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# **Graphical abstracts in Forensic Sciences – science** communication and literacy

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#### **Abstract**

Background: Scientific digital communication presents a diversity of add-on summaries to verbal abstracts [1]. Among these native HTML and PDF publications, Graphical Abstracts (GAs) are possibly the oldest [2] and are prevalent in chemistry, medicine, and biology [3]. Even so, some biomedical sub-areas seem to resist to the use of GAs, including the Forensic area. Objective: Review the frequency of GAs in scientific forensics journals and alert for the importance of at least optional GA presentation. Methods: A search of scientific literature was done using Pubmed and ScienceDirect looking for: "graphical abstract", "forensic" and "forensic science", and analyzing major journals assessing the prevalence of GA: mandatory; optional; specific image; the first image of the paper; only online or in the pdf. Results: According to the h5-index, eight publishers are responsible for publishing the 20 most important Forensic Sciences journals. GAs are optional in 30% (n=6) and mandatory in 5% (n=1), some use the first image as GA. In Elsevier, Oxford Academy and MDPI journals, GAs are mandatory or optional. Guidelines for GA elaboration are usually brief, and Elsevier presents more detailed guidelines. Bentham Science asks for animated video abstract (as a complement to GA), the most complex format to be produced. Conclusions: The reduced adherence of important publishers to GAs may be related to I) idiosyncrasies from forensic areas which can make GAs unattractive; II) resistance to digital genres [4,5]; III) being seen by others as means of trivializing and simplifying technical knowledge [6,7]. Furthermore, for some researchers, GA construction is time-consuming and a waste of time. We can deduce also that a lack of literacy is a possible factor. It is essential to focus on critical digital literacy strategies to prepare students and researchers to produce high-quality multimodal genres with diverse digital tools without losing scientific quality.

Keywords: forensic sciences; graphical abstract; critical digital literacy; science communication

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