Shipboard nursing on aircraft carriers: The perceptions of twelve Navy nurses

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The purpose of this study was to describe the experience of shipboard nursing on aircraft carriers. Using the principles of Husserlian phenomenology, 12 Navy nurses previously stationed aboard aircraft carriers were interviewed to explore their familiarity with being a ship’s nurse. Shipboard nursing was best described by the following essences: (1) experiencing the best but toughest job the Navy has to offer its nurses; (2) ensuring readiness; (3) being one-of-one; (4) operating constantly in an environment of uncertainty; (5) having 2 families; and (6) making the job better for the next generation. Since the United States is currently a nation involved in wartime activities, the findings of this study are timely and give a public voice to this extraordinary experience of military nursing. Additionally, any nurse who is a sole practitioner may recognize some commonalities.

Aircraft carriers support the United States’ (US) interests and commitments throughout the world. Moreover, the Navy’s surface forces are built around battle groups with aircraft carriers as their centerpieces. Frequently the focal point of US military, diplomatic, and geopolitical strategy, aircraft carriers represent the cornerstone of Navy “operational readiness,” which is defined as “the ability to deploy personnel and equipment in an expeditious manner to any part of the world in support of military operations,” which is defined as “the ability to deploy personnel and equipment in an expeditious manner to any part of the world in support of military operations.” Each aircraft carrier is as tall as a 24-story building, weighs approximately 97000 tons, contains over 2700 compartments, has a flight deck > 4.5 acres in area, and carries a crew of 5000–6000. An aircraft carrier has an airport control tower, holds over 80 aircraft, and features a movie theater, television station, library, chapel, gym, and medical and dental wards.

The Navy has 12 aircraft carriers in operation. The health care staff on each ship includes 6 physicians, a physician’s assistant, 1 registered nurse, and 40 enlisted hospital corpsmen. There is 1 operating room, a 3-bed intensive care unit (ICU), a 50-bed inpatient ward, other patient care areas, and further ancillary spaces that provide radiography and endoscopy services.

The ship’s nurse on an aircraft carrier shoulders considerable weight and scope of responsibility for the health and readiness of the ship’s crew. The enormity of this task requires that nurses assigned this duty be fully prepared to serve in this capacity upon arrival to the carrier. The initial step in this process is the formulation of a thorough and accurate description of the responsibilities of a ship’s nurse on an aircraft carrier. Since this information did not exist in some codified and readily accessible form, this study was designed to elicit and compile this critically important information from those with first-hand knowledge of the experience.

METHODS

This phenomenological inquiry was grounded in Edmund Husserl’s perspectives. The goal of Husserlian phenomenology is to describe the meaning of an experience from the standpoint of those who have had (or “lived”) that experience. Husserl’s emphasis on pure description was consistent with the purpose of this research, so his phenomenological philosophy was adopted as its theoretical framework. Streubert’s ten-step methodology for qualitative examination of phenomena—which is a compilation of several phenomenological researchers including Spiegelberg, Co-laiuzzi, Patterson and Zderad, Oiler, and van Manen—was selected for its clear investigational approach.

Step 1: Explicating a Personal Description of the Phenomenon of Interest

The researcher must clarify any prejudices prior to data collection. Better yet, one should write a description of his/her perceptions in an attempt to acknowledge any presuppositions about the phenomenon of interest. The fact that I never served as a ship’s nurse assisted any presuppositions about the phenomenon of interest.
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Step 2: Bracketing the Researcher’s Presuppositions

Few concepts in phenomenology have led to as much misunderstanding as the concept of bracketing. Even Husserl was not consistent with his writings on bracketing. The process of bracketing was Husserl’s way of reducing the natural world to a transcendental consciousness. Bracketing is “transcendental because it constitutes every transcendence in pure subjectivity.” To accomplish bracketing, the researcher must suspend the “natural attitude” and shift to the “phenomenological attitude” in order to understand the true meaning of experienced phenomenon. Bracketing is a philosophical device that negates the natural attitude prior to phenomenological inquiry. With bracketing, only descriptions are allowed because judgments belong in the natural attitude. The goal of bracketing is to allow the investigator to render an absolutely faithful description of what has been given. Phenomenology must begin and end with what is given because the first transgression in phenomenology is to transcend the given.

Two processes that supported the concept of bracketing were used for this study. First, pre-conceived ideas about the phenomenon of interest were explicated through documentation in a journal. Furthermore, journaling occurred prior to and following each interview. Second, any perceptions and decisions were cross-checked with a colleague whenever it appeared that individual biases were influencing the project.

Step 3: Interviewing Participants in Settings Comfortable to the Participants

The tape-recorded face-to-face interviews took place in settings familiar to the participants. Nurses who had been previously stationed on an aircraft carrier (for at least 2 years) were purposively selected to participate in this study. Six of the participants were female and 6 were male. I initially contacted those nurses who had left the aircraft carriers within the past 2 years of when data collection began. A backwards year-by-year progression was utilized to solicit former aircraft carrier nurses, and interviews were conducted until saturation occurred (when no new themes emerged). In retrospect, saturation was probably reached by interview number 6 or 7; however, this fact was not fully appreciated until the last 2 interviews. This impression is validated by Sandelowski’s comment that novice qualitative researchers, such as myself, often require more sampling units than experienced researchers and that saturation may not be recognized until more data are collected.

