



# Using data mining to analyze physicians' chronic disease risk assessment

YI-LIEN LEE

Chi Mei Medical Center, Tainan, Taiwan

## Background

Physicians play a core role in the medical health system and are the main leaders of the medical team. Patients turn to doctors for physical health needs, but doctors are also human beings, and their health status seems to be rarely discussed. Therefore, we hope to use data exploration to Analyze doctors' risk assessment of chronic diseases to assist hospitals in formulating health promotion activities.

## Materials and Methods

Taking doctors from a certain hospital as the target, data mining technology was used to obtain the risk assessment results of chronic diseases from January 1 to December 31, 2023. The collected data were divided into 3 categories and 20 variables were used for data analysis to explore Physicians in chronic disease risk assessment.

## Results

There are 693 doctors (excluding special doctors and interns), 364 people with less than 5 years of experience account for 52.53%, 460 people under 40 years old account for 66.38%,  $24 \leq \text{BMI} \leq 35$ , a total of 282 people (45.93%), cardiovascular For risk assessments of adverse events, coronary heart disease, hypertension, stroke, diabetes, etc., only 75 people completed the task, with a response rate of 10.8%. The proportions of high-risk individuals were 23 (30.67%), 11 (14.67%), 17 (23.29%), 12 (16%), 26 (34.67%), and 16 (21.92%) had already Suffering from hypertension; 7 people (9.33%) already suffered from diabetes. Inferential statistical single-factor variation analysis showed that age and seniority have significant differences in the risk assessment of hypertension and diabetes.

## Conclusion

The professional quality and experience of doctors are an important basis in a hospital to build its core competitiveness. The productivity of doctors will directly affect the quality of medical services. Therefore, chronic disease risk assessment should be included in the necessary examination items when doctors take office to facilitate understanding of the health status of doctors. Carry out health management activities.