

## **286577 - THE IMPACT OF SOCIAL MEDIA ON PEDIATRIC ANESTHESIA PAPERS AND BIBLIOMETRY**

Author(s)

Maria Salman

Sickkids

Presenting Author

Co-Authors(s)

Clyde Matava - Hospital for Sick Children

### Background:

The use of social media has become prevalent in both contemporary and scientific communities. Alternative metrics (altmetrics) allow for the evaluation of the impact generated by academic papers, and can be measured by the aggregate Altmetric Score (ALTScore). Altmetric score is a novel aggregate of various social media mention indices. The purpose of this study was to examine the characteristics of the 100 highest ALTScore papers in pediatric anesthesiology and to evaluate the correlation with citations.

### Methods:

This study was exempt from Ethics Approval. A database study was performed in May 2016 utilizing the Altmetric Explorer tool (Altmetric.com) that included articles in anesthesia and pain medicine focusing on pediatric anesthesia. A supplemental search was conducted with other major journals such as The Lancet, and New England Journal of Medicine specifically looking for pediatric anesthesia papers. For the top 100 ALTScore papers, altmetrics and Scopus citation data were collected. Correlation coefficients between variables were determined and statistical significance was calculated. Abstracts were read to identify key themes present.

### Results

ALTScores were highly correlated with Twitter mentions ( $r=0.81$ ) but were not highly correlated with other social media metrics, citations, or access counts. Theme analyses identified original articles and case reports as being highly mentioned. The most popular topics included neurotoxicity, methods of sedation, and chronic pain. There was a strong association between mention on Mendeley with citation ( $r=0.71$ ;  $p=0.02$ ). Twitter mentions were not associated with citations.

### Conclusion

Our study demonstrates the characteristics of highly mentioned pediatric anesthesia papers. They focus on controversial and challenging topics. Academic based social media such Mendeley appears to influence citation while Twitter does not. Further research on translation of information shared on social media into clinical practice and patient outcomes is needed.

### **References:**

[Clin Obstet Gynecol. 2013 Sep; 56\(3\):](#)

[10.1097/GRF.0b013e318297dc38](#). doi: [10.1097/GRF.0b013e318297dc38](#)