

The Influence of Time and Place on the Experiences of US Military Nurses in Vietnam

COL (US Army, retired) Bonnie Mowinski Jennings^{a*}, MAJ Jeffrey C. Ransom^b,
COL (US Army, retired) Susan G. Hopkins^c

^aNell Hodgson Woodruff School of Nursing, Emory University, Atlanta, GA; Colonel, US Army (retired)

^bUS Army Nurse Corps, Center for Nursing Science & Clinical Inquiry, Madigan Army Medical Center, Tacoma, WA; Major, US Army

^cNursing & Health Studies, University of Wisconsin, Green Bay, WI; Colonel, US Army (retired)

ARTICLE INFO

Article history:

Received 31 March 2022

Received in revised form

18 August 2022

Accepted 18 August 2022

Keywords:

military nursing

qualitative research

Vietnam nursing

nursing deployment

ABSTRACT

Background: Although the conflict in Vietnam (usually referred to as the Vietnam War) ended almost 50 years ago, few research-based publications of nurses' experiences in Vietnam exist.

Purpose: The purpose of this study was to expand what is known about the experiences of US military nurses who served in Vietnam.

Methods: This secondary analysis used qualitative description to examine interview data from 15 nurses who served in-country (within Vietnam) and in-theater supporting Vietnam (e.g., Guam, the Philippines) between 1965 and 1972.

Findings: We found that nurses' experiences varied based on time deployed and place deployed (land, sea, or air; in-country or in-theater). The influence of time and place on US military nurses' experiences in Vietnam are illustrated through findings pertaining to danger, daily life, and work. The most prominent differences were between nurses assigned in-country and those assigned in-theater.

Discussion: The findings illustrate ways research of more recent and future conflicts might be strengthened.

Cite this article: Jennings, B.M., Ransom, J.C., & Hopkins, S.G. (2022, November/December). The Influence of Time and Place on the Experiences of US Military Nurses in Vietnam. *Nurs Outlook*, 70(6S2), S104–S114. <https://doi.org/10.1016/j.outlook.2022.08.003>.

The conflict in Vietnam, usually referred to as the Vietnam War, officially ended in 1975 (Ward, 2017). With rare exceptions (i.e., Kirk, 1965), US Military nurses' experiences in Vietnam were not published until the 1980s. Personal accounts (Odom, 1986; Van Devanter & Morgan, 1983; Walker, 1985) were followed by Norman's (1986, 1989, 1990) seminal research. Despite these and other efforts to chronicle nurses' experiences in Vietnam (c.f. Paul, 1985; Schwartz, 1987), "the full story has not yet been told" (Brunk, 1997, p. 230). As we add to

what is known about nurses' experiences in Vietnam, we use the familiar phrase Vietnam War, acknowledging an act of war was never declared by the US.

Background

Nurses' involvement in the Vietnam War typically spanned 1962 to 1973 (Paul, 1985). Nurses served

This article is published as part of a supplement sponsored by the The Geneva Foundation and funded by the TriService Nursing Research Program (TSNRP).

*Corresponding author: Bonnie Mowinski Jennings, 4275 Owens Rd, Apt 537, Evans, GA 30809.

E-mail address: bonnie.m.jennings@emory.edu (B.M. Jennings).

© 2022 The Author(s). Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

<https://doi.org/10.1016/j.outlook.2022.08.003>

in-country (within Vietnam) and in-theater supporting Vietnam (i.e., Japan, the Philippines, Thailand, Guam, Okinawa; [Norman, 1986](#)). The first Army Field Hospital opened in 1962, and the last Army nurses left Vietnam in 1973 ([West, n.d.](#)). Most US military nurses in Vietnam were Army nurses ([Pless Kaiser et al. 2017a](#)).

The Naval hospital ships, USS *Repose* and USS *Sanctuary*, were in the South China Sea from 1966 to 1970 and 1967 to 1971 respectively ([Herman, 2010](#)). The *Repose* was anchored near Danang until the Viet Cong attempted an attack. Subsequently, the hospital ships cruised slowly in a figure-eight pattern ([Norman, 1990](#)). Navy nurses also served on land to include the Naval Support Activity, a hospital in Danang ([Norman, 1990](#)) and at in-theater naval hospitals ([Herman, 2010](#)).

Air Force nurses served in-country flying air evacuation (AE) missions, transporting wounded from base to base; staffing casualty staging facilities, part of the AE system, where patients usually spent ≤ 24 hr; and staffing hospitals ([Holm & Wells, n.d.](#)). In-country Air Force assignments were filled by males until 1966 ([Schwartz, 1987](#)) when 16 females were sent to facilities at Cam Ranh Bay ([Holm & Wells, n.d.](#)). The in-theater AE nurses relocated patients from Vietnam to hospitals in-theater and ultimately to the US ([Holm & Wells, n.d.](#)).

In Vietnam, US military nurses provided care where battle lines were not well-defined ([Cleveland & Egel, 2020](#)). Nurses treated patients with massive injuries ([Blyth et al., 2015](#)), tropical diseases such as malaria ([Harrison & Yim, 2017](#)), and psychiatric conditions ([Camp, 2015](#)).

Existing published investigations of nurses in Vietnam focus on their mental health following return home ([Fontana et al. 1997](#); [Paul, 1985](#); [Pless Kaiser et al., 2017b](#); [Stretch et al. 1985](#)) and descriptions of nurses' experiences ([Norman, 1986, 1989, 1990](#); [Pless Kaiser et al., 2017a](#); [Scannell-Desch, 1996, 1999, 2000a, 2000b](#)).

[Norman \(1989, 1990\)](#) identified that service branch and dates mattered, reflecting the year female nurses served, politics of the time, and whether the war was building up or winding down. [Scannell-Desch \(1996, 1999, 2000a, 2000b\)](#) reported data aggregated across service branches and time to reflect female nurses' experiences. Neither the influence of time nor place (land, sea, air; in-country, in-theater) nurses deployed have been fully explored. Investigators have largely overlooked male nurses in Vietnam. Although [Paul \(1985\)](#) and [Stretch et al. \(1985\)](#) included males in their samples, findings were not reported by gender. The purpose of this analysis, therefore, was to expand the understanding of Vietnam deployment experiences among US military nurses.

