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Observational Study

Development of a depression in Parkinson's disease prediction model using machine learning

Haewon Byeon

Abstract

BACKGROUND

It is important to diagnose the Parkinson's disease depression (DPD) as soon as possible and identify predictors of depression for improving the quality of Parkinson's disease (PD) patients' lives.

AIM

The objectives of this present study were to develop a model for predicting DPD based on support vector machine while considering sociodemographic factors, health habits, Parkinson's symptoms, sleep behavior disorders, and neuropsychiatric indicators as predictors and provide baseline data for identifying DPD.

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Feb 28, 2020 · Personalized **prediction** of **depression** in patients with newly diagnosed **Parkinson's disease**: A prospective cohort study. Gu SC(1), Zhou J(2), Yuan CX(3), Ye Q(4). Author information: (1)Department of Neurology, Longhua Hospital, Shanghai University of Traditional Chinese Medicine, 725 South Wanping Road, Shanghai, 200032, China.

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[PDF] An Improved Approach for Prediction of Parkinson's Disease ...
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by **using** advanced **machine learning** models. Some recent **machine learning** algorithms have been chosen for **prediction** and have made a comparative performance analysis of these models based on accuracy, area under the ROC curve and other measures. III. MATERIALS AND METHODS A flowchart of the proposed analysis is shown in Fig 1.

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