

Wound, Ostomy and Continence Nurses Competency Model: A Qualitative Study in Japan

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Abstract

Background: Wound, Ostomy, and Continence Nurses (WOCNs) in Japan have received high praise for the outcomes of nursing activities. It is important for WOCNs not only to practice and obtain education but also to continuously expand and develop in their roles. Therefore, maintaining and improving professional qualities and abilities is an issue. However, the competency of WOCN to become an expert is not clear. It is necessary to grasp the proficiency level of WOCN or the acquisition process of WOCN abilities. This research aimed to clarify the competency of WOCNs and to develop a competency model.

Methods: This research is a qualitative descriptive research design. The qualitative data collected by semi-structured interviews was analyzed. Participants were 27 people working at a hospital with more than 5 years WOCN experience.

Results: Competency concepts of expert WOCNs in role performance were as follows: "Action required for the achievement of duty goals," "Human relationships based on understanding others," "WOCN role formation," "WOCN professional skills," and "WOCN self-study." These competency concepts were related to each other. WOCN competency model was visualized as being able to acquire advanced expertise by accumulating experiences and to grasp the level of proficiency.

Conclusion: This research identified WOCNs' competency concepts in Japan, and showed the WOCN competency model as leading to the development of WOCNs. The concepts in this model are related to each other in the role performance of WOCNs and suggest that the model can be used for self-evaluation of WOCNs and human resource development.

Keywords: Competency, WOCN, Competency model, Certified nurse

Introduction

Wound ostomy continence nurses (WOCNs) provide important care for people with a stoma, wound, fistula-drain, pressure ulcer, or continence failure [1]. WOCNs in the United States are authorized as Advanced Practice Registered Nurses [2]. WOCNs' activities increase patient satisfaction and reduce medical costs [3]. Additionally, WOCNs routinely evaluate the prediction and prevention of pressure ulcers in home medical care, and manage pressure ulcers among elderly people [4, 5]. This has led WOCNs to expand nursing activities in pressure ulcer care. Further, WOCNs can help to prevent medical litigation through consultancy [6]. But, WOCNs face problems with the legal definition of their professional services, education requirements, and obscure certification requirements [7]. It is necessary to clarify the behavioral characteristics of effective and excellent nursing

activities in order to grasp the proficiency level of WOCN or the acquisition process of WOCN abilities. Competency is based on the concept in research by McClelland. Spencer and Spencer defined competency as follows: "for a certain job or situation, [competency is] a fundamental characteristic of the individuals who are involved as the cause that produces an effective or outstanding achievement in the light of the criteria" [8, 9]. Thus, clearly demonstrating the ability to produce high achievement in a particular domain indicates competency in that domain. Moreover, competency may provide action guidelines within organizations. Research examining nursing competency has addressed Advanced Practice Nurses (APNs) and nursing educational orientation and pathways [10-13]. WOCNs had competency in advanced nursing practice, but research has not modeled WOCN competency. Hamric et al. found that the role development process of APNs varies from beginners to experts, however, WOCNs' process of acquiring abilities and qualities has not been examined [7,10]. The WOCN Society has proposed that competency is constituted by skill in

adapting to particular treatment situations, rather than technical proficiencies [14]. They also demonstrated the Magnet Model that is able to measure WOCNs' compliance with the American Nurses Credentialing Center's Magnet program [15]. Nonetheless, the relationship between each competency of WOCN and the years of experience in specialized fields has not been verified in the Magnet Model.

