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Editorial

Attract readers with a graphical abstract – The latest clickbait

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ABSTRACT

Graphical abstract (GA) is the pictorial presentation of key findings of the manuscript which make the readers and viewers understand the highlights of the manuscript. The adoption of GA in the journal improves manuscript's visibility and journal's citations in the subsequent years. There are various challenges faced by the author and editorial team to incorporate GA in the journal. Infographics play a major role as a resource for creating an effective GA. The GA helps in promoting and propagating scientific research among scholarly peers in the community for inter-country collaborations through various social media.

Graphical abstract (GA) is the summary of an article's key or significant findings that are to be published pictorially.[1] Social platforms like Twitter, Instagram, and LinkedIn help in disseminating the research data, and engage or collaborate among peers in the community for initiating further research.[1] A research report states that 20 words of plain text take nearly 6 seconds to read whereas visual icons take almost 1/4th of a second to understand the content of the area of interest[2] and hence the GA are easier to comprehend to most readers.

The structure of GA contains 4 potential areas namely A - Title; B – Methods; C – Results; and D – Conclusion as depicted in Fig. 1. The author, journal name, and logo must be presented in the lower part of the GA. GA is presented by visual icons in single, dual, or multi-colored ones. With such colored icons, the readers may read and assimilate the knowledge about the article's key findings and provide a platform for broader readership among scholarly personnel.

An effective GA must provide clarity of purpose, rapid prototyping, imperative and thoughtful restraint, and relevant creativity in presenting the article's findings in a nutshell. Ibrahim et al. have laid down the criteria and topography for creating GA for promoting research data. With the provided guidelines by the journal, the author's team is supposed to prepare the GA with excellent relevancy and creativity. They identified the resources for creating GA with infographics and icons. Globally, more than 50 leading journals have adopted GA in their respective journals for promoting research and its findings. While disseminating via social platforms, researchers observed a significant increase in the visibility and number of citations of the article.[3]

A debate on GA adoption arises with a) GA creation by either author or editorial team, b) guidelines for GA creation, c) a reviewer panel for GA, and d) who, how, and where GA will be disseminated among the community. If the adopting journal provides answers to the above debate, then the journal can publish a good quality GA with manuscript integrity. Hence GA is not an alternative for the whole manuscript, but helps in the journal's appraisal among the peer-reviewed journals, improves the journal metrics significantly, and augments more research collaborators among their peers. A temporal association exists between the GA and the research dissemination on social media platforms.[4–6]

The limitations of GA are a) misinterpretation of research results due to oversimplification of the research contents, b) salami slicing of research when outsourced for creating GA by a third party, c) non-readability of the whole manuscript, d) quality control of GA and e) availability of adequate space in the GA. The fallacies can be overcome by a) ideating a better social platform for disseminating research, b) GA creation team on the editorial board, c) infographics training, d) maintaining a GA repository, e) GA indexing databases, and f) GA presentation as a poster in the conferences, symposiums, and academic gatherings. An overview of merits and de-merits of GA is tabulated in Table 1. The following approach is recommended to create an effective GRAPHIC Abstract:

- G – Get to know your audience
- R – Restrict the use of colors
- A – Align elements
- P – Prioritize parts
- H – Highlight the heading
- I – Invest in imagery
- C – Choose charts carefully

The GA has become an innovative, visuo-graphic tool for disseminating scientific research. Journals need to adopt individual policy guidelines for the smooth assimilation of mandating GA in the article for propagating research data. It is also crucial that the quality and integrity of GA are maintained for a correct and hassle-free understanding of the research data of an article.

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Fig. 1. Schematic presentation of areas of Graphical Abstract.

Table 1
Overview of merits and de-merits of a Graphical Abstract.

Merits of a Graphical Abstract	De-merits of a Graphical Abstract
• Visual presentation of key findings of the article • Propagation over social media platforms • Increase of citations of the article • Global collaboration with scholarly peers	• Non-readability of whole manuscript • Mis-interpretation of oversimplified results • Space limitation • Salami slicing of research data when outsourced for creating Graphical Abstract • Quality control of Graphical Abstract

Conflicts of interests

The authors are the editorial board members of the Journal of Orthopaedics.

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