Prior to the start of the formal interview, informed consent was documented and demographic data was obtained (in order to fully place the data into context). The interviews began with the question: “What was your experience as a nurse on an aircraft carrier?” When the participant felt he or she had expended his or her description, this concluding question was asked: “Is there anything that you have not offered, either positive or negative, about the experience that you would like to add?” Requesting negative descriptions of the phenomenon assists the researcher with determining authenticity and trustworthiness of the data (by allowing data to be compared and contrasted). Most of the participants utilized this solicitation as their time to offer a concluding remark regarding their entire experience as being a ship’s nurse.

Step 4: Carefully Reading the Transcripts of the Interview to Obtain a General Sense of the Experience

The interviews were transcribed prior to data analysis and then the transcripts were read while listening to the audiotapes so that their accuracy could be verified. In-depth analysis of the interview data commenced after data saturation was achieved in order to avoid imposing meaning from one participant’s interview onto the next. During this aspect of data analysis, the transcripts were reviewed repeatedly to gain an overall impression of the data. Organization of the data were aided through the use of the computer program entitled NVivo.

Step 5: Reviewing the Transcripts to Uncover Essences

Essences compose the basic units of common understanding of any phenomenon. There was no attempt to order sentences into themes at this point. Over 2500 passages pertaining to the experience of shipboard nursing aboard aircraft carriers were eventually isolated and assigned to 98 codes (otherwise known as “nodes” in NVivo). Data management occurred when some of the codes obviously went with others.

Step 6: Apprehending Essential Relationships

Once the transcripts were coded, the next step of apprehending essential relationships began. Using NVivo, an “assay scope” of all of the codes in relation to each participant was run. The assay scope of 98 codes revealed codes which were common to the participants (meaning that at least 7–12 of the participants had significant statements attributed to that code) and which codes were not (meaning that <6 of the participants had significant statements related to that code). The NVivo assay scope of the significant common codes was printed, along with their extracted passages, and the reports were used to apprehend essential relationships.

By reading and re-reading the extracted passages of the common codes, and practicing the concept of bracketing, all possible forms the experience could take from all angles was examined. By adding and deleting certain features, and recognizing when the experience no longer exemplified the concept, what was essential to the experience was eventually identified. Once an
essence emerged, it was recorded and the next step of data analysis ensued in order to describe the new essence.

**Step 7: Developing Formalized Descriptions of Phenomena**

For this step, the word processing capabilities of the computer were used. Portions of the description were entered and deleted until an accurate depiction of the essence was captured. When in doubt, I returned to the extracted passages of the common codes and read and re-read them until an accurate representation of the essence materialized. Eventually, shipboard nursing was best described by 6 essences.

**FINDINGS**

**Essence 1: Experiencing the Best but Toughest Job the Navy Has to Offer Its Nurses**

The participants felt that shipboard nursing on aircraft carriers was one of the best but toughest jobs the Navy has to offer its nurses. They experienced a great sense of pride in being called the “Ship’s Nurse.” Carrier nursing was a worthwhile experience that included both rewards and challenges. The rewards included practicing in an autonomous environment; going to sea and experiencing what the Navy was all about; feeling a sense of mission and contributing to that mission; and traveling to unique locations. Among the job’s challenges were working in a dangerous work environment that incapacitated or even killed shipmates; being away from home when deployed; participating in exercises to get the ship ready for sea travel; navigating equipment and supply issues; and adjusting to the constant turnover of both the medical department personnel and the ships’ crew. All of the nurses felt that shipboard nursing was not without its challenges; however, they were pleased that they had a chance to experience what the Navy was all about:

*It was probably the most challenging, demanding, rewarding, and exciting job I’ll ever have in the Navy . . . . You really got a sense of what the Navy was all about . . . when you’re out to sea. . . . You can see the Navy working, launching jets and doing underway replenishments and seeing every aspect of the Navy at once from every sailor doing their job . . . so it was really kind of neat to be a part of something bigger and you felt a sense of mission and you felt your contribution to that mission.*

**Essence 2: Ensuring Readiness**

The nurses’ primary and most time-consuming job was ensuring readiness by coordinating the medical training team. In this capacity, they developed scenarios, simulated medical casualties throughout the ship, and conducted various briefings regarding each drill. Orchestrating these exercises involved substantial assimilation with all of the departments on the ship; consequently, the nurses got a lot of “face time” with the leaders on each ship.