Methods

In this qualitative descriptive study, we used secondary data from a parent study of experiences of US military nurses deployed during six major wars since 1941. Data

for the analysis reported here were generated between July 2015 and March 2018. Institutional Review Board (IRB) approvals were obtained prior to the parent study and this secondary analysis. The purposeful sampling criteria for the parent study included: (a) the six wars, (b) service branch, (c) gender, and (d) the deployment timeframe. The only exclusion criterion was diminished cognitive capacity. Following informed consent, interviews were conducted by three doctorally prepared nurses, digitally recorded, then transcribed by a professional transcription service. Each transcript was verified for accuracy. The data were deidentified before they were released for this analysis.

Data Analysis

Using the principles of qualitative descriptive inquiry ([Kim et al. 2017](#); [Sandelowski, 2010](#)), the researchers remained “close to the data with minimal transformation during analysis” ([Kim et al., 2017](#), p. 24). We used conventional content analysis ([Hsieh & Shannon, 2005](#)) to discover patterns and concepts about nurses' Vietnam deployment experiences. In conventional content analysis, the patterns and concepts “flow from the data” ([Hsieh & Shannon, 2005](#), p. 1279), not from a priori views of the topic, thereby gleaning new insights. Interview length averaged 77 min (range 33 to 121 min).

All investigators read each transcript several times to get “a sense of each interview before attempting comparisons across interviews” ([Sandelowski, 1995](#), p. 373). During this process, it became evident that time (years deployed) and place deployed (i.e., in-country or in-theater; land, sea, or air), were focal points and became the lenses through which the data were viewed.

Two experienced qualitative researchers coded the data. A third investigator participated in all conversations, keeping us true to the data. The coding scheme was developed and refined through an iterative, rigorous, independent, and collaborative process. Codes were used to create matrices that helped us identify where data were dense, insufficient, or discrepant and to discover patterns and concepts.

Saturation was partially achieved. In the parent study, in-country and in-theater assignments were not sampling criteria. We did not reach saturation for in-theater experiences.

Rigor

Rigor was maintained by “checking, confirming, making sure, and being certain” ([Morse et al. 2002](#), p. 17) in each step of the analysis. Reflexive and analytic memos were written throughout. We regularly revisited the data to challenge assumptions and verify interpretations ([Maxwell, 2013](#)), while maintaining reflexivity and identifying discrepant cases ([Maxwell, 2013](#); [Morse, 2015](#); [Morse et al., 2002](#)).

Table 1 – Major Findings

Time ← Findings → Place
Background of Danger <ul style="list-style-type: none"> • Nighttime War • Danger Continuum <ul style="list-style-type: none"> ◦ Near Danger ◦ Mid-range Danger ◦ Distant Danger • Protection <ul style="list-style-type: none"> ◦ Self-protection ◦ Patient-protection Middle Ground of Daily Life <ul style="list-style-type: none"> • Austerity Continuum <ul style="list-style-type: none"> ◦ Space and Privacy ◦ Amenities ◦ Food • Confinement Continuum <ul style="list-style-type: none"> ◦ On-Base ◦ Off-Base Foreground of Work <ul style="list-style-type: none"> • Context of Work <ul style="list-style-type: none"> ◦ Facility Type ◦ Duty Uniforms ◦ Schedule ◦ Staff to Patient Ratio • Patient Care Continuum <ul style="list-style-type: none"> ◦ Time from Injury ◦ Patient Variety and Flow • Resource Continuum <ul style="list-style-type: none"> ◦ Supplies and Equipment ◦ Improvising

Findings

The findings reflect in-country experiences unless otherwise stated. We use the term base for all military installations. Quotations reflect the participant's pseudonym, their service (A=Army; N=Navy; AF=Air Force), and whether they worked on land (L), sea (S), or air (A). The data led us to focus on three concepts—the background of danger, middle ground of daily life, and foreground of work as influenced by time and place (see [Table 1](#)).

Participant Characteristics

The participants' average deployment age was 25.5 years and 73.6 years when interviewed (see [Table 2](#)). Although four participants stated time since deploying diminished their recall of details, others offered highly detailed responses, some of which were accompanied by tears and raw emotion. Nurses often volunteered to go to Vietnam but not always. Unlike in the Army, there was a waiting list of Navy volunteers: there were "fewer than...100 [Navy] nurses total in Vietnam." [Eileen-N-S]

Deployment Characteristics

Deployment characteristics are summarized in [Table 3](#). There were vast differences between participants

Table 2 – Participant Demographics (N = 15)

	Average in Years (Range)
Age during Deployment*	25.5 (22–32)
Age at Interview	73.6 (67–82)
Pre-Deployment Nursing Experience*	4 (0.5–17)
	N
Service	
Army	7
Navy	4
Air Force	4
Gender	
Female	11
Male†	4
Race/Ethnicity‡	
White, Non-Hispanic	14
White‡	1
Married at the time of Deployment§	
Yes	2
No	13
Volunteered to Deploy	
Females	
Yes	7
No, Received Orders	3
Unknown	1
Males	
Yes, In Lieu of Being Drafted	2
No, Drafted or Obligated Volunteer	2

* Not directly asked – estimate of military and/or civilian nursing experience based on interview data

† Three Army and one Air Force

‡ One participant did not indicate Hispanic or Non-Hispanic

§ Two males were married when they deployed, one female was married while deployed

assigned in-country versus in-theater. Of the 13 in-country participants, 10 were on land, two at sea on the Sanctuary, and one in the air (see [Figure 1](#)). The in-country AE nurse experienced life on land and work in the air. The three participants assigned in-theater were either on land (Navy nurses at the hospital in Guam) or in the air (an Air Force AE nurse stationed in Japan). Only one participant was in Vietnam during the Tet Offensive, a turning point in the war ([Ward, 2017](#)) and did not provide care for casualties from those battles.

