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Artificial intelligence publications trends in oncology and cardiology

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SUMMARY

We analysed historical patterns in publications linked to artificial intelligence applications in cardiology and cancer, which are the two domains researching the major causes of death globally, to ascertain whether there has been an increase in publications on these topics. There may be growing interest in the application of artificial intelligence in several important domains, according on upward trends in publications.

Keywords Oncology;Cardiology;Artificial Intelligence

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INTRODUCTION

A wide term used to describe computer-performed tasks that would typically require human ability is artificial intelligence (AI). Although AI in medicine has influenced many domains, fields with a focus on cutting-edge research like cardiology and oncology may have the broadest implications. We analysed historical patterns in publications linked to artificial intelligence applications in cardiology and cancer, which are the two domains researching the major causes of death globally, to ascertain whether there has been an increase in publications on these topics. There may be growing interest in the application of artificial intelligence in several important domains, according on upward trends in publications [1].

DESCRIPTION

A wide term used to describe computer-performed tasks that would typically require human ability is artificial intelligence (AI). Although AI in medicine has influenced many domains, fields with a focus on cutting-edge research like cardiology and oncology may have the broadest implications. When automating complicated cognitive activities that may not yet be precisely defined, deep learning (DL), a type of machine learning (ML) that is also based on pattern recognition, evaluates data at various levels of abstraction using layered artificial neural networks. Another area of artificial intelligence (AI) is natural language processing (NLP), which involves the analysis, processing, and transformation of natural language input into a form suitable for computin. All of these AI technologies have applications in the medical field, including oncology and cardiology [2-5].

As we continue to advance clinical practise and biological research into the precision medicine era, there is enormous hope for the potential of AI to impact data management and support clinical decision-making in the healthcare industry. In the end, AI promises to enhance patient outcomes and quality of treatment in a data-driven, automated, and economical manner. The interpretation of biomedical data, such as radiographic scans, skin lesions, pathology slides, vital signs, electrocardiograms, faces, and so forth, as well as the real-time measurement of patient data using wearable biometric monitoring devices, as well as the direction of biomedical interventions, have already found applications in AI. These applications have the

ability to advance AI in the field of healthcare by producing speedy, accurate imaging and pathology interpretations, the potential to reduce diagnostic error, the systematisation of treatment decisions, and prognostication. Development in the utilization of artificial intelligence in biomedicine ought to prompt development in the quantities of distributions on man-made intelligence in medication. However, there is no genuine examination of distribution patterns portraying the general utilization of artificial intelligence in medication, especially in cardiology and in oncology [6].

There is writing giving the condition of-workmanship, commitments, and difficulties of simulated intelligence in cardiology and in oncology yet their extension does exclude the verifiable patterns or any bibliometric examination showing the rising utilization of simulated intelligence use in cardiology or oncology. In this review, we guessed that the quantities of distributions connected with man-made intelligence have advanced over the long run in the overall biomedical writing and especially in cardiology and oncology, particularly lately. Computer based intelligence distributions in cardio-oncology alone are not evaluated in this composition, given the early stages of the field and the presence of this original copy in a series with different original copies portraying open doors for man-made reasoning in cardio-oncology [7].

TECHNIQUES

Utilizing the MEDLINE PubMed data set of the US Public Library of Medication (the biomedical store most often involved by clinicians and researchers in these fields), we played out a cross-sectional review to survey verifiable patterns in simulated intelligence related distributions up until May 2019, which incorporated all information accessible at the hour of the examination [8].

Articles were remembered for the investigation in the event that the title or conceptual alluded to "man-made reasoning" or its subcategories "AI", "normal language handling", or "profound learning". Distribution patterns utilizing these four terms were additionally viewed as with regards to cardiology distributions alone (looking for "cardiology", "heart", "cardio", or "heart"), or oncology distributions alone (looking for "oncology", "oncologic", "oncological", "disease", "harm", "dangerous growth", "threatening neoplasm", "chemotherapy", "radiation treatment", or "radiotherapy"). Articles were barred from the investigation on the off chance that the title or dynamic did exclude one of the expressions "man-made consciousness", "AI", "normal language handling", or "profound learning" [9].

We acquired the complete number of distributions connected with the field of simulated intelligence for cardiology, oncology, and general biomedical distributions to assess verifiable patterns. Likewise, we standardized the quantities of computer based intelligence related distributions in cardiology or oncology in a given year to the all-out number of cardiology or oncology distributions, separately, for that year.

SAB physically checked on the titles and modified works of 50 haphazardly chosen abstracts for propriety, as well as consequently a few extra edited compositions explicitly on "profound learning" to decide if a high recurrence of superfluous digests was improperly remembered for our investigation. Generally speaking, the main significant recurrence of unessential modified works was noted for "profound learning" and these were taken out from the examination. Of note, in beginning distributions, "profound learning" alluded to a singular way of acclimatizing data by understudies. In later distributions, "profound learning" alluded to an AI strategy that depends on multifaceted counterfeit brain organizations. This distinction in importance was considered while choosing proper distributions and measuring "profound learning" distributions for this review; subsequently, the distinction contributed unimportantly to the general examinations. Until the end of the composition, "profound learning" alludes to the definition explicitly pertinent to AI [10].

CONCLUSION

Engaging measurements were utilized to list simulated intelligence distributions over the long run, particularly in oncology and cardiology. A relapse examination was performed to survey the decency of-spasm of the quantity of artificial intelligence distributions in cardiology, oncology, and the overall biomedical writing to an outstanding development model. The connection coefficient R2 was registered for every dramatic fit. Microsoft Succeed programming was utilized for fundamental measurable investigation and information plots.

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CONFLICT OF INTEREST

Author declare that they have no conflict of interest.

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