Original article

International WOCNEP at Ho Chi Minh University School of Nursing and the University Medical Center

ABSTRACT

Background Healthcare systems across the globe are challenged to meet the increasing demands for wound, ostomy and continence related nursing care.

Program development Faculty at Ho Chi Minh University of Medicine and Pharmacy School of Nursing and at the University Medical Center identified an opportunity to provide advanced wound, ostomy and continence education to nurses in Vietnam and throughout Asia. Nursing leaders chose to develop a program that met the accreditation of the wound ostomy continence nursing education program (WOCNEP) outlined by the WOCN Society.

Results Utilising technology, the barriers of time zones, delivery of didactic content and clinical collaboration were overcome to develop the first accredited WOCNEP program in Asia.

Keywords WOC nursing, WOC education, program development, collaboration

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INTRODUCTION

Globally, over 9,000 nurses are certified in either the specialty of wound, ostomy or continence care¹. However, healthcare

Charleen Singh*

PhD MBA MSN FNP-BC CWOCN RN UC Davis BIMSON Wound Care Services, Regional Medical Center of San Jose, San Jose, CA. USA

Surgery Nurse Practitioner, Cottage Hospital, Santa Barbara, CA, USA Program Director International Wound Ostomy Continence Nursing Education Program (WOCNEP)

Email cdsingh@ucdavis.edu

Ann Nguyen

Wound Care Services, Regional Medical Center of San Jose, San Jose, CA. USA

Program Director International WOCNEP

Tran Thuy Khanh Linh

Vice Dean of Nursing, Ho Chi Minh University of Medicine and Pharmacy, Vietnam Facilitator International WOCNEP

Nguyen Thi Hong Minh

Chief Nurse, University Medical Center, Ho Chi Minh, Vietnam Facilitator International WOCNEP

Fadime Koyunc

Research Assistant, University of Health Sciences Gulhane, Ankara, Turkey

* Corresponding author

systems across the globe face the complex reality of more people requiring care related to wound, ostomy or continence health issues². There is a discrepancy between the number of specialty trained nurses and the number of patients needing both acute, chronic wound care as well as care related to ostomy and continence¹. A wound is classified as a chronic wound when it does not heal normally and in a timely manner due to various pathological conditions, and often 'stops' at one point². In recent years chronic wounds have become an international public health problem due to high incidence rates all over the world³. The prevalence of chronic wounds is cited at 1.5-5% in the UK4 and 1.7% in China5; Germany has a similar rate and the number increases every year⁶. Chronic wounds affect approximately 8.2 million Medicare beneficiaries in the United States7. The number of people with ostomy and continence concerns is also increasing globally, with approximately 1.5 million individuals possibly benefiting from specialised care8.

There is therefore an ongoing need for access to the specialty training of wound, ostomy and continence nursing¹. Across the globe there are several wound care training programs and societies for nurses. However, there are few programs which focus on the trispecialty education addressing the specialty of wound, ostomy and continence. Currently the wound, ostomy, continence care nursing program developed in the late 1950s by Dr. Rupert Turnbull and former patient Norma Gill remains the gold standard for providing education and

training. Together they initiated a formal education program in 1961 with the vision of developing specialised nursing care to meet the needs of populations with bowel or urinary health concerns⁹. The organisation then expanded its perspective to wound and continence to become the American Association of Enterostomal Therapists and in 1968 became known as the Wound Ostomy and Continence Nurses (WOCN) Society¹. The society provides opportunities for specialist healthcare services to individuals with wound, ostomy or continence health related concerns. Eight training programs credentialled by the WOCN Society are in existence and all are located within the US⁹.

PROGRAM DEVELOPMENT

Analysis

A wound ostomy continence nurse education program (WOCNEP) is out of reach for many nurses outside of the US and especially in Central Asia and developing countries. The cost of programs, access to didactic training, training materials and limited clinical sites, as well as language, were identified at first as barriers and then identified as opportunities. Building a program in Central Asia overcomes the barrier of cost of education, access to theory material, clinical site and language^{10,11}. Identifying ways to share nursing speciality knowledge and experience internationally is a daunting challenge; however, utilisation of technology helps bridge the gap.

