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**Improving the health of patients undergoing long-term hemodialysis by using a diversified mobile intelligence-based health education method****Ching-Ling Wang, Kuo-Kai Lin and Chi-Wen Chen**  
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**Background:** As the demand for foreign care workers remains high, improving their care skills can elevate patients' health status.

**Objective:** This study developed a nursing instruction system (in multiple languages) for use on smartphones to enhance the home care skills of care workers of other nationalities and improve the subjective and objective health status of patients undergoing hemodialysis.

**Method:** This study adopted a quasi-experimental design. A questionnaire was drafted to assess the home care skills of care workers and a self-perceived health status scale was employed to evaluate the subjective health status of patients undergoing hemodialysis. A physical examination report for each patient containing information such as patients' dialysis efficiency, urea reduction ratio, hemoglobin, albumin, potassium ions and calcium and phosphate product was obtained 3 months before and after introducing the intervention measure and utilized to measure the patient's objective health status. The intervention measure involved the development of a nursing instruction system using social networking software (i.e., Line and Facebook).

**Results:** The 23 care workers of other nationalities in this study scored an average of 19.3 increased to 22.3 ( $z=-2.989$ ,  $p<0.01$ ) in home care skills after the intervention. The patients scored an average of 13.3 increased to 15.9 ( $z=-1.998$ ,  $p<0.05$ ) in subjective health status after the intervention. In addition, all six-objective health status assessment criteria of dialysis quality improved after the intervention. Among these criteria, albumin improved the most (from an average of 3.81 to 3.97), thereby achieving statistical significance ( $z=-2.744$ ,  $p<0.01$ ).

**Conclusion:** The results show that using the diversified mobile intelligence-based health education method developed in this study can effectively enhance the home care skills of care workers of other nationalities and elevate the subjective and objective health status of patients undergoing long-term hemodialysis.

**Biography**

Ching-Ling Wang is a Nursing Supervisor, Department of Nursing, National Yang-Ming University Hospital, Taiwan. She has her expertise in nursing education and nursing administrative capacity in improving the patient health outcome.

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