The Background of Danger

Danger was confronted immediately upon arrival in Vietnam. Rides from the airfield were "etched" in nurses' minds as they witnessed the "jeeps, thousands of them" and military men in uniform carrying weapons. [Danielle-N-L] The most profound first impression involved a nurse who noticed a "huge hole in the

Table 3 – Deployment Characteristics

	Land	Sea	Air
Service			
Army	7	-	-
Navy	3*	2*	-
Air Force	2	-	1
Deployment Location			
In-Country	10	2	1
In-Theatre	3 [†]	-	1 [†]
Type Nursing Unit [‡]			
Casualty Staging	2	-	-
Emergency Department	3	-	-
Female Dependent	1	-	-
Fixed Wing Aircraft	-	-	2
Intensive Care	4	1	-
Medical and/or Surgical	3	1	-
Operating Room	3	-	-
Pediatrics	1	-	-
Pre-operative	2	-	-
Psychiatric	-	1	-
Deployment Length			
12 months	10	1	1
> 12 months (n = 4) [§]	3 [†]	1	1 [†]
Schedule (if mentioned)			
12 hr shifts	4	1	-
8 hr shifts	3	1	1
Irregular shifts	-	-	1
6 Days a Week	6	1	-
Years In-Country/In-Theater			
1965–1966	1	-	-
1966–1967	1	-	-
1967–1968	2	-	-
1968–1969	5	1	-
1968–1970	-	-	1
1969–1970	-	1	1
1969–1971	2	-	-
1971–1972	1	-	-

* One Navy nurse spent time on land in-theater prior to transferring to sea

† One Air Force nurse spent 1 year as a flight nurse, then 1 year on land primarily monitoring flight records

‡ Multiple participants worked on more than one type of unit

§ In-theater participants had longer tours of duty (i.e., 18 months, 24 months), one in-country nurse extended for 6 months to preempt returning for a second tour, one nurse started a tour in-theater then transferred to the Sanctuary (for a total tour of 13 months)

|| The timeframes capture the years deployed without focusing on exact months arriving and leaving

The Danger Continuum

Proximity to attacks revealed a danger continuum. Near danger involved nurses and planes targeted by the enemy, including potential enemies on-base. For instance, a nurse was shot at by snipers while boating in the South China Sea on a day off. “Aircraft were targets for the Viet Cong” leading to unloading patients quickly and leaving the engines running to takeoff fast. [Ginger-AF-A] Potential enemies on-base included sappers and mamasans. Sappers (elite forces who breached the perimeter at night) were overt enemies and mamasans (women hired to wash and clean for the troops) were more covert enemies. Although not everyone distrusted mamasans, an AE nurse believed them capable of sabotage; she inspected her aircraft before missions “because those ladies could’ve slipped anything in there.” [Ginger-AF-A]

Mid-range danger involved enemy and friendly rounds going overhead. Although intended for combat units, rounds sometimes fell short, hitting near hospitals. In Danang, for instance, enemy rounds hit the hospital’s generator one night, leaving a nurse in the dark, operating a suction machine by foot. Sights and sounds signaled the enemy was nearby such as when nurses heard bombs exploding in adjacent Cambodia. Friendly fire from Navy ships firing at enemy sites was common at a hospital in China Beach.

Nurses at sea were the most distant from danger. Although they did not address danger explicitly, one ship-based nurse said somewhat dubiously, “Everybody told you the Vietnamese had nothing that could reach us artillery-wise.” [Eileen-N-S]

Sirens announced potential attacks prompting nurses to protect themselves and their patients—if the sirens penetrated the nurses’ tiredness. “One night, sirens went off. . . but we didn’t hear them. We were so tired.” [Felisha-AF-A]

Protection

An underlying sense of fear was not evident in the data. Hard work, tiredness, and feeling protected overshadowed fear. Protection was offered by “men with machine guns on the porches [of the quarters]” [Quinn-A-L] and unit leaders. During an alert, the Chief Nurse of the land-based Navy hospital went “to every room [and asked] ‘Are you wounded there?’” [Danielle-N-L] Despite experiencing danger, two nurses regarded their hospital assignments as a form of protection because they were not “out in the jungle” [Carol-A-L] “getting shot at.” [Adam-A-L].

Nurses quickly learned how to protect themselves and their patients using protective gear (i.e., helmets, flak jackets), destroying supplies that could become weapons, and avoiding danger. All but the nurses aboard ship and in Guam discussed helmets and flak jackets for self-protection. Two land-based participants said empty IV bottles and medication vials were smashed to preclude the enemy making them “into bombs” [Hanna-AF-L] or Molotov cocktails. Nurses

terminal roof.” [Hanna-AF-L] Rockets had created the hole the day before, killing technicians waiting to return to the US.

An important time distinction was participants’ impressions that attacks were mostly a nighttime occurrence. The danger of nighttime flying meant that, with rare exceptions, the AE nurse stopped flying in the late afternoon. Place also influenced the sense of danger. In-theater participants were exposed to less danger: “[In Guam] We didn’t have any... missiles going over...[or] the trauma of bombs exploding around us.” [Isabel-N-L]