We approached each barrier as an opportunity and worked towards a feasible solution. Working closely with the WOCN Society Accreditation Committee, the first step was a feasibility study to determine if the current infrastructure for nursing education in Vietnam supports the rigorous WOCNEP. After establishing that Vietnam's current nursing education and practice infrastructure was adequate, the program build started. The program development followed the blueprint provided by the WOCNEP Accreditation Committee on request. The feasibility phase determine the infrastructure to support WOCNEP.

The feasibility phase not only identified the ground work of nursing scholars and clinicians throughout Vietnam, but the equity technology has to offer. There is a rich infrastructure for the profession of wound care, ostomy and continence care in Vietnam. The Vietnam Wound Management Association hosts annual conferences bringing scholars from around the world to discuss the concerns of patient outcomes related to the specialty of wound care. Nurse leaders across the country recognise the value and impact of evidence-based wound care education as part of a continuing education curriculum¹²⁻¹⁶. Since 2012 nursing scholars have explored how to incorporate speciality wound care education into ongoing nursing education across Vietnam¹². The Ministry of Health developed continuing professional development (CPD) curriculum based on Vietnam's Basic Nursing Competency Standards (VNBNCS) which incorporate wound care education¹²⁻¹⁶. Initial findings from implementing a CPD program focused on wound care including increased nursing confidence in managing wounds^{12–16}. Nursing scholars and clinicians further identified that nurses want a common language for wounds^{17–21}. However, there is a lack of nursing specialty education addressing ostomy and continence. The WOCNEP curriculum addresses wound, ostomy and continence nursing specialty knowledge which meets the educational needs of the nurses. While no formal survey was conducted to evaluate nurses' interest in specialty training, anecdotally nursing leaders reported a growing need based on acute care hospital patient case mix and that, if the program were available, nurses would participate.

Design

Having faith in the nursing leaders of Vietnam, the International WOC nursing education program design build started after establishing adult learning theory as the foundation of the program. Adult learning theory, developed by Knowles, is based on the idea that the adult and pre-adult learner are different from each other^{22,23}. According to this theory, the need to know and learn are the basic components that increase the learning motivation of adult learners^{22,23}. In this context, learners' experiences are actually the most powerful source that motivates adult learners to learn^{22,23}. The program design required close collaboration between the experienced WOCNEP faculty from the US, the University Medical Center of Ho Chi Minh, the Ho Chi Minh University School of Nursing, the Ministry of Health and the WOCNEP Accreditation Committee.

A design which facilitates international time zones, distance learning and supports adult learner theory was chosen. The final design of the program is 40 hours of didactic for each specialty - wound, ostomy and continence - for a total of 120 hours of theory. Didactic material is delivered over 16 weeks in English and then Vietnamese for the first cohort using video teleconferencing technology. The required 40 hours of theory is supplemented with 40 hours of case studies, small workshops and professional development over 16 weeks for each specialty, which is beyond the accreditation requirements. The supplemental 40 hours of case studies and 16 hours of simulation allow for assimilation of knowledge through increased exposure to content. Required course content is spread out over several months to provide the learner with the opportunity to assimilate new knowledge. Each session is recorded and made available for the student to review. Didactic content is presented in English and Vietnamese to facilitate focusing on content and not translation. Concepts are initially presented in English, then translated to Vietnamese as a repeat lecture with a case study.

At the end of the didactic material and prior to the start of the clinical practice portion there are 16 hours dedicated to simulation, standardised patients and case review. Each nurse is signed off as demonstrating competencies as outlined by the WOCNEP blueprint. After successful completion of competencies, the students move onto 40 hours of clinical practice with the program director. Throughout the entire instruction period the program director and lead faculty are accompanied by faculty from Ho Chi Minh University School

of Nursing to ensure appropriate transfer and application of speciality of nursing knowledge and to overcome the language barrier.

The International WOCNEP is different from nursing wound education programs around the globe in that the curriculum covers the three specialities which include wound, ostomy and continence. While nurses enrolling in an International WOCNEP can chose one specialty or all three, all three is strongly encouraged.

