Immunity, Inflation and Infection

Student’s Name:

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Course:

Date:

Immunity, Inflation and Infection

Annotated Bibliography

Overview

Immunity, inflation, and infection are common terms that may have multifaceted meanings. In this case, the terms are analyzed from a medical aspect. Therefore, having sources that are related to the context is quite essential. As a result, the articles highlighted below were selected because they contain relevant information that will be used to support the ideas or claims that will be included in the research. Most of these articles were selected due to the relevance and the validity they have in regards to the topic to be discussed in depth.

Cai, X., Xu, H., & Chen, Z. (2017). Prion-Like Polymerization in Immunity and Inflammation. National Institute of Health, 9(4), 1-17. doi:doi: 10.1101/cshperspect.a023580

The article is a study of innate immune signaling. The authors pay particular attention to the different forms of polymerization in which the immune signaling takes place. In support of their research, the authors review previous studies on the polymerization of inflammation and immunity. Both the primary data and the secondary information from other researchers make the author conclude that the prion-like structures involved in polymerization are used in relaying sensors and effectors. However, the authors suggest that there is need to research on the role of the mitochondria on the prion-like activity. Validity may be low because most of the information is based on previous studies and may be prone to bias. This weakens the entire case study despite expounding using the secondary research. Despite this, it plays a significant role in the research topic because the article primarily focused on immunization.

De La Motte, C., & Kessler, S. (2015). The Role of Hyaluronan in Innate Defense Responses of the Intestine. International Journal of Cell Biology, 1-7. doi:http://dx.doi.org/10.1155/2015/481301

The article is a study that seeks to find out the Hyaluronan distribution in the body during inflammatory diseases and homeostasis. The authors make use of secondary sources by citing previous studies that relate to the topic. They also use diagrams to expound on the significant role of the Hyaluronan in homeostatic functions. Based on the evidence used, the authors conclude that the Hyaluronan in the intestines is mostly for innate responses and homeostatic functions. Thus, the information presented is useful to our research topic, especially when expounding on infections regarding inflammatory diseases. However, the fact that the authors rely mostly on the previous studies weakens the article.

Gaudet, R., Bradfield, C., & MacMicking, J. (2016). Evolution of Cell-Autonomous Effector Mechanisms in Macrophages versus Non-Immune Cells. National Institute of Health, 4(6), 1-30.

The article is a comparison study of non-immune cells and macrophages with the focus on the evolutionary aspect of the microorganisms. The authors provide a brief description of the microorganisms such as the features and the ancient origins of the macrophage killing organisms. In the analysis, they also include the aspect of immunity once these microorganisms are in the human body. Thus, this makes the article relevant to the topic in regards to providing the evidence required for immunity. Furthermore, the use of neutral language makes it easy to understand the information and relate it to the research topic. However, the limitation is that it is quite challenging to identify the comparisons made in the article.

Paulus, G., & Xavier, R. (2015). Autophagy and Checkpoints for Intracellular Pathogen Defense. National Institute of Health, 31(1), 14-23. doi:10.1097/MOG.0000000000000134

The primary focus of the article is the study of Autophagy and its role in the intracellular defense. The authors use various sources to back up their claims and findings throughout the article. As a result, they provide comprehensive information in various sections describing the process in which the pathogen defense takes place in the body. This makes it easy for readers to comprehend the information which strengthens the article and makes it a good reference point for the article but the lack of diagrams weakens the research done in the article. However, it is still a good source of information for the research topic regarding the immunity aspect.

Spano, S., Gao, X., Hannemann, S., Lara-Tejero, M., & Galan, J. (2016). A Bacterial Pathogen Targets a Host Rab-family GTPase Defense Pathway with a GAP. National Institute of Health, 19(2), 216-226. doi:http://dx.doi.org/10.1016/j.chom.2016.01.004

The article is in the form of an experiment. The authors use the experiments with the aim of finding out how various bacterial pathogens target the host. Before conducting the tests, the authors give a brief introduction on microbial pathogens, how they affect the host and how the immune system of the host prevents their survival and growth. To demonstrate this, the authors conduct several experiments using different bacteria to illustrate how the host's body prevents growth or survival. Most of the results obtained from the various experiments are represented using graphs or diagrams which makes it easy for readers to understand. Thus, the strength of this research design is the use of graphs to interpret the results. However, this may also be a weakness as it may be difficult for some people to understand the information presented in the tables and graphs. Despite this limitation, the experiments in the article are an excellent source of information for the research topic, especially when supporting ideas on immunity and infection.

References

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