pm, 28/05/2024] Omar Hirbawi Uop: The use of big data analytics in healthcare research could 9:00] revolutionize the field by improving diagnosis, developing treatments, and improving overall healthcare. Public health surveillance and epidemic forecasting: Big data analytics can help monitor public health trends and predict the spread of epidemics. Some of the ways in which big data analytics are being used in this field are summarized below: Improving diagnosis and prediction of diseases: Big data analytics relies on analyzing huge amounts of medical data such as patient records, medical imaging, and laboratory test results. In short, big data analytics offers powerful tools to improve healthcare by providing accurate and comprehensive insights that help in making data–driven decisions, ultimately improving the health and quality of life of individuals. Example of a practical application: In the COVID–19 pandemic, big data analytics have played a vital role in tracking the spread of the virus, identifying hotspots, and evaluating the effectiveness of health interventions. These analyzes can help detect patterns invisible to the human eye, helping to improve diagnostic accuracy and predict diseases .before symptoms appear. This helps improve the effectiveness of treatment and reduce side effects