Credentialing system by Japanese Nurse Association certifies the following three; certified nurse specialists, certified nurses (CN) and certified nurse administrators. WOCN is included in CN. The important role of CN is practice, instruction, and consultation [16]. WOCNs' activity outcomes have received high praise and yielded considerable economic benefit, leading to the full establishment of the WOCN position. The number of WOCNs is increasing rapidly and a high demand exists for WOCNs for social needs. Nevertheless, WOCNs experience with lacking of public activities, work-related stress [16-19]. WOCNs are sometimes unable to manage their role and responsibilities as a CN and commonly face complex work-related issues. Regarding WOCN competency in Japan, Nishizawa et al. conducted a literature review focused on pressure ulcer management and found that WOCN nursing requires the ability to approach in phases according to organizational position based on the characteristics of each occupation [20]. There is also the components of WOCNs' practical ability and WOCNs' professional standards and code of conduct [21, 22]. That research has examined elements of WOCNs' competency but has not presented a competency model for WOCNs. Additionally, research has not established which elements of expert WOCNs' competency are necessary to achieving positive care outcomes and expanding the role of nursing practice. Further, WOCNs commonly face complex challenges with clinical research, nursing practice, and organizational activities. They are seeking means of maintaining and developing their own professional qualities and abilities. Therefore, WOCN's competency has not considered to grasp the level of proficiency through the acquisition of WOCN skills and abilities.

In this study, WOCNs competency was conceptualized as an expert WOCN's ability to practice effective or excellent nursing activities and determine the actions necessary to achieve the desired outcome. A model of WOCN competency can explain the abilities and roles of advanced nursing practice, and there is a possibility that can be used to evaluate competency and role acquisition status. Developing such a model will enable self-assess of WOCN in order to grasp the competency necessary for WOCN and to identify areas that require development; thereby helping to improve the quality of WOCNs' nursing practice. This study aimed to clarify the competency from the qualitative data of the expert WOCNs who has been experienced more than five years as a certified nurse, and develop a competency model.

Methods

Design

A qualitative descriptive design was used. This design was selected because it permits the comprehensive examination and accessible representation of events [23].

Participants

Target participants were 189 CNs who were expert WOCNs and had more than five years' experience working in hospitals in the

Kyushu region. Participants published on the website of the Japan Nursing Association were recruited. A written request to participate in this research was mailed to target WOCNs. A total of 27 WOCNs agreed to participate. At least 10 years of experience is necessary for proficiency of a discipline [24]. WOCNs has experience in wound ostomy continence (WOC) care for more than three years before certification. Therefore, WOCNs with more than five years of experience following certification were defined as experts in this study.

Data collection

Competency data were collected using semi-structured interviews. Five questions were as follows: "Please describe some positive experiences you had in your WOCN role," "Please describe some challenging experiences you had in your WOCN role," "In addition to your WOCN role, what ideas and actions require implementation at work?" "What are the competencies required for the WOCN role?" The interview format followed the Behavioral Event Interview technique [9]. Interviews were conducted in a private room and lasted for 45–120 minutes. The researchers recorded interview content using an IC recorder (manufacturer: OLYMPUS; model: V-822). Data were collected from October to November 2015.

Data analysis

Data were analyzed to extract WOCNs' competency according to a procedure of Andersen. Data points considered to represent WOCNs' particular behavioral characteristics were underlined. Data units that could be meaningfully read were extracted. The extracted action was coded as a competency. Extraction of actions and competencies was conducted on a one-to-one basis [25]. Categorization was conducted through examination of similarity and dissimilarity between data units. Categories with a common meaning were collected and classified into clusters. Finally, elements of WOCNs' competency were identified after creating a list of competency clusters. Data analysis was regularly supervised and conducted through repeated analysis of interview content.

Trustworthiness

Trustworthiness was assured according to the validation procedure for qualitative studies of Holloway and Wheeler [26]. Certainty was maintained by checking data descriptions with the participants. Validation was carried out using peer debriefing and regular supervision by educators majoring in qualitative research.

Ethical considerations

This study was approved by the appropriate university institutional review board. The researchers provided a description of the study's aims, procedures, and ethically relevant characteristics to the participants verbally and in writing. All participation was voluntary. All personal information was protected.

Results

Participants' characteristics (Table 1)

Participants' average age, years of experience as a WOCN, and as a nurse were 44.2, 6.7, and 22.9 years, respectively. The most common job title was senior vice nurse manager (15 participants); full-time work was the most common work arrangement (16 participants).