Development

Program development began in late 2019 with a proposed start date of September 2020. However, the pandemic brought the program development to a halt. The uncertainty of the pandemic's impact around the globe jeopardised the feasibility of the program. It was unclear if there would be enough resources left to launch a program as the first, second and third waves of the pandemic raged on.

Given the program director and lead faculty are located in the US, the burden of the pandemic was deeply felt; however, the well managed pandemic in Vietnam allowed the nursing leadership to envision how the program could flourish despite the pandemic. The current program director has experience as co-director from the established wound ostomy program at San Jose State University Valley Foundation School of Nursing. The program continued to develop with the nursing leadership from University Medical Center of Ho Chi Minh and the Ho Chi Minh University School of Nursing, encouraging the faculty in the US that this program was a beacon of hope during the grim time of the pandemic.

The development of the content followed the WOCNEP blueprint and the first cohort enrolled for a September 2021 start date. By October 2021 it became clear that, regardless of what was happening with the pandemic, the program would continue and clinical practice would take place in June 2022. The program director and lead faculty knew that during many of the scheduled lectures the nurses participating were either in lockdown, caring for extremely ill patients or dealing with the many stressors the pandemic presented. However, 24 nurses from around the southern region of Vietnam persevered to become the first cohort of International WOCNEP supported by accreditation from the WOCN Accreditation Committee.

Knowing that we were launching this program during the uncertainty of the pandemic, a clinical training location was solidified at the start of the program. It became clear that having a close relationship between a hospital and School of Nursing is an essential component. The University Medical Center of Ho Chi Minh agreed to be the primary clinical site for training to meet the required 40 hours of clinical practice for each specialty. The medical centre and School of Nursing guaranteed a clinical site contingent on faculty travelling from the US.

Implementation

The utilisation of technology facilitated the successful

implementation of the wound course. Each nurse enrolled in the program was provided with an access key code to the online classroom and e-text book. The use of technology overcame the physical barriers of location and resources. Nurses tested access a week prior to the start of the course which allowed time to correct issues with classroom login and e-text book. Live lectures were delivered over video conferencing that was synchronous and recording of the lectures allowed for asynchronous instructions. Implementation of the program was supported by an educational grant to offset the cost of technology, cost of travel for clinical training, initial accreditation and resources for clinical training. The program director and lead faculty volunteered their time and expertise. Accreditation occurred with a virtual site visit and virtual presentations, and the certification board conducted an onsite visit to verify the School's ability to be a test centre for the board certification exam of the trispecialty.

Evaluation

At the end of the first cohort of nurses enrolled in the wound course, the Ho Chi Minh University School of Nursing International WOCNEP received full accreditation for the trispecialty of wound, ostomy and continence. The evaluation included criteria outlined by the WOCN Accreditation Committee and the School of Nursing, and elements identified as important to the program director. The program director felt strongly that nurses in the cohort should comment on the inclusivity of the program by asking "did they feel this program is for them".

Initially, 27 nurses registered for the wound course, with three withdrawing within a month of the start of the program and one nurse deferring clinical practice until 2023. A total of 23 nurses successfully completed the wound course.

The nurses in the first cohort are leaders within their organisations and had employer support to attend the course, with time off for clinical practice. A majority of the 23 nurses (n=13) in the program are lecturing faculty at either the baccalaureate or graduate level who intend to incorporate the newly learned content into their lecture material. Many (n=7) work across the age spectrum in acute care representing both surgical and medical specialities (Table 1). The nurses from acute care report being eager to develop wound care teams in their facilities and start staff education series for their nurses. Three nurses in the program are in leadership positions who intend to make systematic changes throughout the healthcare system in the management of wounds based on the evidence based practice.

Using a 5-point Likert scale, all 23 nurses rated the program as highly likely to change their practice, and as being extremely satisfied with the delivery of the content and layout of the program. Overwhelmingly, the majority of nurses in the program voiced that they wanted more opportunities for group discussion throughout the didactic instruction. The nurses also wanted more clinical time and time to debrief after the clinical day (Table 2).

Some nurses (n=6) in the program reported feeling guilt over not knowing the wound speciality content earlier in their careers and wondered if they could have changed outcomes for their patients had they known. All nurses reported excitement in incorporating evidence-based practice into their current practice and in sitting for the board exams.

