

# An Analysis of Posters Presented at an Annual Anaesthesiology State Conference

Dipali Anand Taggars<sup>1</sup>, Arun Kumar Ajjappa<sup>2</sup>, Sapthami Gowda S<sup>3</sup>, Shashikala P<sup>4</sup>

<sup>1,3</sup>Postgraduate, <sup>2</sup>Professor and Head, Department of Anaesthesiology, Critical Care and Pain Medicine

<sup>4</sup>Professor and Head, Department of Pathology,

SS Institute of Medical Sciences and Research Centre, Davangere, Karnataka

[Received: 12/04/2015, Revised: 17/05/2015, Accepted: 19/05/2015]

## Abstract :

**Introduction :** Scientific posters are rapidly gaining popularity as a method of presenting scientific findings in a concise manner at meetings and conferences. The new university curriculum has made it mandatory for all postgraduates to present posters. We aim to analyze types of posters being presented by anaesthesiologists and postgraduate residents at conferences.

**Methodology :** This study analyzed 118 posters presented at the 30<sup>th</sup> Annual Karnataka State Conference of the Indian Society of Anaesthesiologists (KISACON). Gender composition of the presenters was analyzed. The type of institute was classified as Private Hospital, Government Medical College and Private/Aided Medical College. The studies were divided into three types: Rare case, Challenging case, New/Modified technique and Comparative

**Results :** Of the presenters, 53% were male and 47% were female. 93% of posters were from private medical colleges compared to 6% from government medical colleges and 1% from private hospitals. Of the 118 posters, 55 (47%) were classified as challenging, 51 (43%) as rare, 9 (8%) as modified technique and 3 (2%) as comparative.

**Conclusion :** We conclude that a majority of posters submitted to the conference were case reports: the lowest class of evidence-based research. It highlights a need to encourage more investigative research, especially among the younger generation of Anaesthesiologists.

**Keywords :** Anaesthesiology conference, Medium of education, Poster analysis, Scientific communication

## Introduction :

Scientific posters are rapidly gaining popularity as a method of presenting scientific findings in a concise manner at meetings and conferences. They are a prevalent means of scientific communication. They form a hybrid of a speech and a paper as they are more detailed than a speech and stimulate more interaction than either. The emphasis is driven by the presenter in a speech. However, in a poster, the viewer drives the focus.<sup>1</sup>

A poster enables interested peers to grasp research in one's absence, simply by reading the poster. It is a means of sharing experiences and communicating succinctly within the scientific community. It retains the interest of the reader while conveying the entire message. It promotes active student discussions and enables their interaction with experienced faculty which can all lead to further research, encourage future collaborations and

valuable insight regarding the subject matter.<sup>1</sup> A poster is an interactive medium of education.

So far we have looked at the positive aspect of poster presentations. But we have to ask this question – How many of us attend the poster presentations at these conferences? Studies have questioned the merit of posters presented at these academic sessions.<sup>2</sup>

The new university curriculum has made it mandatory for all postgraduates to present posters. Apart from fulfilling this objective, posters give students an idea on how to effectively communicate their ideas. What kind of subjects are anaesthesiology residents choosing to present as posters? That is what we aim to analyze.

## Aim :

To analyze the type of posters submitted for a state conference by postgraduate students and practitioners in Anaesthesiology.

## Correspondence:

Dr. Dipali Anand Taggars

PG Resident, Dept. of Anaesthesiology,  
SSIMS & RC, Davangere, Karnataka, India.  
Email: dipalitagg@gmail.com Mob. : 9902586487

Access this article online

Website : [www.jermt.org](http://www.jermt.org)

Quick  
Response  
Code :



### Objectives :

1. To categorize the posters based on the sex of presenter, type of poster and thus, analyze the posters submitted to a state anaesthesiology conference
2. To analyze the distribution of poster submission from various institutes categorized as: Private Hospital, Private Medical College and Government Medical College

### Methodology :

We analyzed the abstracts of 118 posters presented at the 30<sup>th</sup> Annual Karnataka State Conference of The Indian Society of Anaesthesiologists conducted at SDM College of Medical Sciences and Hospital, Dharwad in October 2014. We classified them based on sex of presenter, type of institute and type of study. The abstracts were extracted from the Souvenir booklet published by KISACON, which included all the posters and oral presentations made at the conference.

The type of institute was classified as Private Hospital, Government Medical Institute and Private/Aided Medical Institute. We divided the posters into four types: Rare case, Challenging case, New/Modified technique and Comparative.

We realized there would be a considerable overlap between Rare and Challenging, making the division quite subjective. A case was first judged to be rare or not, based on the primary pathology being dealt with and discussed. A rare case was defined as one with a known prevalence of less than 1 per 1000 people.<sup>3</sup> If the subject matter was commonplace, but the accompanying situation was unique, or the complete scenario made it tricky, it was classified as challenging. We conducted literature searches on Google scholar and Pubmed to determine the prevalence of the various diseases described and classified them accordingly. If two treatment modalities or drugs were being compared, the case was labeled as comparative. If the surgery had been performed with an unconventional technique, it was called new/modified technique.

