Annotated Bibliography: Descriptive Data Analytics

Kamal Afridi M Shaik: 916387844

DA 03511: Patient Data Privacy & Ethics

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Article 1

Analysis of the sources

Health analytics is a professional term highly related to business and encompasses a wide variety of intelligence applications, including big data analysis. The availability and accessibility of data and information sources require good integration, as identified by the author Khalifa.

Critical Thinking

Health analytics are moving towards the advanced stage of operational activities, which requires strategic utilization of diagnostic information through descriptive analysing processes.[1] This process will help hospitals in the future to nurture various services digitally in the future for collecting and storing huge data informatics to detect various feasible alternatives to complexities.

Synthesis and Argument

Descriptive analytics is the easiest way to transform huge amounts of data to support the required diagnosis of the patient during an emergency. The author has also mentioned in the journal that inferential analysis and correlated variables require a high level of control and management to ease the work of the professionals.

Data visualization is used to help answer specific questions or identify patterns of care. However, a broader view of evidence-based practice can never be digitalized in the case of serious patients through electronic medical support.

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[1]Khalifa, Mohamed. "Health analytics types, functions, and levels: a review of literature." Data, Informatics and Technology: An Inspiration for Improved Healthcare (2018): 137–140. DOI: 10.3233/978-1-61499-880-8-137

Article 2

Analysis of the sources

The author has addressed the issue faced in the year 2018, where it was seen that 5.3 million children aged less than five years died around the world, mostly in the African region. Hence, controlling the challenges of the infectious diseases faced due to the existing IDSR system was the main criterion.

Critical Thinking

The surveillance that was accommodated by the HMIS was very weak and was not covering the laboratories completely to provide instant relief to the children, as mentioned by Mwamnyange, Edith, and Sanket. This was the main reason for the increased number of deaths which forced many countries to use the procedures of big data analytics for the identification of patterns through implemented systems in the locality.

Synthesis and Argument

The process of multi-diverse mixed healthcare data sets structures the big data that is acquired throughout the locality to make things fall under the control and high surveillance[2].

The argument that was highlighted in the journal was regarding the usage of data analytics technology with the help of traditional databases, which was the identified challenge as well.

Article 3

Analysis of the sources

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[2]Mwamnyange, Mdoe, Edith T. Luhanga, and Sanket R. Thodge. "Big Data Analytics Framework for Childhood Infectious Disease Surveillance and Response System using Modified MapReduce Algorithm." (2021). DOI: https://dx.doi.org/10.14569/IJACSA.2021.0120345

Artificial intelligence is the supportive technology that covers the related machines that work smartly. Currently, it is used frequently to achieve accurate classified respiratory sounds among paediatric patients.

Critical Thinking

The electronic stethoscope demonstrates high performance, which observes coarse crackles and rhonchi more significantly than routine practices. AI algorithms have been implemented and blended for automated pulmonary function tests to enhance the unbiased decision-making process among physicians to take steps instantly.[3].

Synthesis and Argument

The author has also mentioned the interpretation that has been explored with expert performances which proved that artificial intelligence is a higher accurate decision-maker than individual pulmonologists.

The argumentative gesture in this journal was that AI for diagnosing respiratory diseases was quick in development among adults, but limited detection restricted the application over children in case of aiding pneumonia.

Article 4

Analysis of the sources

[3]Ferrante, Giuliana, Amelia Licari, Gian Luigi Marseglia, and Stefania La Grutta. "Artificial intelligence as an emerging diagnostic approach in paediatric pulmonology." Respirology (2020). DOI: https://doi.org/10.1111/resp.13842

Healthcare organizations or diagnostic service providers search for suitable technologies and applications to improve patient experiences and organizational performance to control management efficiency. This has been addressed by Khanra and the other authors in the journal.

Critical Thinking

Big data analysis in this journal has been conceptualized by the author as the analysis of detailed verified data at a low cost to provide sophisticated solutions to their patients and management operations distinctively in the organization.[4]. The urge of the service providers was to take care intensively of the risk profiling patients to approach the potential so that failure could be minimized through preventive interventions.

Synthesis and Argument

The urge to prove the application prominence has summarised the insight on broad topics so that the patients can be given additional benefits from the organization. The quest to meet the two criteria was attempted by the organization with the BDA techniques in healthcare.

The contrasting issue that was also recognized by the author was regarding the harnessed qualities that failed to be maintained under reviewing processes which critically limited the sample of the design as well.

Article 5

Analysis of the sources

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[4]Khanra, Sayantan, Amandeep Dhir, AKM Najmul Islam, and Matti Mäntymäki. "Big data analytics in healthcare: a systematic literature review." Enterprise Information Systems 14, no. 7 (2020): 878-912. DOI: https://doi.org/10.1080/17517575.2020.1812005

In this particular journal, the brain sciences have recently tormented the factor of data-rich specialty in medicine. The huge biomedical data is detailed assessments that functionalities a large number of participants in the base of connectivity.

Critical Thinking

The present scenario that is observed among the population database is used specifically to quantitatively analyse psychiatric disorders, including autism, to put forward significant sources of population diversity. The capturing of such multifaceted aspects of psychological diseases for improving the diagnosis needs numerous techniques to reduce the habit of using drugs.[5]. The big data analysis in this scenario is required to enlist the behavioural mala-adaptations variant to reduce the sensitivity effect.

Synthesis and Argument

The over-expression of neurons should be monitored constantly to read the paradoxical increase in human bodies to control the self-administrations as and when required with the advanced techniques to support the patient immediately. The analytics descriptions also help the management to understand the targeted genes more than specifically to create a drug tolerance effect beforehand as well.

This data casually increases the expression and controls the behaviour of a particular cell type which can regulate the disorder partially. This is the only comparison fact mentioned by the author in this journal.

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[5]Kopal, Jakub, and Danilo Bzdok. "Endorsing Complexity Through Diversity: Computational Psychiatry Meets Big Data Analytics." Biological Psychiatry (2022). DOI: https://doi.org/10.1016/j.biopsych.2022.07.023

Reference List

Ferrante, Giuliana, Amelia Licari, Gian Luigi Marseglia, and Stefania La Grutta. "Artificial intelligence as an emerging diagnostic approach in paediatric pulmonology." Respirology (2020). DOI: https://doi.org/10.1111/resp.13842

Khalifa, Mohamed. "Health analytics types, functions and levels: a review of literature." Data, Informatics and Technology: An Inspiration for Improved Healthcare (2018): 137–140. DOI: 10.3233/978-1-61499-880-8-137

Khanra, Sayantan, Amandeep Dhir, AKM Najmul Islam, and Matti Mäntymäki. "Big data analytics in healthcare: a systematic literature review." Enterprise Information Systems 14, no. 7 (2020): 878-912. DOI: https://doi.org/10.1080/17517575.2020.1812005

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Mwamnyange, Mdoe, Edith T. Luhanga, and Sanket R. Thodge. "Big Data Analytics Framework for Childhood Infectious Disease Surveillance and Response System using Modified MapReduce Algorithm." (2021). DOI: https://dx.doi.org/10.14569/IJACSA.2021.0120345