OCR Result from Uploaded Image

Abstract This research was conducted based on the large amount of drug sales transaction data in pharmacies that has not been optimally utilized as a source of information to support decision-making. However, the large amount of stored transaction data can be analyzed to determine consumer purchasing pattems. One method that can be used is data mining with the Apriori algorithm, which functions to discover relationships between products that are frequently purchased together. This study aims to apply the Aprion algorithm to drug purchase data at Seruni Pharmacy and provide recommendations regarding inventory management and marketing strategies based on the obtained purchasing patterns. The research methods used include observation, interviews, data collection of drug purchase transactions from 2021-2025, data preprocessing, frequent itemset formation, and association rule formation using the Apriori algorithm. The data processing was performed using RapidMiner software, using a minimum support value of 10% and a minimum confidence level of 60%. The results showed that out of a total of 13,068 transaction data sets, after preprocessing, 12,700 transactions were obtained for analysis. The implementation of the Apriori algorithm generated 140 association rules that met the minimum support and confidence thresholds. One rule with the highest confidence value of 99% indicated that consumers who purchase herbal products, medical devices, and wound care products tend to purchase topical ointments and creams simultaneously. Furthermore, a relationship was also found between generic prescription drugs and restricted over-the-counter drugs with confidence values of 71% and 78%, respectively. Based on these results, it can be concluded that the Apriori algorithm can be used effectively to identify drug. pure jasing patterns at Seruni Pharmacy. The resulting association patterns can be utilized to. assist in-drug: inventory management, product organization, and the development of more targe jeted promotional and marketing strategies.