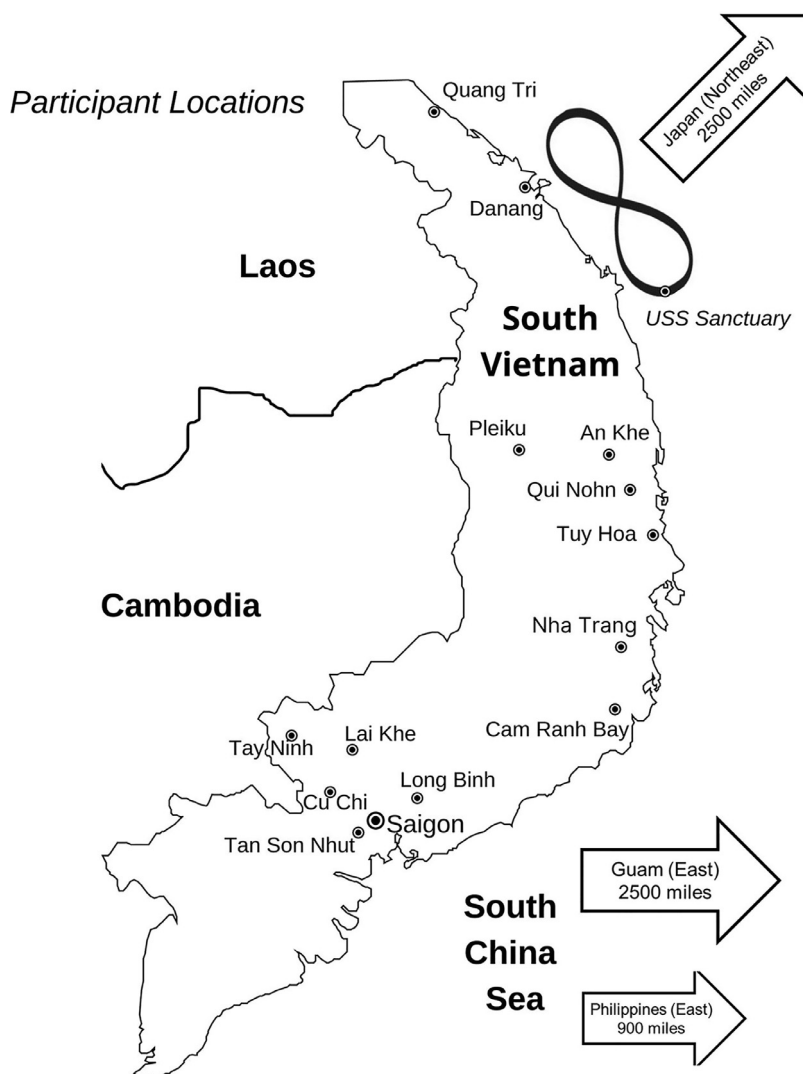


Figure 1 – Participant Location. Note. This figure depicts the participants’ location during their deployment. Some participants were in more than one location. The USS Sanctuary sailed in a figure 8 pattern. Both Japan and Guam, though in-theater, were approximately 2500 miles away. The Philippines are notes as an Air Evacuation location.

avoided danger on-base by relocating to safer places during attacks—beneath beds, in bunkers, or behind sandbags. Off-base nurses maintained good situational awareness, never travelling alone, avoiding unsafe places, and remaining on-base under high threat circumstances.

Nurses on land in-country who worked during attacks acted immediately to protect patients by placing them under beds or covering them with mattresses. When possible, patients were relocated to bunkers. One nurse recalled putting “a whole ward of patients in a bunker one night.” [Bert-A-L] Nurses aboard ship and in-theater did not have to protect patients in this manner.

The Middle Ground of Daily Life

Daily life involved time away from work sleeping, eating, and relaxing. Some gender differences were noted

in daily life. Quarters and bathrooms were designated by gender. Females needed a male escort when leaving the ship and going into Danang. A male nurse found having female nurses accompany him off-base was advantageous: “that was the best way to get a taxi” [Adam, -A-L]; the taxis were military trucks.

Other features of daily life were common across genders. All participants experienced an austerity continuum reflecting space and privacy, amenities on base, and food. They also experienced a confinement continuum in seeking ways to get away from work and the war.

The Austerity Continuum

Time had a powerful effect on living conditions. As the theater matured, facilities also matured creating a “different kind of tour” [Alice-A-L] for those who came later. A nurse who arrived in 1969 viewed her quarters as “relatively comfortable compared to earlier folks.”

[Becky-A-L] Regardless of time, living conditions were simple and spartan. At sea, time had no effect on living conditions because the Sanctuary was the same throughout the war.

Place mattered more for land-based nurses because of the climate. Vietnam was hot and humid. Winds pushed rain into rooms during Monsoons. Air-conditioning was highly desirable. All Navy ships, hospitals, and quarters were air-conditioned. Some land-based nurses who had air-conditioning said it was noisy and unreliable. Consequently, fans were a “premium thing... It was really hard to sleep [without one].” [Bert-A-L]

Space and Privacy. On land, nurses lived in hooches. “A hooch...was where you stayed... it might be a tent” [Bert-A-L] Because hooches differed, space and privacy varied; both were prized and limited. Between 1965 and 1968, three nurses lived in tents for the first several months of their deployment, having no privacy. Moving to fixed structures was “a vast improvement.” [Chad-A-L] Most nurses had one roommate, although in one case there were four to a room. Three had individual rooms; this private space was “small but all ours.” [Danielle-N-L] At sea, all quarters were small and shared. To cope with their small hooches, nurses took advantage of any available space, including the outdoors, for socializing, recreation, and privacy.

In-theater nurses had the most desirable housing. A Navy nurse had a two-room suite that, though furnished spartanly, included a private bathroom and a bedroom large enough for a double bed, unlike the bunkbeds used by most nurses. The Air Force nurse had a one-bedroom apartment in Japan. She also stayed in numerous temporary accommodations depending on her schedule (see [Figure 2](#)), having private but impermanent space.

Bathrooms were typically communal. In 1965, eight-person wooden latrines initially did not have partitions for privacy. Weekly communal showers were a mile away and no roof meant no privacy when helicopters flew overhead and crews gawked. By contrast, in 1968 a nurse was enthusiastic about a communal bathroom because of hot and cold running water and flush toilets. A nurse who arrived later in the war (1971) shared a tiny bathroom with a roommate where the water was always rusty, non-potable, and sporadically hot.

Amenities. Time enhanced the availability of amenities such as base exchanges (BXs, military stores) and officers’ clubs. None of these existed in 1965. BXs sold prized fans, stereo equipment, alcohol, cigarettes, and small food items. Getting to the BX on a day off was a “big deal.” [Dan-AF-L] Some BXs had “everything pretty much in [them]” [Adam-A-L]; others ran out of items, like fans, quickly. Female nurses said “the BX just didn’t carry anything for females” [Hanna-AF-L] including uniform items, like

shoes and nylons, and feminine hygiene products. They acquired these items in care packages from family and friends.

In 1966, officers’ clubs were in tents. In 1968, the officers’ clubs in Danang ranged from lovely to lacking. “By warzone standards, it [the officers’ club] was truly lovely.” [Danielle-N-L] By contrast, “We built our own officers’ club...with the help of the Navy” [Adam-A-L], exemplifying interservice camaraderie. Both in-country and in-theater AE nurses visited the officers’ club at Clark Air Force Base in the Philippines. It had meals, a pool, a chance to “get your hair done...and dress up like a woman.” [Ginger-AF-A] Nurses at sea had access to officers’ clubs in Danang on days off or when ships went to Subic Bay.