DISCUSSION

Understanding not only the growing need for specialty nursing knowledge related to wound, ostomy and continence but the interrelationship between the trispecialty knowledge, it is important to offer all three courses. As the incidence rates of cancers that impact bowel and bladder increases year after the year, so does the need for nurses to meet humanity's needs. Nursing is at the frontline of supporting a person back to homoeostasis in both the hospital and community setting, which implies the inherent value in the trispecialty education of wound, ostomy and continence.

The quality of life and outcomes improve when specialty trained nurses are involved in care. Literature demonstrates improved quality of life for patients with either chronic wounds, ostomy or continence related health concerns with the involvement of nurse with relevant specialty training. In the development of the International WOCNEP, the nurse leaders of Vietnam noticed the increase in patient populations within the acute care setting that would benefit from nurses having specialty training. While options for wound, ostomy and continence education are available in neighbouring countries such as Singapore and China, the programs do not facilitate the translation of knowledge to Vietnam. Other programs available within Asia offer education specific to wound care only, which do not meet the educational needs identified by the nurse leaders.

Nurse leaders of Vietnam want application of theory to their patient population, and for learning needs to be dynamic through critical analysis of current practices and theoretical application of newly acquired knowledge. Programs outside of Vietnam may not offer the same opportunity for

Table 1. Nurses in the first cohort (n=23)

Participant demographics	n	
Nurses in leadership roles	5	
Lecture responsibilities	13	
Clinical practice only	5	
Masters prepared	5	
Doctorate prepared	1	
Years of experience	7 (4–13)	
Areas of clinical practice		
Medical/surgical	12	
Trauma	3	
Oncology	2	
Paediatrics	1	

assimilation and application of knowledge to clinical practice. It is important to change clinical practice from within current practice, making adjustment and quality improvement initiatives without disrespecting current practice. By developing a trispecialty program within Vietnam, the nurse leaders were able to identify how the specialty knowledge is applicable in the clinical setting.

CONCLUSION

Nurses in Vietnam who participated in the program found the International WOCNEP curriculum met their learning needs. The first cohort of the program is eligible to sit for the WOCN certification board exam. The program met accreditation requirements and is accredited by the WOCN Society Accreditation Committee for 7 years. By overcoming the barriers of language and delivery of content, there is dissemination of the specialty nursing knowledge of wound, ostomy and continence. After completing the program, the nurses from the first cohort reported confidence in delivering evidence-based wound care in their community. In developing countries where access to the wound, ostomy and continence nursing education program is limited, technology, coupled with collaboration, overcome barriers to the specialty knowledge of wound, ostomy and continence nursing education.

Table 2. First cohort's evaluation of the program (n=23)

Program evaluation according to Likert Scale	5 most likely	4 likely
	n (%)	n (%)
Instruction	5	4
How satisfied are you with the overall quality of instruction?	18 (78.2)	5 (21.8)
How satisfied are you with the classroom environment?	18 (78.2)	5 (21.8)
How satisfied are you with clinical placements?	10 (43.5)	13 (56.5)
How satisfied are you with the support from administration?	17 (73.9)	6 (26)
Application of knowledge		
How satisfied are you with the program preparing you to integrate professional role in your specialty practice?	21 (91)	2 (9)
How satisfied are with you with the program preparing you to integrate core competencies to your practice?	21 (91)	2 (9)
How satisfied are you with the program preparing you to integrate the WOCN scope and standard of practice?	21 (91)	2 (9)
How satisfied are you with the program preparing you to practise as a specialty nurse in wound care?	21 (91)	2 (9)
How satisfied are you with the relevance of course content to your area of practice?	21 (91)	2 (9)

ETHICAL CLEARANCE

Ethical clearance was obtained from Western Institutional Review Board.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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REFERENCES