Table 1: Participant characteristics n=27

Characteristic	Classification	N
Age	30–39	8
	40–49	13
	50–59	6
Mean	44.2 years	
Years of experience as a certified nurse	5 years	8
	6 years	6
	7 years	4
	8 years	5
	9 years	3
	≥10 years	1
Mean	6.7 years	
Years of experience as a nurse	10–15 years	2
	16–20 years	8
	21–25 years	10
	26–30 years	2
	31–35 years	5
Mean	22.9 years	
Job title	Staff nurse	9
	Senior vice nurse manager	15
	Nurse manager	2
	Deputy nursing director	1
Type of work	Working full time	16
	Exclusive duty	6
	Staff nurse	3
	Other	2

WOCN competency

The following competency concept categories were extracted: Action required for the achievement of duty goals, Human relationships based on understanding others, WOCN role formation, WOCN professional skills, and WOCN self-study. The following section presents main quotes from participants, with anonymous participant identifiers (e.g., “N03”) included in square brackets. In some instances, supplementary explanation is presented in parentheses.

Action required for the achievement of duty goals

Actions necessary to achieving WOCNs’ duty goals critically involved repeating the following process: preparation, implementation, evaluation, and improvement. Participants indicated that this process helped them to achieve important care outcomes.

Regarding preparation, N03 actively collected patient information from medical personnel and electronic medical records in order to achieve job objectives. Specifically, important information was obtained through deliberately initiated conversations. N25 used their status as a CN to facilitate engagement with other professionals and locate human resources corresponding to patients’ needs.

(A link nurse attending to a patient’s pressure ulcer wrote a sentence describing the patient’s condition and requirements; however, that

sentence did not effectively convey the nurse’s intended meaning) If I go to the ward—that’s “if”—I will normally have a conversation [with the link nurse]. [N03]

(When I discuss an intractable wound with the attending physician) It’s important to speak to the attending physician. For example, “The long-term goal is clear, but let’s decide on the right short-term direction together,” “Once a week, whenever it’s convenient, let’s visit the patients.” That way, care is practiced in conjunction with the staff nurse, link nurse, and chief nurses, during the patient visit. [N25]

Regarding implementation, N15 reported analyzing patient information by assessing the problems’ priority, examining the staff nurse’s report, and considering the patient holistically. This practice involved knowledge and techniques particular to WOC care. N06 shared information to promote collaboration and cooperation among medical care team members, but reported using the power of the WOCN position when necessary. N24 reported negotiating in WOCNs’ pioneering and economic perspective in hospital management decision making.

(The WOCN has received consultation from the staff nurse regarding a patient’s peristomal skin problem) I completed an assessment of the stoma’s location, stool properties, and examined the patient’s abdominal wall. Ingenuity of care was required; I tried using a plane or a convex surface ostomy appliance, according to the patient’s condition. [N15]

(When I feel that WOC care practiced by the staff nurse is incorrect or risky) I went as soon as possible to the patient’s bedside in order to provide instruction. I also provided information regarding the staff nurse to the senior vice nurse manager, and asked the staff nurse to explain the case to the senior vice nurse manager. [N06]

Unnecessary dressings and medical tape are always reviewed in the ward, leading to the loss of unused storage products. I had to submit their efforts as benefits to the settlement of article accounts for the year. [N24]

Regarding evaluation, N21 actively collected information from patients, their families, other nurses, and care records following care completion. The care was then evaluated against targets. Data collected in WOC care was used for objective analysis. Further, N19 reviewed and evaluated their own actions in providing instruction, training, and education to staff nurses.

(When I re-confirmed correct WOC care practices with the staff nurse) The staff nurse had been unable to properly complete the procedure, had conducted it in a non-standard way, and had not collected information in the field. As a result, the patient’s condition had worsened. [N21]

I carried out study meetings regarding pressure ulcers [yearly] to Nurses in medical facilities in the region. In consequence, pressure ulcers had decreased in the region. [N19]

Regarding improvement, N25 described implementing improvement after noticing a way to solve a problem with care practices while planning measures, or discovering that expected outcomes had not been achieved.