Food. Weapons and ammunition had a higher priority than food. Consequently, a participant ate “hot dogs for three meals a day for 3 weeks, until the off-loading [from the supply ship was] completed.” [Alice-A-L]

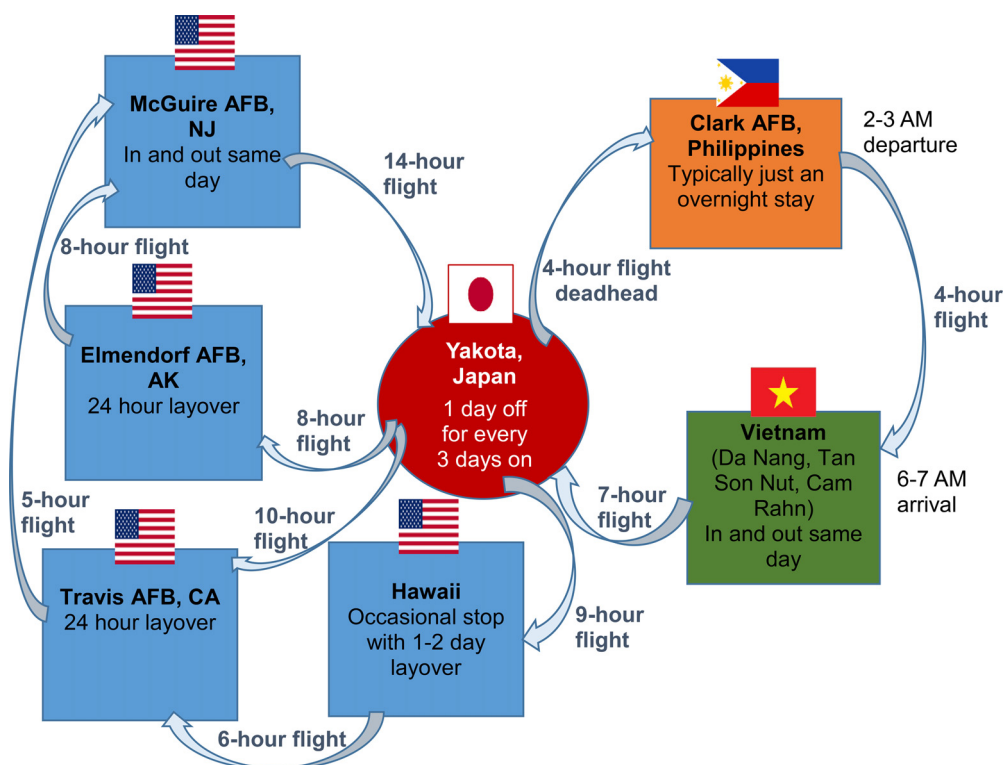
Land-based nurses occasionally had C-rations, but usually ate at dining halls where the food ranged from “not very good” [Ginger-AF-A] to “decent” including “nice big yeast rolls like my grandmother [made].” [Carol-A-L] While eating, it was common to fight “lots of flies, the national bird of Vietnam.” [Danielle-N-L] Beef was a common menu item, with one participant proclaiming, “everybody dreaded roast beef.” [Chad-A-L], “the cow in a can.” [Becky-A-L] Having connections expanded food options; steaks and lobster tails sometimes “[fell] off the back of a truck” [Hanna-AF-L] One nurse’s connections enabled her to make pizza in a dental clinic autoclave.

The most striking food contrast was between in-country land-based nurses and nurses at sea. One land-based nurse who transported patients to the Sanctuary was invited to eat in the wardroom, another example of interservice camaraderie. The experience was memorable; food was “serv[ed] off silver trays. They had napkins and rings.” [Bert-A-L] A shipboard nurse verified this impression, The food was “fabulous...We even had Baked Alaska about once a month.” [Eileen-N-S].

The Confinement Continuum

Although all nurses had occasional personal time, there was a feeling of confinement because daily life and work were in close proximity. Personal time was usually spent on-base with sporadic opportunities to go off-base for a day, a weekend, or several days. When threat conditions were high, you “[couldn’t] get away...[it] felt kind of like [being] in a prison.” [Eileen-N-S]

On-Base. Ways of relaxing included writing letters, reading, sleeping, listening to music, having cookouts and parties, and participating in sports. Officers’ clubs offered nurses a place to drink, socialize, or have a meal. The beautiful beaches on the South China Sea were available to nurses assigned in Danang and Cam



Note: Flight times approximated based on transcripts and web searches.

Figure 2 – An In-Theater Flight Nurse's Schedule: 1968-1970.

Ranh Bay. "Going to the beach helped a lot." [Dan-AF-L] The nurses did "oddball things...to pass time" [Bert-A-L]. Things mentioned only by land-based nurses included watching the spread of Agent Orange over the tree line. One example of getting away on-base was a nurse who repeatedly referenced "smoking dope and getting high." [Chad-A-L]

Off-Base. Getting off-base allowed an escape from daily life. It was a "way of coping, something to look forward to." [Dan-AF-L] Off-base activities included dining or shopping in nearby cities. The nurses at sea got off-base via helicopter or small boats to enjoy the beach, dine, shop, or go to a bar. Getting away sometimes reflected interservice camaraderie. Because alcohol consumption was prohibited at sea, "[people from the Sanctuary] would come to our place [on land]...and we'd have cocktail parties." [Bert-A-L] Longer periods off-base included a weekend at former Vietnamese resorts in-country or taking leave or rest and recreation to select countries in the Asia-Pacific region, including Australia.

Nurses at sea and in-theater had unique off-base opportunities. At Subic Bay during needed ship upkeep, nurses had 10 days off with "the freedom to do anything we wanted to do." [Jada-N-S]—visiting a nearby military resort, playing golf, sightseeing, drinking, and partying. In-theater nurses had access to automobiles, affording them more get away options. For instance, a nurse was authorized to ship her automobile to Guam.

The Foreground of Work

The nurses' work was central to their Vietnam experience. The nurses remembered vivid details of patients. One nurse provided a powerful statement about the stench of pseudomonas and how she can smell it even today. Facility location, unit type, schedules, and staffing created the work context. The primary variances in work were across continuums of patient care and resources.

The Context of Work

In 1965, a nurse worked in a tent hospital before moving to Quonset huts. Casualty staging facilities ranged from trailers in 1966 to "one long building" without air conditioning in 1968. [Hanna-AF-L] In 1968, land-based nurses rendered care in places such as tents, mobile units, and fixed facilities. Fixed facility variability included a newly built hospital in Danang in 1968 and a converted French school with piped in oxygen in 1971. As the war progressed, nurses were more likely to work in fixed facilities with air conditioning.

Although facility size varied from 60 to over 700 beds, nurses' experiences were shaped more by the nursing unit where they worked. Nurses in the emergency department (ED), operating room (OR), or casualty staging were most likely to receive newly injured patients. Nurses on medical and surgical units saw patients with tropical diseases or after initial surgical treatment. Intensive care unit (ICU) nurses saw

patients who, although not all injured, faced the most severe and life-threatening circumstances. Psychiatric patients were only mentioned briefly during AE missions, at casualty staging facilities, and aboard ship.

