Christopher Torres

Professor Rinehart-Kim

BIOL 294

September 7th 2022

Primary/Review Articles and The Peer-Review Process

With the ever-increasing amount of information on the internet, it can be very hard to recognize when information in articles can be trustworthy or not. However, not all sources contain false information, two examples of trustworthy research articles include: Primary and Secondary articles. Primary articles are original researched reports that describe any new scientific findings in a given subject. Near the time of publishing, primary articles are also peer-reviewed by other officials to make sure there is no false information. When reading this type of work, you can expect there to be a title, a list of authors that contributed, an abstract/brief summary, an introduction, a collection of charts, graphs and possible equations, the article text, the conclusion, and lastly a citations list of all references that were used.

Even though primary articles are the ideal first choice of information, secondary or review articles are an acceptable source of information as well. A review article is what the name implies; it is a type of research article that reviews/summarizes the work of someone else's scientific report. Review articles are not to be confused with peer-review, review articles are reports that summarize information, while a peer-review is the process of validating information in an article. For example, an article that sums up the trial information, procedure, and results of a cancer research study can be classified as a review article. Lastly, review articles are always peer-reviewed in order to prevent false information.

Now, when it comes to information accuracy, seeing if an article was peer-reviewed or not, is the best way to tell the difference. Usually whenever an article is published, it has to have been peer-reviewed by other officials and this can be a very rigorous process. Firstly, when the author(s) write their findings in an article draft, the journal's editor of the scholarly journal must either approve or deny publication. Once it has been approved, the article is then sent to a group of experts of that relative field of the article's topic, who must deny or approve the article; sometimes approved with revisions. During this step, when experts are reading over the article, they think and ask questions about the article's relevance, accuracy, originality and other factors when deciding if the article is appropriate for publishing. Lastly, once approved by the group of experts, the journal's editor must again decide whether or not the article is appropriate for publication. This process can take somewhere from a couple of months to possibly years to get published or not.

After figuring out the difference between a primary article and a review article, it can be quite easy to spot the difference between the two. One example is the article "*Huntington's Disease: Mechanisms of Pathogenesis and Therapeutic Strategies*". After looking at its contents, one can denote that this is a review research article. This is because the authors in this article seem to describe more about the concepts of other research groups that overall describe the main points in relation to the topic of this report. Another example is the article "*Permanent inactivation of Huntington's disease mutation by personalized allele-specific CRISPR/Cas9*". Similarly, after looking at its contents, one can denote that this is a primary review article. This is because in this article it is clearly stated that it is an original article, and most of the information portrayed is from experimental results that these authors have found themselves.