

Study on early warning treatment of senile depression in community based on artificial intelligence model

Jiali Xiao^{1,2}, Yifeng Li¹, Lihua Li¹ and Yan Tian^{1*}

¹Beijing Institute of Technology Zhuhai, Zhuhai 519000, China and ²Universiti Sains Malaysia, Penang 11800, Malaysia

*Corresponding author.

Background. In recent years, with the acceleration of population aging in China, the number of elderly people with depression is increasing. Artificial intelligence models and data analysis have sound applications in the early warning and treatment of the elderly with depression in the community by finding the elderly with depression timely and carrying out early warning treatment for them.

Subjects and Methods. 50 elderly people with depression, from two communities of equal size, were randomly selected to participate in the experiment. Among them, one community adopts routine management and treatment, and the other community conducts early-warning treatment based on an artificial intelligence model and data analysis. The former and the latter were used as the observation group and the intelligent group respectively. All the elderly were evaluated according to the Geriatric Depression Scale (GDS) before and 6 months after the experiment.

Results. The GDS scores of the elderly in the observation group and the intelligent group before and after the experiment are shown in Table 1. The GDS scores of the observation group and the intelligent group are close before and after the experiment from Table 1. Six months after the experiment, the GDS scores of the intelligent group are significantly lower than that of the observation group. In this experiment, $P < 0.0$ indicates that the difference is statistically significant.

Conclusions. According to statistics, the incidence rate of depression in the elderly can reach 10%, so it is necessary to strengthen the early warning and treatment of depression symptoms in the elderly. The artificial intelligence model and data analysis can help find the depressive symptoms of the elderly in the community as early as possible, and help take measures to carry out early warning treatment, thereby improving the depressive situation.

Table 1. GDS score results of the two groups of elderly before and after the experiment

Group	Project	GDS score before the experiment	GDS score after the experiment
Observation group	Score	17.18±1.45	14.71±1.13
	<i>t</i>	0.125	1.234
	<i>P</i>	0.034	0.039
Intelligent group	Score	16.31±1.27	10.28±0.97
	<i>t</i>	0.243	1.314
	<i>P</i>	0.019	0.028

Acknowledgement. The research is supported by: Provincial key platforms and major scientific research projects of Guangdong universities “Building an intelligent community public welfare platform based on blockchain (No. 2021ZDZX3004)”.

Analysis of the influence of positive psychotherapy on the improvement of re drinking among alcohol dependent people from the perspective of ideology and politics

Yan Wang

Shaoxing University, Shaoxing 312000, China

Background. Alcohol dependence is a chronic and recurrent brain disease of central nervous system poisoning caused by long-term excessive drinking. The prevalence of alcohol-dependence patients in China shows a rising trend year by year. Alcohol dependence will not only cause serious harm to patients' physical health and mental state, but also affect their family relations and even entire social security. The study evaluated the improvement of psychological intervention measures on alcohol-dependent people's rehydration in the context of the Great Thought Policy to help them better reduce alcohol dependence.

Subjects and Methods. The study selected 200 patients with alcohol dependence admitted to a provincial hospital. The patients were divided into an experimental group and a control group by the random number table method. Both groups were treated with the same drug intervention. Among them, the patients in the experimental group were treated under active psychotherapy, that is, the responsible nurse combined psychological knowledge with ideological guidance to guide the patients to quit drinking. The control group was given routine psychological intervention. The patients were investigated with Symptom Checklist 90 (SCL-90) and telephone follow-up. The data were processed with SPSS 17.0 statistical software, and $P < 0.05$ indicated that the difference was statistically significant.

Results. Results showed that the rehydration rate and rehospitalization rate of the experimental group were lower than those of the control group, and the mental health status of the patients in the experimental group was significantly improved compared with the control group ($P < 0.05$), indicating that the psychological measures under the ideological and political intervention can effectively control the patients' emotions.

Conclusions. The experimental results show that the combination of ideological guidance and positive psychological knowledge, and the guidance and intervention of patients can effectively reduce their alcohol relapse, improve the level of mental health, and achieve the effect of successful abstinence.