Duty uniforms varied by service and nursing unit. Typically, Army nurses wore jungle fatigues, Air Force nurses wore navy pants and light blue shirts, and Navy nurses wore the white uniform common of the era—starched dresses and caps, white shoes and, for those aboard ship, white hose. Nurses in the ED, OR, or ICU, however, often wore scrubs. In 1971 at the Army hospital in Saigon, nurses were switched from fatigues to the white uniform. With the lack of hose and shoes at the BX, this was considered “the dumbest decision ever.” [Carol-A-L].

It was common to work 6 days/week, with land-based nurses experiencing mass casualty surges working up to 72 hours nonstop. The in-theater AE nurse had the most erratic schedule depending on flight assignments (Figure 2). She recognized land-based nurses “had the hard time” while noting that AE “wasn’t easy, because we had all sorts of hours” [Felisha-AF-A] like being awakened at 2-3 AM and having flights up to 12 hours. Although most nurses worked shifts of ≥ 12 -hours, there were exceptions with nurses in the OR and ICU sometimes experiencing 8 hours shifts.

A striking feature across all places was staff to patient ratio. The in-theater AE nurse sometimes had another nurse to care for 40 patients with the assistance of 1 to 2 medical technicians; it was rare to have a physician accompany them. Onboard ship, 28 nurses staffed 700 beds. One nurse covered an ICU of about 18 beds, depending heavily on the 6 to 7 Corpsmen on duty: “They were essentially your hands.” [Jada-N-S] A shipboard nurse who worked on medical and surgical units was simultaneously in charge of the 12-bed psychiatric unit where psychiatric technicians provided care.

The Patient Care Continuum

Nurses cared for patients with traumatic battle injuries, tropical diseases, and psychiatric disorders. The all-male combatant US service members, mostly 18 to 20-year-olds, left a nurse feeling “like I was taking care of my younger brother.” [Carol-A-L] Patient care considerations included time from injury, patient variety and flow, and patients as persons.

Time from Injury. The nurses most prominent memories were of newly injured patients with extensive injuries: “99% of patients arrive by helicopter, right from the field, within 15 minutes of injury.” [Danielle-AF-L] On land and ship, patients stayed up to 30 days, long enough for complications. By contrast, the AE nurse received mostly newly injured patients, and casualty staging nurses usually kept patients less than 24-hours. The in-theater AE nurse cared for stabilized patients prioritizing comfort with medications or relieving litter pressure. A nurse in Guam commented about first dressing changes for in-theater patient

transfers. “That’s when you saw the straw and the rocks...still coming out of this wound that looked like hamburger.” [Isabel-N-L]

Patient Variety and Flow. Army Soldiers and Marines dominated the patient population. The patients in-country also comprised Vietnamese and Republic of Korea military, traveling entertainers, prisoners of war, and civilians including women and children. Nurses in Guam also provided care for Pacific Islanders and military family members.

Patient flow was unpredictable, fluctuating between “the boredom of war” [Bert-A-L] and mass casualties. From one to over 100 patients with various injuries and illnesses arrived simultaneously. For nurses on land and at sea, battles resulted in numerous patients arriving for initial treatment. Regardless of the volume, a triage process was conducted—those with moderate to minor injuries were usually treated first. There was one report of occasionally disregarding the triage protocol by reversing the process and focusing all efforts on one critically injured patient. During a mass casualty, staff swarmed to the ED: “you never lacked for help.” [Becky-A-L] Some nurses never triaged; others found it “very difficult” [Quinn-A-L], and one nurse could “triage with my eyes closed.” [Hanna-AF-L]

The Resource Continuum

The amount and condition of supplies and equipment for Army and Air Force nurses were often inadequate, leaving them with “nothing to work with” [Hanna-AF-L]. By contrast, Navy nurses did not mention supply or equipment problems. The land-based Navy nurse described a hospital with the latest drugs and equipment; “[we] lack[ed] for nothing.” [Danielle-N-L]

Except for the Navy nurse, land-based nurses emphasized the lack in quantity and variety of supplies. Some supplies were expired, malfunctioned, or offered limited options. Nurses believed supplies were stolen and sold illegally and then purchased back when normal procurement channels failed (e.g., antibiotics). Sometimes supply shortages resulted from extreme use, such as when blood supplies were depleted. In bunkers there were no supplies.

Land-based nurses mentioned having inadequate equipment. Sometimes equipment was shared between units or facilities. Nighttime workplace lighting was often insufficient—in bunkers, ambulances, or during an attack.

The lack of supplies and equipment prompted improvisation. An extreme example of improvising occurred when the AE nurse had to use a different aircraft (C7) when her C130 was hit in a night attack. Luckily her medical technician knew “where you could hook up the oxygen” because she did not [Ginger-AF-A]. Usually nurses improvised using whatever was available including sharing chest tube drainage bottles between patients, substituting clamps in the OR, or using feminine pads for bandages. Regardless of place, Navy nurses did not report improvising.

Discussion

The US military nurses' experiences in Vietnam of danger, daily life, and work were influenced by time and place. Our data allow us to provide more context, nuance, and depth regarding deployments in support of the Vietnam war than previously offered. For example, danger revealed an unexpected aspect of time—nurses perceived it was a nighttime war. Although this discovery was unexpected, it is congruent with a brief description by Norman (1990) that nighttime was the "enemy's favorite time" to attack (p. 66). Our analysis augments the nighttime nature of the war.

The influence of place was most profound when comparing nurses who served in-country to those who served in-theater. In-theater nurses were more distant from danger and encountered less austerity and confinement, including the unique finding of access to personal automobiles. The itinerant lifestyle and unusual work hours for the in-theater flight nurse have not been depicted previously. Previous investigators did not distinguish between nurses who served in-country and in-theater.

Place had more to do with shaping the nurses' experiences than service branch as previously reported (Norman, 1989, 1990). Branch had some influence—only Navy nurses were at sea, only Air Force nurses flew AE missions, and only Navy nurses claimed being well-equipped. Yet nurses from all branches worked on land. Although Air Force nurses worked in the air, they lived on land, having their wartime experiences shaped by two places. Shipboard nurses also had experiences on land on days off.

