Primary Vs. Review Articles

Declan N. Butler Old Dominion University BIOLOGY 294: GENETICS Professor Janet Rinehart-Kim September 10th, 2021 A primary article is an article written that presents new research. It is an article that is written to inform about a specific topic in great detail. Primary articles tend to be heavy in raw data that supports the research, and written in the first-person point of view. These articles are written to expand human knowledge.

A review article is an article that mentions primary articles. This type of article tends to be easier to interpret than primary articles with less hard raw data. These articles typically reference the original data because the writers of these articles did not do the research, they just mention it. Secondary articles typically synthesize multiple primary articles together to prove a specific claim or show an overall pattern.

The scientific peer-review process is designed to filter bad research from good. It is meant to get scientists to publish articles with data that can be tested by others who wish to replicate the findings. The peer-review process begins with a researcher wanting to publish their paper in a credible journal. They send their article to a company where, if approved, gets sent to other professionals in the field to be read for correctness. The process is very tedious and could take years to complete (Litvina & Maurer, 2015). The process allows researchers to share their findings with other experts in their field to gain advice on how to better express key takeaways.

Anyone could write up and post a review article. Review articles could be heavily biased and could push for a narrative by being highly selective in the data chosen to represent their argument. The peer-review process is used by peer-reviewed journals to keep their writings accurate and true. It creates credibility for the journal to use the peer-review process by only allowing fact-checked and heavily edited information to be published.

Based on the definition of the primary article, as stated above, *Identification of a new human coronavirus* would easily be classified as a primary article. This is because of the use of

the first-person point of view while describing the research they conducted. They describe how they conducted the research step-by-step and what was used during each step in the materials and methods section, which is another key identifier in primary articles. *The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak* article does not use the first-person point of view in the research conducted because they were not the researchers for those data points mentioned. They did not have a materials and methods section because they are simply trying to inform the reader on COVID-19 in a very easy-to-understand way. It can be seen that this article is a review article because it references statistics that were collected by outside organizations that conducted the primary research.

References

Litvina, L., & Maurer, A. C. (2015, July 10). As good as it gets? Peer review and its discontents. Science in the News. Retrieved September 11, 2021, from https://sitn.hms.harvard.edu/flash/2015/as-good-as-it-gets-peer-review-and-its-discontents/.