardar Patel Post Graduate Institute of Dental and Medical Sciences, Lucknow, Uttar Pradesh	0	0	1	0	0	1

JFDS=Journal of Forensic Dental Sciences

Dental College and Hospital, Bengaluru, Karnataka (3), Vishnu Dental College, Bhimavaram, Andhra Pradesh (3) and Modern Dental College and Research Center, Indore, Madhya Pradesh (3).

DISCUSSION AND CONCLUSION

There is a paucity of information about publication trends about forensic odontology specialty in India. From this study, it was interpreted that original articles take a major share of published articles and this is a good indicator that they are considered to be the backbone of the dental research. Review articles form the second major share and the editorial board should select the key experts to write a review article only if he or she has written an original research article on the same topic. Short communications and case reports form the minor share of the articles and the editorial board should publish the articles, which are conveying an important message and articles, which

need immediate publication should be included in short communication.

The contents of the published article were grouped into nine individual dental specialty articles based on the new working classification proposed for forensic odontology.^[3] Regarding the relationship of forensic odontology with various dental specialties, the maximum numbers of published articles were related to oral medicine and radiology (30) followed by oral pathology and microbiology (16), prosthodontics (14), orthodontics (10) and community dentistry (5). The two dental specialties such as oral and maxillofacial surgery and periodontics were untouched over 4 years publication. Under periodontics specialty, the editorial board should include articles about age estimation using periodontosis (gum recession), root transparency and root length and identification using gingival morphology and pathology and thickness and widening of the periodontal ligament and pathology and

status of alveolar bone.^[3] Under oral and maxillofacial surgery specialty, the editorial board should include articles about identification from maxillomandibular and dentoalveolar fractures and surgical repairs and implants.^[3] Among original articles, cheiloscopy (12) followed by palatal rugoscopy (9), sexual dimorphism (6) and cephalometrics (4) form the major attraction of the contributors. This paper also tried to evaluate the new working classification proposed for forensic odontology based on its relationship with other dental specialties.

Regarding the authorship trends, the largest number of published articles was received from Meenakshi Ammal Dental College and Hospital, Chennai, Tamil Nadu (7) followed by Subharti Dental College, Meerut, Uttar Pradesh (4), M. R. Ambedkar Dental College and Hospital, Bengaluru, Karnataka (3), Vishnu Dental College, Bhimavaram, Andhra Pradesh (3) and Modern Dental College and Research Center, Indore, Madhya Pradesh (3). There were only four contributions from outside India, i.e., from Colombia, Argentina, Saudi Arabia and Egypt.

The Editorial board has to take steps to release the issues of the journal in stipulated time. In order to facilitate good articles and attract authors around the globe, JFDS should be shifted from semiannual publication to quarterly publication. It is also time to think about the formation of a new council for dental research i.e., Indian council of dental research under the auspices of Indian Council of Medical Research. The IAFO should come under this apex council. This council should bear the charges for submission,

processing or publication of articles. The journal should not charge for submission, processing or publication of manuscripts and even for color reproduction of photographs. The articles from Indian perspective should be included such as identification from endemic fluorosis and identification from different classes of socio-economic grouping such as dental caries, periodontal disease, oral cancer and the type and the design of the dental filling. The editorial board of JFDS has to be congratulated to get indexed in major databases such as PubMed, PubMed Central and Scopus.

The main limitation of this study is the data pertaining to forensic odontology articles in JFDS may not reflect the overall forensic odontology research output from India. To sum up, this paper hopes to sensitize all forensic medicine experts and dental fraternity throughout the globe to contribute articles related to forensic odontology to this journal published from India.

REFERENCES

1. Shamim T. Forensic odontology. *J Coll Physicians Surg Pak* 2012;22:240-5.
2. Acharya AB. A decade of forensic odontology in India. *J Forensic Dent Sci* 2010;2:1.
3. Shamim T. A new working classification proposed for forensic odontology. *J Coll Physicians Surg Pak* 2011;21:59.

How to cite this article: Shamim T. Publication trends in the journal of forensic dental sciences 2009-2012. *J Sci Res* 2013;2:152-6.

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