As a WOCN, I must attend to management and institutional issues, so I do not often have the opportunity to visit inpatients, and must organize visits to patients around particular care interventions. Therefore, to accommodate my WOCN responsibilities, the time and frequency of patient requests for care is reported to the nurse managers in writing. The nurse managers implemented that idea. [N25]

Human relationships based on understanding others

The concept “human relations based on understanding others” refers to actions directed towards developing and maintaining effective relationships within the organization; specifically, it refers to WOCNs enlisting the support of other healthcare professionals through mutual understanding. Two types of activity exist within this category: “active behavior” and “passive behavior.”

Regarding “active behavior,” N01 and N14 described trying to understand the position of an opposed party in order to respect that party without prejudice. These WOCNs had taken the initiative to proactively network with new contacts. Regarding “passive behavior,” N03 and N04 aimed to openly listen to others’ perceptions when opposed to them. These participants also reported the occasional necessity of resolving conflict by exerting their authority with the assistance of others.

WOCN activities require negotiation with people from various departments and professions. Therefore, although it’s burdensome, I make sure to engage with colleagues from other professions at events such as meetings, New Year celebrations, and end-of-year parties. [N01]

My purpose as a WOCN is predetermined. I have to be clear about it, in order not to get distracted and pursue other things. [N14]

(When I need to transfer contents for wound care) I am able to a request to convey information from the deputy nursing director to the ward nurse manager. [N03]

(Because a wound is not healing) The patient and his wife were very anxious. He said, “At some point, I’ll need to look after myself, so I want you to tell me how to get [my wound] to heal.” Anyway, I made sure to listen quietly and pay attention throughout his story. [N04]

WOCN role formation

The concept “WOCN role formation” refers to actions WOCNs take to deepen their self-understanding; for instance, by obtaining feedback through self-analysis and from others. This category refers to WOCNs’ personality and identity, as well as to actions that comprise elements of WOCN’s role in nursing practice. This category is divided into “self-understanding” and “identity.”

Regarding “self-understanding,” N03 and N09 described using introspection, self-analysis of one’s thoughts and attitudes, and seeking the opinions of others, to examine their behavioral characteristics. These participants also mentioned needing to remain aware and in control of their emotions. Regarding “identity,” N09 and N19 described a sense of “mission” and personal beliefs, which they developed in accordance with the needs of the hospital. These participants mentioned taking pride in contributing to their hospital or region through their work.

(While teaching pressure ulcer prevention to staff nurses) I have been saying this for three or four years: “Assessment, depressurization, and preventing deviation.” Then, while I was in the ward, I noticed that I had been teaching the answer to the staff nurses until now. [N03]

(While discussing wound management with the doctor) I was excited about it, but I had to think to myself, “wait a moment,” and take a deep breath. [N09]

(Regarding WOC care training) Previously, prevention education for pressure ulcers had only been provided to hospital officials off-site; however, this year, it’s being provided to caregiver facilities and homes. [N19]

(When giving one’s opinion as a WOCN against nurses and other occupations) I said, “This is the care objective for the patient.” It was not negotiable; if anything, I was preventing its becoming blurred. [N09]

WOCN professional skills

The concept “WOCN professional skills” refers to actions demonstrating technical and skilled professional knowledge particular to WOC care; accordingly, it captures behavior critical to role performance behavior.

WOCNs have expanded the nursing process with a focus on WOC care. N11 described making full use of technical expertise in WOC care when deploying nursing processes. This participant stated that care methods should be practiced discreetly, according to the patient’s condition, and with commentary and instruction in order to properly manifest ideal care practices. N02 evaluated WOC care practices after their performance, comparing before and after the intervention. N12 directly praised staff nurses to other parties when nursing care achieved positive outcomes. N09 provided instruction discreetly, considering the staff nurse’s motivation and readiness, to prompt behavioral change in the staff nurse. N13 engaged in self-evaluation regarding educational involvement, and N22 actively presented information that was used to take the initiative on a document for presentation to the committees.