### Results :

118 poster titles submitted to KISACON 2014 were analyzed. Of the 118 presenters, 53% were male and 47% were female (Fig. 1).

There was a remarkable difference in the institute-based analysis (Fig. 2). 93% of posters were from Private Medical Institutes compared to 6% from Government Medical Institutes and 1% from Private Hospitals.

Of the 118 posters, 55 (47%) were classified as challenging, 51 (43%) as rare, 9 (8%) as modified

technique and 3(2%) as comparative. The students presented majority of case reports (97%) or case series. (Fig. 3)

### Discussion :

Research is vital in the practice of medicine to ensure its continued development. It is essential to discover new therapies by uncovering evidence, stimulate further research, answer unanswered questions, while generating new ones, all of which improve our understanding of the human body and aid in improvement of patient care.

Research findings can be disseminated in the scientific community through ways such as publication or presentation at scientific forums. Presentation can be either in poster or oral format. It endeavors to disseminate information rapidly to a large number of professionals while stimulating discussions and encouraging the younger researchers. It is considered a principal link between execution of a research project and publication of the completed work.<sup>4</sup>

Poster sessions, in particular, are an increasingly important part of scientific conferences and constitute a valid and interesting alternative to paper presentations at conferences. They facilitate informal discussions between authors and the audience and enable an intimate exchange of knowledge and discussion.<sup>5</sup>

A lot of subject matter is available regarding the nuances of poster-making<sup>1</sup>; however, an analysis of the kinds of subjects chosen has not been undertaken. Hence, we have attempted to do the same.

Our analysis revealed that 53% of the posters were presented by male students compared to 47% by female.

Of the posters, 93% were from private medical colleges, 6% were from government medical colleges and 1% from private hospitals. The limited participation from private hospitals and institutes with DNB courses is a glaring finding in our analysis. The increased private college contribution can be attributed to the increased number of private medical colleges as compared to government medical colleges in Karnataka from where most of the posters have been submitted.

Our analysis of the type of research being presented as posters revealed that 98% were case reports and 2% were comparative studies. A lot of has been discussed regarding the advantages and disadvantages of a poster session. Studies have tried to explore perceptions of the academic poster as a medium for knowledge transfer.<sup>6</sup> Some studies have shown that authors believe them to be a good medium and a valid form of academic knowledge exchange.<sup>6,7,8</sup> Those for the posters, found them to be

more interactive by facilitating direct two-way exchange of ideas.<sup>9</sup> Salzl et al demonstrated that despite low attendance to poster sessions, they gave a valuable platform to young researchers to present their scientific work.<sup>10</sup> On the other hand, Goodhand JR et al demonstrated that <5% delegates visited posters. It was discovered that only a minority of those visiting the posters read them, and fewer asked questions. There was also extremely poor recall of content.<sup>2</sup> An analysis of our data shows that presenters predominantly choose case reports to present as posters. Comparative studies are presented as papers. Case reports are at lower level in evidence based medicine compared to comparative studies. The decreased number of comparative studies and original articles being presented as posters may reflect the perception that they are not as widely discussed in conferences as papers, thus limiting exposure.

Of the case reports, which were the predominant form of scientific writing presented as posters in the academic gathering being discussed; majority were challenging cases (47%) followed by rare cases (43%). Only 8% discussed any new or modified technique, thus, emphasizing the need for more innovation especially among the student population.

A challenging case is subjectively based depending on the facilities available at the institute and the previous exposure to cases of a similar nature. Rare is a more objective term which we were able to define. Looking at the nature of the disease, we were able to classify them as rare or not. Sharma A et al state that a rare disease is one with the disease manifestation in patient populations representing at the maximum 6 – 8% of the world population. As per US laws, rare diseases affect less than 1 every 2000 people. Japan's definition of rare is a disease with prevalence less than 50000. India still has to conclusively come up with a definition.<sup>11</sup> In our study, we have defined a rare disease as one affecting less than 1 per 1000 population.<sup>3</sup>

The limitation in our study is the official definition of a rare disease which still needs to be established in the Indian scenario. As the search for the prevalence was carried out manually, there is a chance of human error.

**Conclusion :**

We conclude that a majority of posters submitted to the conference were case reports which are now considered the lowest class of evidence-based research<sup>4</sup>. Of these, majority were challenging and rare case reports, with a small fraction presenting any new or modified techniques. Only 2% were comparative studies. It

highlights a need to encourage more investigative research, especially among the younger generation of Anaesthesiologists, which will also make their work more likely to be published than case reports.<sup>4</sup> This may also reflect the reservation amongst the medical community regarding the relevance of posters as a medium of sharing research findings. There was nearly equal representation of both sexes. There was minimal contribution from the private hospitals.

