

Investigation on the knowledge and influencing factors of vessel catheter-associated infection among clinical nurses

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Objective

To investigate the current situation of clinical nurses' knowledge of vessel catheter-associated infection(VCAI) and analyze its influencing factors,so as to provide a basis for homogenizing training on prevention and control strategies of VCAI.

Methods

A total of 1450 nurses were selected from 15 hospitals in East, West, Central, South and North area of China from April 9 to June 9 2022 by multi-stage random sampling method. They were invesigated by general data questionnaire and VCAI knowledge questionnaire. The questionnaire included 7 dimensions, covering definition, clinical manifestations, diagnosis methods, risk factors, prevention measures, treatment measures and management system.

Results

A total of 1 424 valid questionnaires were collected, with an effective recovery rate of 98.21%. Nurses' knowledge of VCAI was 50.97 ± 19.20 . There were 442 qualified nurses(30.9%), 169 good nurses(11.8%), and 50 excellent nurses(3.5%). There was no statistical signiicance in the accuracy of different knowledge dimensions ($P > 0.05$). Multiple linear regression analysis showed that the main influencing factors of clinical nurses' knowledge score on VCAI were age, hospital grade, job post, educational background, and whether or not they were intravenous therapy specialist nurses ($P < 0.001$).

Conclusion

Nurses in county-level and prefecture-level hospitals who participated in the survey had a lower knowledge of VCAI than nurses in provincial or minister-level hospitals. Nursing managers should conduct homogenized training on VCAI knowledge for nurses in county-level and prefecture-level hospitals,so as to change the prevention and treatment behavior of nurses in county-level and prefecture-level hospitals, and reduce the incidence of VCAI.

Key words

Clinical nurse; Vessel Catheter-Associated Infection; Knowledge; Questionnaires; Cross-sectional studies