(While providing pressure ulcer care to a patient) I visited the patient’s room with the responsible nurse, and said while continuing to practice, “Let’s try this way first.” Then I said, “Part of the method is in what you don’t do.” Pressure ulcer care needs to be unified. [N11]

(After I conducted evaluation before and after a care intervention with an ostomate) I explained, “The skin would have been red in the direction from “3 o’clock” to “6 o’clock.” Because even when many years have passed since the surgery, you have still changed the person’s body weight and affected the abdominal skin. You have to explain that those changes aren’t often the same [from one person to the next].” [N02]

(When I see that the staff nurse has correctly taped a wound) I make sure to give praise, such as “truly amazing, wonderful.” [N12]

The staff nurse made contact regarding ostomy appliance leakage. I confirmed along with the staff nurse that the patient’s care

needed to be changed, “Given the cause of this leak, let’s continue to change the patient’s care.” In addition, I would explain the basis for the change and how to assess it, since in order to share information, everyone needs to understand, “Why did you choose this or that action; why are you choosing this or that in ostomy appliance.” [N09]

I asked, “Why did you choose to do this,” in order to find out about the nurse’s rationale. In addition, (when I found that the nurse didn’t understand something) I said, “You would have been in trouble. Why do you think you would have been trouble? You didn’t know to check the patient’s record.” Well, you need to tell everyone to record things, and not simply mention them in conversation.” [N13]

(Regarding reporting on WOCN activities to the committee) The reports should use data that can be visualized. For example, I think photographs are a valid means, and stoma numbers are numerical. (Regarding data on WOC care) Data describing increases from previous percentage rates to current percentages is also useful; it’s very important to make reports that are easy to understand. [N22]

WOCN self-study

The concept “WOCN self-study” referred to continuing to practice and acquire specialized knowledge and techniques related to WOC care to grow and develop as a WOCN. Regarding WOCN self-study, N19 and N22 developed new communication abilities and gave effective presentations using graphics. Similarly, N25 acquired new knowledge through accessing research or attending training and academic conferences on WOC care.

The staff nurse mentioned that wound treatment was a very difficult topic, so I adjusted the contents of my presentation at a wound seminar to make the important parts of wound treatment understandable to staff nurses. [N19]

If a wound fails to heal in a particular location, photographs taken over time may help staff nurses to understand the situation. [N22]

When I did not properly understand wound care, I studied [all of the available literature]. [N25]

WOCN competency model in Japan (Figure 1)

Competency concepts of expert WOCNs in role performance were as follows: “Action required for the achievement of duty goals,” “Human relationships based on understanding others,” “WOCN role formation,” “WOCN professional skills,” and “WOCN self-study.” These competency concepts are related to each other, and the WOCN competency model has been visualized as being able to acquire advanced expertise by accumulating experiences and to grasp the level of proficiency.

Discussion

The WOCN competency model clarifies the behavioral characteristics involved in creating effective and desirable behavior patterns based on interview findings describing expert WOCNs’ role performance behavior. These may be used to evaluate WOCNs’ role-related ability, and inform organizations’ approaches to good WOC care. This model is composed of the following concepts: “Action required for the achievement of duty goals,” “Human relationships based on understanding others,”

“WOCN role formation,” “WOCN professional skills,” and “WOCN self-study.” The identified concepts of competency reflect the WOCNs’ development from novices to experts by associating with each other and completing the cycle of role performance. That is, this model represents the direction of WOCN expertise stages from novice to expert, corresponding to Benner’s clinical nursing practice learning model [27]. This model suggests that WOCNs are able to grasp learning situations on their own and act by determining what is necessary to their progress.