Place influenced danger, daily life, and work. We discovered continuums in each. The danger continuum spanned near to distant. The only example of near danger we found in the literature was Norman's (1990) mention of mamasans smuggling explosives into nurses' hooches in Saigon and sappers at Cam Ranh Bay. Paul (1985) gives credence to the danger continuum by noting that the likelihood of harm was greater at some hospitals than others. Most existing literature addresses mid-level danger, focusing on rounds landing close to hospitals (Norman, 1986, 1990; Paul, 1985; Scannell-Desch, 1996, 2000a). We did not find mention of distant danger in the literature. Unique to our findings, the nurses expressed an overall sense of security rather than feeling a constant threat of danger.

Findings related to daily life mirror existing literature regarding small spaces and little privacy (Norman, 1989, 1990; Pless Kaiser et al., 2017a; Scannell-Desch, 1996, 2000a). Nuances in our findings include the importance of fans, a point not mentioned previously. We also portray a confinement continuum that is not in existing reports; getting away usually meant going off-base. We expand the existing view of camaraderie (Norman, 1986, 1989, 1990; Scannell-Desch, 1996, 1999) by noting interservice camaraderie related to place—such as nurses at sea being invited to parties on land.

Food was not mentioned in existing reports, and we found a sharp contrast between nurses on land and at sea, with superior food and food service at sea.

Norman (1990) wrote that for nurses in Vietnam, "Life revolved around work" (p. 21). Our findings support that point, placing work in the foreground of nurses' experience. A discrepancy was noted when comparing our findings to existing literature in regard to nurses' duty uniforms. Norman (1990) said jungle fatigues were standard except in Saigon and aboard ship. We discovered more variability including the switch in Saigon from fatigues to the white dresses, caps, hose, and shoes, underscoring the effect of time.

Along with severe battle injuries, patients also presented with tropical diseases and psychiatric disorders. Like Norman (1990), our findings show that casualty flow was feast or famine. Our data are more detailed regarding triage. Not reflected in existing reports is that US troops who became patients were mostly Army Soldiers and Marines. Classifying all US troops as Soldiers obfuscates important distinctions.

Consistent with existing literature (Norman, 1990; Pless Kaiser et al., 2017a; Sarnecky, 2007), except for Navy nurses, our participants talked about limited resources and improvising. Unique to our sample was the experience of an in-country AE nurse who had to use an unfamiliar aircraft.

Unlike prior researchers, we explored gender differences and found only a few, mainly in daily life. Thus, findings from previous work in which genders were aggregated may apply to males and females alike. We hypothesize that, since the onset of the Vietnam war, gender has had little influence on military nurses' deployment experiences because demands and requirements are the same regardless of gender.

In future research, we recommend sampling to ensure that time of deployment is captured because it alters experiences. We also recommend that sampling reflects place of deployment, especially in-country versus in-theater deployments. Service branch matters, yet it is where nurses live as well as where they work that alters their deployment experiences.

Despite the small number of males and in-theater nurses, we also offer a beginning sense of whether gender and being in-country versus in-theater effects experiences. Limitations include the effects of time since deploying on recall. Because this was a secondary analysis, we did not achieve saturation for the in-theater participants or males. We lacked the perspective of males in the Navy.

Conclusion

The findings from our study highlight that deployment experiences for nurses related to danger, daily life, and work, varied across both time and place. By understanding the differences in time and place, nurses can

be better trained and prepared for deployment. Both gender differences and location of deployment, in-country versus in-theater, merit further investigation. Given the current ages of the nurses who served in Vietnam, it is not likely we can learn a great deal more from their experiences. We can, however, use findings from studies such as this one to guide future research pertaining to US military nurses who deploy.

Disclaimer

The views expressed are those of the authors and do not reflect the official policy or position of the Department of the Army, the Department of Defense, or the US Government. The investigators have adhered to the policies for protection of human subjects as prescribed in 45 CFR 46.

Acknowledgements

The parent study for this study was supported by the TriService Nursing Research Program, Bethesda, MD (TSNRP; N14-P05). The work of this secondary analysis did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. TSNRP was not involved in the study design; collection, analysis, and interpretation of the data; in the writing of the report; or in the decision to submit the article for publication. We would like to thank Kristal Melvin, PhD, CRNP, LTC(ret) who conceptualized, co-wrote, and conducted interviews for the parent study; LTC Leilani Siaki, PhD, FNP-BC, FAANP, who participated in conceptualizing the parent study and conducted interviews; Gordon West, PhD, RN, LTC (ret) who de-identified data and facilitated the current study; both Jacqueline M. Luizzi, BSN, MLIS, AHIP, Librarian, Madigan Army Medical Center and Sharon L. Leslie, MSLS, AHIP, Nursing Informationist, Emory University Woodruff Health Sciences Center Library who contributed to extensive literature and document searches. We also express our gratitude to colleagues who reviewed earlier drafts of this manuscript: Judith Gedney Baggs, PhD, RN, FAAN, Professor Emerita, Oregon Health & Science University; Elizabeth Hill, PhD, RN, LTC (ret), immediate past Chief of Research, Reno VA; Sandra Rogers, PhD, RN, International Vice President, Brigham Young University (retired); and Katherine A. Yeager, PhD, RN, FAAN, Associate Professor, Nell Hodgson Woodruff School of Nursing, Emory University. Mostly, we are deeply grateful to the nurses who participated in the interviews, often discussing deeply personal information. Lastly, we acknowledge all nurses who have served during past wars and those who will deploy in the future.

Authors' Contributions

Bonnie Mowinski Jennings: investigator on parent study, conceptualization, methodology; formal analysis, resources, writing-original draft, writing-review & editing, supervision.

Jeffrey C. Ransom: conceptualization, methodology, formal analysis, resources, writing-original draft, writing-review & editing, visualization.

Susan G. Hopkinson: conceptualization, methodology, formal analysis, resources, writing-original draft, writing-review & editing, visualization.