**References :**

1. Miller JE. Preparing and Presenting Effective Research Posters. Health Serve Res. 2007; 42: 311 - 28.
2. Goodhand JR, Giles CL, Wahed M, Irving PM, Langmead L, Rampton DS. Poster presentations at medical conferences: an effective way of dissemination research? Clin Med. 2011; 11 (2): 138–41
3. www.rarediseasesindia.org
4. Tyagi A, Chugh V, Kumar S, Sethi AK. Presentation of research in anaesthesia: culmination into publication? J Anaesthesiol Clin Pharmacol. 2013; 29: 216–20
5. D'Angelo L. Creating a Framework for the Analysis of Academic Posters. Language Studies Working Papers. 2010; 2: 38 - 50
6. Rowe N, Ilic D. What impact do posters have on academic knowledge transfer? A pilot survey on author attitudes and experiences. BMC Med Educ. 2009;9:71
7. Ilic D, Rowe N. What is the evidence that poster presentations are effective in promoting knowledge transfer? A state of the art review. Health Info Libr J. 2013; 30(1): 4-12
8. Arslan D, Koca T, Tastekin D, Basaran H, Bozcuk H. Impact of poster presentations on academic knowledge transfer from the oncologist perspective in Turkey. Asian Pac J Cancer Prev. 2014;15:7707-11
9. Maugh TH. Poster sessions: a new look at scientific meetings. Science 1974;184:1361
10. Salzl G, Golder S, Timmer A et al. Poster exhibitions at national conferences: education or farce? Dtsch Arztebl Int 2008;105:78–83
11. Sharma A, Jacob A, Tandon M, Kumar D. Orphan drug: Development trends and strategies. J Pharm Bioallied Sci. 2010; 2(4): 290–99

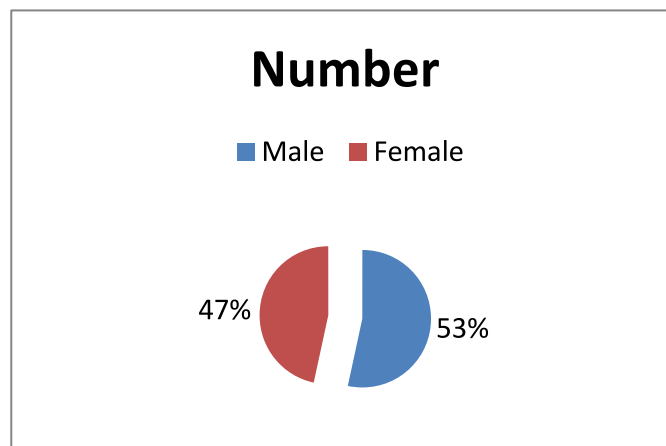


Fig. 1 Gender composition of presenters in the group

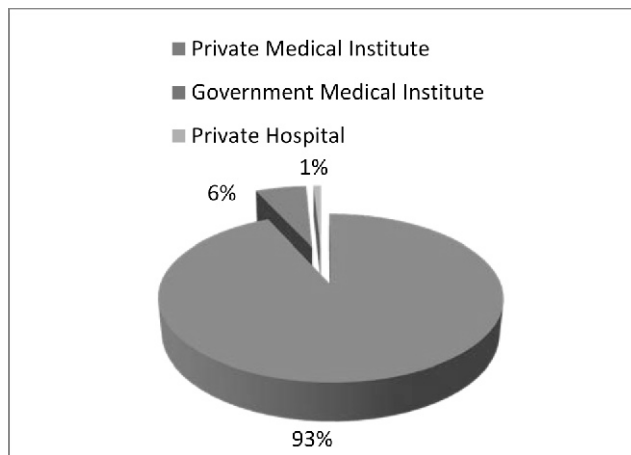


Fig. 2 Types of Institutions represented at the poster sessions

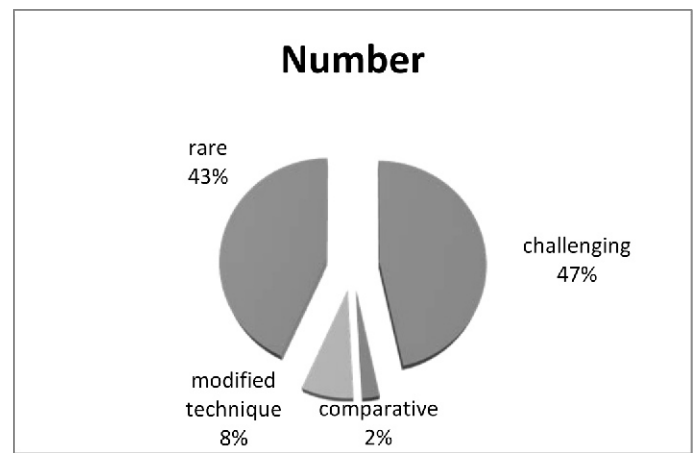


Fig. 3 Distribution of posters based on their type

How to Cite this article :

Taggarsi D.A, Ajjappa A.K, Gowda S.S, Shashikala P, An Analysis of Posters Presented at an Annual Anaesthesiology State Conference. J Educational Res & Med Teach 2015;3(1):24-7.

Funding: Declared none Conflict of interest: Declared none