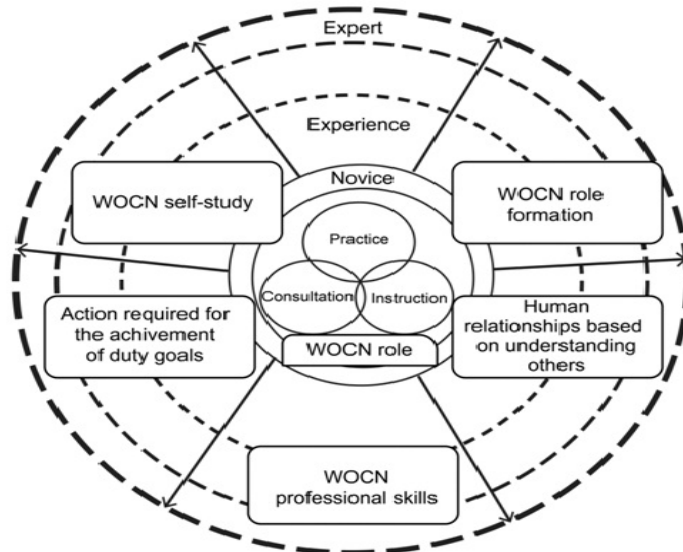


Figure 1: A competency model for wound, ostomy, and continence nurses.

The WOCN Society’s Magnet Model is organized into the following domains: “Leadership,” “Empowerment,” “Professional practice,” “High-quality results,” and “New knowledge, innovation and improvement” [15]. The WHO’s global competency model which is utilized for human resource development with nurses, includes the following competency concepts: “Core competencies including communication, self-management, etc.,” “Management competencies including empowerment, resource utilization, etc.,” and “Leadership competencies including leadership, innovation, organizational learning, etc.” [28]. These models’ concepts of competency correspond to some of those extracted in this study, supporting the WOCN competency model. This model is also related to educational training and adjustment ability, which form the core of Hamric’s model of Advanced Practice Nurse competency [10]. Concepts of this model were observed as the WOCN’s expected competency in practicing highly specialized nursing. Each of concepts suggests that the model includes the competency necessary for WOCN to demonstrate advanced expertise. This model also suggests that WOCNs accrue experience in role performance through self-monitoring and simultaneously form to the WOCN role. This formation may result from knowledge, skills, and ethical attitudes acquired in a wide range of situations over a long time [29]. This model may help to increase awareness of WOCNs as professionals and grasp the process of proficiency. WOCNs may begin with the central skills of practice, instruction, and consultation, and develop through engagement with each of the identified concepts of competence. In this context, this model suggests directions for developing WOCNs’ competency and expertise.

In contrast, in Spencer and Spencer's generalized competency model for support and human services (including nurses), achievement-orientation similar to "Action required for the achievement of duty goals" is a relatively small component [9]. However, this study found that "Action required for the achievement of duty goals" led to the Plan-Do-Check-Act (PDCA) management cycle [30]. This concept involves deriving results and achievements in WOC care through repeating the process of "Preparation," "Implementation," "Evaluation," and "Improvement." Additionally, this result is similar in that WOCNs who centrally affect pressure ulcer management, aim at healing pressure ulcers through full use of pressure ulcer care techniques and proactive cooperation with medical personnel from other professions [20, 31]. WOCNs may be attempting to promote care outcomes by maintaining their intrinsic motivation and keeping high professional awareness [32]. "Action required for the achievement of duty goals" reflects expert understanding of how to achieve care outcomes, as well as which care outcomes are necessary [33]. Therefore, this is a critical concept of WOCNs' competence. In this context, future research should test the reliability and validity of the WOCN competency model.

Strengths and limitations

This study reflects the viewpoint of expert WOCNs. Therefore, it remains necessary to determine if this model may promote novice WOCNs' career development. Participants were confined to WOCNs affiliated with hospitals. Future study should aim to examine WOCNs from a variety of institutions. Furthermore, the WOCN competency model needs to investigate reliability and validity.

Conclusions

This study identified WOCNs competency concept in Japan, and illustrated a WOCN competency model based on them. This result suggests that the developed competency model may be used to self-evaluation and human resource development with WOCNs.

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