

20th Asia Pacific

DIABETES CONFERENCE

July 16-17, 2018 Sydney, Australia

Diabetic foot ulcer primary prevention in Vietnam: A longitudinal evaluation of a theory-based foot care education intervention program

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Statement of Problem: The burden of diabetic foot ulcers is enormous and Vietnam is not exempt from this issue. Up to 85% of foot ulcers can be prevented, however, in most cases, early-stage prevention strategies have not been a focus.

Aim: The study aimed to evaluate the effectiveness of a Self-Efficacy Theory (SET) based foot care education intervention program. The program examined foot self-care behavior and common minor foot problems among patients at low risk of diabetic foot ulcers in Ho Chi Minh City, Vietnam.

Method: A quasi-experimental design with 2 groups, using pre-and post-tests was used. From the 119 participants, 60 participants in the control group received usual care and a foot care brochure. Those in the intervention group received: 60-75 minutes of a small group intensive education and hands-on skills session; a foot care kit and documents and three regular booster follow-up phone calls over 6 months. A generalized estimating equations model was undertaken to examine the impact of the intervention on foot self-care behaviors and prevalence of common minor foot problems (i.e. dry skin, corns/callus) over 6 months from baseline after adjusting covariates.

Result: The intervention group had significantly improved outcomes compared to the control group over 6 months in the following aspects: Better preventive foot care behavior ($p=0.001$); decreased prevalence of common minor foot problems (i.e. dry skin, corns/callus) [OR: 0.04, 95% CI: 0.01-0.13, $p<0.001$]. However, reduction in potentially damaging behavior was not found significantly different between groups over the study period ($p=0.09$).

Conclusion & Significance: The study's findings provide evidence for the effectiveness of a theory-based education intervention on improving foot self-care behavior and preventing minor foot problems what commonly precede diabetic foot ulcers. Further study with a RCT design, in a larger sample of patients and longer follow-up time is recommended.

Biography

Lan Nguyen has been working for 10 years as a Nursing Lecturer in University of Medicine and Pharmacy in Ho Chi Minh City, Vietnam. She has obtained her Masters of Advanced Nursing Practice in the Netherlands in 2010 with her masters' thesis topic on quality of life and coping with diabetic foot ulcers among patients with diabetes. Currently, she is a PhD student at the Queensland University of Technology, Brisbane, Australia. Her research interest focuses on wound management and health prevention and health behavior change strategies.

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