

The therapeutic effect of acupuncture on neurocognitive disorders under the concept of outcome based education

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Background. The neurocognitive disorder is a common neuropsychological disease characterized by impaired cognitive function, attention deficit, and memory loss. With the aging of the population and lifestyle changes, the prevalence of neurocognitive disorders is on the rise, seriously affecting patients' quality of life. Acupuncture therapy, an essential part of traditional Chinese medicine, has shown potential therapeutic effects in treating neurocognitive disorders.

Subjects and Methods. The outcome based education concept was incorporated into acupuncture therapy to explore its therapeutic effect on neurocognitive disorders. The study included 50 neurocognitive-impaired patients, 25 of whom received acupuncture therapy under the outcome based education concept as an experimental group. The other 25 served as a control group and received traditional Chinese acupuncture treatment. The experiment lasted three months, and the 3-minute Delirium Diagnostic Scale (3D-CAM) was used to measure the level of consciousness, mental clarity, attention, and delirium characteristics.

Results. After receiving acupuncture therapy under the outcome based education concept, most of the patients in the experimental group had a lower risk of delirium, and their attention, thinking, and consciousness levels were significantly improved. Patients in the control group generally had a higher risk of delirium, difficulty concentrating, and memory loss.

Conclusions. The study proposed that the outcome based education concept in acupuncture therapy has a more noticeable effect on treating neurocognitive disorders. At the same time, this study's results will help reveal the mechanism of acupuncture therapy in treating neurocognitive disorders and provide guidance for clinical practice.

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Deep learning-based companion robot on senile dementia patients

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Background. There are currently at least 50 million dementia patients worldwide, and this number is expected to reach 152 million by 2050, of which about 60-70% will be Alzheimer's patients. The companion robot based on deep learning is a product of the development of artificial intelligence technology, which is of great significance to the physical and mental health of the elderly, so it is used in the research on the treatment of Alzheimer's patients.

Subjects and Methods. 100 patients with Alzheimer's disease in a hospital were selected for the study, and 50 patients were randomly divided into experimental group and control group. In the experiment, 50 patients with Alzheimer in the experimental group used a companion robot based on deep learning for auxiliary treatment while carrying out daily treatment. The control group of 50 patients did not receive any adjuvant therapy in addition to daily treatment. After three months of treatment, the study used the 3D-CAM and the mini-mental state examination (MMSE) to collect the treatment status of all patients, and used the SPSS23.0 statistical software to statistically analyze the collected data.

Results. After statistical analysis, the results of the two groups were obtained. The scores of 3D-CAM and MMSE in the experimental group were significantly higher than those in the control group and the difference was statistically significant.

Conclusions. Companion robots based on deep learning are helpful in the treatment of Alzheimer's patients. They can improve the therapeutic effect and have certain social value.

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Motor imagery therapy on upper limb motor control after stroke

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Background. Stroke is a common neurological disease, the main pathological feature of which is cerebral ischemia or bleeding caused by sudden blockage or rupture of cerebral vessels.