

Opioid Abuse Epidemic: Contrasting Publication Trends in Popular and Scientific Literature for Public Education

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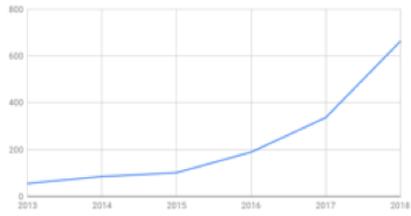
Background: Public consciousness of the health crises related to opioid abuse and misuse has been notably increased in recent years. This can be directly traced to startling statistics that demonstrated dramatic increases in opioid related use and fatalities. The CDC and NIH have made raising public awareness of opioid overdose epidemic an issue of great importance and hope that through education, opioid related harm may be decreased. What is unclear is the role that the popular press versus scientific literature plays in recognizing and relaying these dangers to the general public. In an effort to understand publication trends related to opioid abuse, this study aimed to compare and contrast publication trends in the popular press and scientific literature.

Methods: This study did not involve the collection of patient data and therefore no IRB approval was obtained. Publication data from 2013 - 2018 was collected from Pubmed and Texture (an app with access to over 200 magazines). Popularity on Google Trends was also evaluated as an indicator for public awareness. Search terms included opioid epidemic, opioid crisis, and opioid overdose.

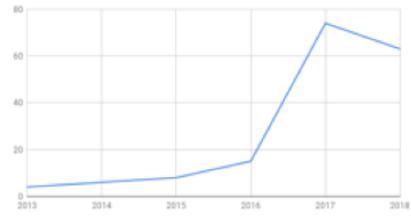
Results: An evaluation of the graphical data reveals that the number of publications focusing on the studied search terms on Pubmed significantly increased in 2016. There continued to be an exponential increase in 2017 and 2018. The number of publications in magazines increased in 2016 and 2017 but plateaued or slightly decreased in 2018. The search popularity on Google Trends was virtually non-existent prior to 2016, increased from 2016 through 2017, then the increase slowed down in 2018.

Conclusion: We observed a strong correlation between the timing and increased coverage of opioid related search terms in the scientific literature and popular magazines. Of note, these increases appear to have occurred simultaneously and it is unclear if interest in one publication format stimulated an increased interest in others. Further data analysis of cause and effect is warranted, but we feel strongly that this is a beneficial area for future research. For example, evaluation of Google Trends data may provide a mechanism to evaluate what topics are of greatest importance to our patients. Our aim for the next study is to identify the timeline for scientific findings to reach public awareness and analyze methods for possible acceleration of vital information transfer from early awareness within academia into public consciousness.

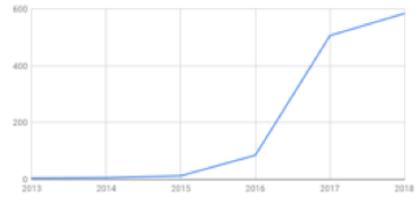
Opioid Epidemic - Pubmed (Number of publications 2013-2018)



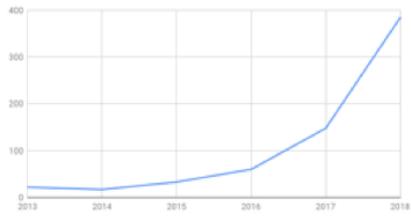
Opioid Epidemic - Texture (Number of publication 2013 - 2018)



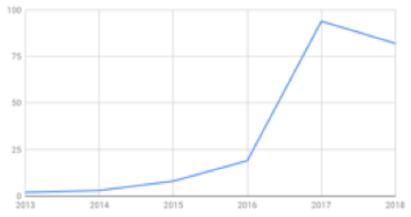
Opioid Epidemic - Google Trends (Relative interest score 2013-2018)



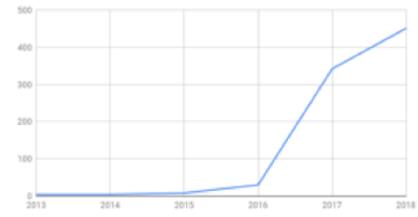
Opioid Crisis - Pubmed



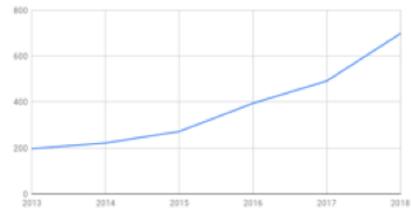
Opioid Crisis - Texture



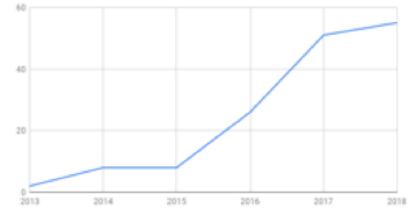
Opioid Crisis - Google Trends



Opioid Overdose - Pubmed



Opioid Overdose - Texture



Opioid Overdose - Google Trends