- Wound, Ostomy and Continence Nursing Society. About us; n.d. [cited 2022 Jun 27]. Available from: https://www.wocncb.org/about-us.
- Armstrong DG, Meyr AJ. Clinical assessment of wounds; 2021 [cited 2022 Jun 27]. Available from: www.uptodate.com/contents/clinicalassessment-of-wounds.
- Olsson M, Järbrink K, Divakar U, et al. The humanistic and economic burden of chronic wounds: a systematic review. Wound Repair Regen 2019;27(1):114–125.
- Guest JF, Ayoub N, McIlwraith T, et al. Health economic burden that wounds impose on the National Health Service in the UK. BMJ Open 2015;5(12):e009283.
- 5. Jiang Y, Huang S, Fu X, et al. Epidemiology of chronic cutaneous wounds in China. Wound Repair Regen 2011;19(2):181–188.
- 6. Heyer K, Herberger K, Protz K, Glaeske G, Augustin M. Epidemiology of chronic wounds in Germany: analysis of statutory health insurance data. Wound Repair Regen 2016;24(2):434–442.
- Nussbaum SR, Carter MJ, Fife CE, et al. An economic evaluation of the impact, cost, and medicare policy implications of chronic nonhealing wounds. Value Health 2018;21(1):27–32.
- 8. United Ostomy Associations of America. Home page; n.d. [cited 2022 Jun 27]. Available from: https://www.ostomy.org/
- Cleveland Clinic: Cleveland Clinic ET/WOC nursing history; n.d. [cited 2022 Jun 27]. Available from: www.clevelandclinicmeded. com/live/courses/2008/ETWOC08/history.htm
- Hutchison CB. Internationally inclusive science education: addressing the needs of migrants and international students in the era of globalization. In: Atwater MM, Russell M, Butler MB, editors. Multicultural science education. Dordrecht: Springer; 2014. p. 137– 158.
- 11. Gay G. Culturally responsive teaching: theory, research, and practice. New York: Teachers College Press; 2018.
- Dung PT, Trang LT, Tung HH. Nurses' knowledge, practice, and confidence after the training program on wound care at the Agriculture General Hospital in Vietnam. Open J Nurs 2020;10:646– 656. doi:10.4236/ojn.2020.106045
- Phan TD, et al. Assessment of knowledge, attitude, and practice of wound care among nurses based on nursing competencies standards and some related factors. J Vietnam Assoc Orthodont 2014;368–373.
- 14. Phan TD, et al. Effectiveness of training programme on nurses' wound care competencies after one year of implementation. Thai J Surg 2017;38:140–146.

- 15. Phan TD, Nguyen DC. Assessment of nurses' knowledge after 6, 9, 12 months after the training program on wound care based on nursing competencies standards at Viet Duc Hospital. J Disaster Med Burn Inj 2018;4:47–54.
- 16. Phan TD, et al. Evaluating a training programme at Viet Duc University Hospital in Vietnam. Br J Nurs 2016;25:S14-S21.
- 17. Do HTT, Edwards H & Finlayson K. (2023). Surgical wound assessment tool: Construct validity and inter-rater reliability of a tool designed for nurses. Journal of clinical nursing, 32(1-2), 83–95. https://doi.org/10.1111/jocn.16476
- 18. Do HTT, Edwards H & Finlayson K. Development of a surgical wound assessment tool to measure healing and risk factors for delayed wound healing in Vietnam: a Delphi process. J Wound Care 2022;31(5):446–458.
- Do HTT, Edwards H & Finlayson K. Postoperative wound assessment documentation and acute care nurses' perception of factors impacting wound documentation: a mixed methods study. Int J Clin Pract 2021;75(2):e13668.
- 20. Do HTT, Finlayson K & Edwards H. Surgical wound assessment in Vietnam: a think-aloud technique and interview analysis. J Wound Care 2020;29(Sup4):S4–S13.
- 21. Do HTT, Edwards H & Finlayson K. Identifying relationships between symptom clusters and quality of life in adults with chronic mixed venous and arterial leg ulcers. Int Wound J 2016;13(5):904–911.
- 22. Merriam SB, Bierema LL. Adult learning: linking theory and practice 1st ed. San Francisco, CA; Jossey-Bass; 2014.
- 23. Knowles MS, Holton EF, Swanson RA. The adult learner: the definitive classic in adult education and human resource development. 6th ed. Burlington, MA: Elsevier; 2005.