REFERENCES

- Blyth, D. M., Yun, H. C., Tribble, D. R., & Murray, C. K. (2015). Lessons of war: Combat-related injury infections during the Vietnam war and Operation Iraqi and Enduring Freedom. *The Journal of Trauma and Acute Care Surgery*, 49, S227–S235, doi:10.1097/ta.0000000000000768.
- Brunk, Q. (1997). Nursing at war: Catalyst for change. *Annual Review of Nursing Research*, 15, 217–236, doi:10.1891/0739-6686.15.1.217.
- Camp, N.M. (2015). U.S. Army psychiatry in the Vietnam war: New challenges in extended counterinsurgency warfare. American Psychiatric Association Publishing. <https://doi.org/10.1176/appi.ajp.2015.15040469>
- Cleveland, C.T., & Egel, D. (2020). The American way of irregular war: An analytical memoir. RAND Corporation, pp. 201–203. Retrieved from <https://www.rand.org/pubs/perspectives/PEA301-1.html>
- Fontana, A., Schwartz, L. S., & Rosenheck, R. (1997). Post-traumatic stress disorder among female Vietnam veterans: A causal model of etiology. *American Journal of Public Health*, 87(2), 169–175, doi:10.2105/ajph.87.2.169.
- Harrison, M., & Yim, S. V. (2017). War on two fronts: The fight against parasites in Korea and Vietnam. *Medical History*, 61(3), 401–423, doi:10.1017/mdh.2017.35.
- Herman, J. K. (2010). Navy medicine in Vietnam: Passage to freedom to the fall of Saigon. *Naval History & Heritage Command*.
- Holm, J.M., & Wells, S.P. (n.d.). Air Force women in the Vietnam war. Retrieved from <http://www.vietnamwomen.smemorial.org/pdf/jholm.pdf>
- Hsieh, H.-F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of qualitative descriptive studies: A systematic review. *Research in Nursing & Health* 40, 23–42.
- Kirk, D. (1965). It was 2:00 A.M. Saigon time. *American Journal of Nursing*, 65(12), 77–79, doi:10.1002/nur.21768.
- Maxwell, J. A. (2013). *Qualitative research design. An interactive approach* (3rd ed.). Sage.
- Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, 25(9), 1212–1222, doi:10.1177/1049732315588501.
- Morse, J. M., Barrett, J., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal*

- of *Qualitative Methods*, 1(2), 13–22, doi:[10.1177/160940690200100202](https://doi.org/10.1177/160940690200100202).
- Norman, E. M. (1986). A study of female military nurses in Vietnam during the war years 1965–1973. *Journal of Nursing History*, 2(1), 43–60.
- Norman, E. M. (1989). The wartime experience of military nurses in Vietnam, 1965–1973. *Western Journal of Nursing Research*, 11(2), 219–233. doi:[10.1177/019394598901100207](https://doi.org/10.1177/019394598901100207).
- Norman, E. M. (1990). *Women at war. The story of fifty military nurses who served in Vietnam*. The University of Pennsylvania Press.
- Odom, J. D. (1986). The Vietnam nurses can't forget. *American Journal of Nursing*, 86, 1035–1037, doi:[10.2307/3425582](https://doi.org/10.2307/3425582).
- Paul, E. A. (1985). Wounded healers: A summary of the Vietnam nurse Veteran project. *Military Medicine*, 180(11), 571–576, doi:[10.1093/milmed/150.11.571](https://doi.org/10.1093/milmed/150.11.571).
- Pless Kaiser, A., Want, J., Davidson, E. H., Park, C. L., & Stellman, J. M. (2017a). Stressful and positive experiences of women who served in Vietnam. *Journal of Women & Aging*, 29(1), 26–38. <https://doi.org/10.1016/j.ssmph.2017.01.003>.
- Pless Kaiser, A., Kabat, D. H., Spiro, A., Davison, E. H., & Stellman, J. M. (2017b). Women at war: the crucible of Vietnam. *SSM—Population Health*, 3(1), 236–244. <https://doi.org/10.1016/j.ssmph.2017.01.003>.
- Sandelowski, M. (1995). Qualitative analysis: What it is and how to begin. *Research in Nursing & Health*, 18, 371–375. <https://doi.org/10.1002/nur.4770180411>.
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, 33, 77–84. doi:[10.1002/nur.20362](https://doi.org/10.1002/nur.20362).
- Sarnecky, M. T. (2007). Field expediency: How army nurses in Vietnam “made do”. An ability to improvise is a valuable nursing skill, on and off the battlefield. *American Journal of Nursing*, 107(5), 52–59, doi:[10.1097/01.naj.0000268170.33359.82](https://doi.org/10.1097/01.naj.0000268170.33359.82).
- Scannell-Desch, E. A. (1996). The lived experience of women military nurses in Vietnam during the Vietnam war. *IMAGE: Journal of Nursing Scholarship*, 28(2), 119–124, doi:[10.1111/j.1547-5069.1996.tb01203.x](https://doi.org/10.1111/j.1547-5069.1996.tb01203.x).
- Scannell-Desch, E. A. (1999). Images & relationships forged in war. A study of women nurses who served in Vietnam. *Journal of Psychosocial Nursing*, 37(8), 32–42, doi:[10.3928/0279-3695-19990801-16](https://doi.org/10.3928/0279-3695-19990801-16).
- Scannell-Desch, E. (2000a). The culture of war: A study of women military nursing in Vietnam. *Journal of Transcultural Nursing*, 11(2), 87–95, doi:[10.1177/104365960001100202](https://doi.org/10.1177/104365960001100202).
- Scannell-Desch, E. A. (2000b). Hardships and personal strategies of Vietnam war nurses. *Western Journal of Nursing Research*, 22(5), 526–550, doi:[10.1177/01939450022044584](https://doi.org/10.1177/01939450022044584).
- Schwartz, L. S. (1987). Women and the Vietnam experience. *IMAGE: Journal of Nursing Scholarship*, 19(4), 168–173, doi:[10.1111/j.1547-5069.1987.tb00001.x](https://doi.org/10.1111/j.1547-5069.1987.tb00001.x).
- Stretch, R. H., Vail, J. D., & Maloney, J. P. (1985). Posttraumatic stress disorder among Army Nurse Corps Vietnam veterans. *Journal of Consulting and Clinical Psychology*, 53(5), 704–708, doi:[10.1037/0022-006X.53.5.704](https://doi.org/10.1037/0022-006X.53.5.704).
- Van Devanter, L., & Morgan, C. (1983). *Home before morning. The story of an Army nurse in Vietnam*. Warner Books.
- Walker, K. (1985). *A piece of my heart. The stories of twenty-six American women who served in Vietnam*. Ballantine Books.
- Ward, G. C. (2017). *The Vietnam war. An intimate history*. Knopf 267–273.
- West, I. J. (n.d.). *The women of the Army Nurse Corps during the Vietnam war*. Retrieved from <http://www.vietnamwomensmemorial.org/pdf/iwest.pdf>