The top 3 job responsibilities mentioned consistently during each interview were (1) acting as the medical training officer, (2) caring for the inpatient ward, and (3) monitoring quality assurance (QA). In addition to these primary responsibilities, each nurse held at least 10 collateral duties. The method of assignment of collateral duties was sometimes inexplicable; however, letting a legitimate duty go unfulfilled was inconceivable to these nurses:

*At one point, I kind of reached a breaking point and tried to be departmental training coordinator, ward nurse, ICU nurse, training team leader, credentials nurse, QA nurse, and try[ing] to do health promotions, and wear all the hats, and try to have balance. It was really difficult.*

**Essence 3: Being One-of-One**

The nurses were considered one-of-one because they were the only nurse assigned to their carrier as the “Ship’s Nurse.” Not only did they represent nursing services for their ship, they were nursing services. The nurses felt an incredible sense of responsibility to their
job. They were on call 24/7. The nurses knew their ships inside and out and made it a point to visit all of the ships’ spaces, especially in their capacity as coordinators of the medical training teams. It was not uncommon for the nurses to be stopped in the passageways and consulted on matters ranging from the crew’s own health care needs to questions about a family member’s health status. Everyone on the ship recognized the nurse.

If the nurses had patients in the ICU, they could count on getting very little sleep because they had to deliver direct patient care round-the-clock. They could not initially count on their corpsmen (whose roles are akin to licensed practical nurses) to be their substitute because the corpsmen were not yet trained to take care of critically ill patients. Whereas the physicians could tradeoff on their coverage, the nurses could not because they were one-of-one. As the only nurse, experiencing the autonomy of critical care nursing could be both an exciting and frightening prospect:

I had no corpsmen that had any inpatient experience whatsoever. You are the only ICU nurse, which means when I [had] my two ICU beds full, I was literally catching a catnap on the floor between the two patients.

Essence 4: Operating Constantly in an Environment of Uncertainty

The nurses constantly operated in an environment of uncertainty. They could never be sure of what was going to happen next and always wondered about the “ifs”: if their qualifications were sufficient to get the job done; if they could trust their corpsmen with the inpatient ward; if the ships’ crew could manage a trauma victim given the training the nurses had coordinated for them; if they could handle a critically injured patient in their ICU; and if they could manipulate the sometimes archaic equipment they had inherited. Feeling a strong sense of support from their leaders was paramount in allowing the nurses to excel in their role as the ship’s nurse while practicing constantly in an environment of uncertainty.

Caring for the inpatient ward (which was 1 of the nurses’ key job responsibilities) included training the 2 or 3 corpsmen assigned to the ward. Because the nurses were involved with various activities around the ship, they had to be able to trust the corpsmen to be their eyes and ears on the ward. This proved to be a challenge, since most of the corpsmen initially assigned to the ward had no experience with direct patient care. The nurses strived to develop their corpsmen’s clinical competency levels and were amazed at the progress a lot of the corpsmen made under their mentorship. They recognized that the more they devoted to the training of their corpsmen, the more they could trust the corpsmen to report pertinent patient information when they were otherwise engaged. Since the nurses were on call 24/7, they had to relinquish some control in order to survive the experience:

I think the biggest challenge of a ship’s nurse is developing your corpsmen . . . No matter who you are, no matter how good you are, 24 hours a day, seven days a week, at some point, you’re going to have to get sleep and some point, you’re going to have to shower, [and] you’re going to have to eat. So . . . at some point, you’re going to have to leave the ward, and trust the ward, and the patients, to the corpsmen. If you can’t do that . . . you’re not going to make it because physically, Mother Nature says you have to eat, you have to sleep, you have to have socialization, or you just won’t do well.

Essence 5: Having Two Families

The nurses had 2 families: their significant others and their shipmates. Working with the Line community (which consists of the war-fighting population of the Navy such as the officers that man the ships, fly aircraft, and operate submarines) was a great experience for the nurses. Never before had they seen such amazing teamwork, and felt such a sense of camaraderie, and they realized that once they left their ships, they would most likely never experience this again. Because they worked, lived, ate, and socialized with the crew, they learned about their lives. The Line community demonstrated its respect by allowing the nurses to become equal players in the ships’ operations:

I didn’t have a lot of ship savvy when I got there. But these folks saw . . . somebody who cared about the ship . . . So here’s somebody who they didn’t just see as a nurse . . . There’s that other aspect of it: You’re a [nurse] . . . but you’re also . . . a Naval citizen. You’re going there to be part of that ship. And you’re a shipmate. So they never just blew me off because I was a nurse.

Essence 6: Making the Job Better for the Next Generation

The nurses wanted to make the job better for their successors. Because their own shipboard orientation had been varied and ill-defined, they felt it imperative that their replacements be better prepared than they were when each assumed the duty of an aircraft carrier nurse. This philosophy spilled over into their subsequent tours whereby they took advantage of opportunities to prepare their Navy colleagues for non-hospital assignments.

The participants’ highest recommendation was to assign a second nurse to each carrier. If a second nurse could not be allocated, then the nurses recommended having peers from a Navy hospital transferred to the ships when the carriers went out to sea:
I was literally running almost from one drill set, zipping through the medical department, getting into the ICU. I had a box of 10 syrettes of demerol in 1 pocket and a box of 10 syrettes of morphine in the other pocket as I’m running around the ship. And I’d come down into [the] Medical [Department]. I had the different names . . . labeled on the tubex and then I would give them a little bit of IV [intravenous] push med [medication] for pain. And then, boom! I was out the door again after documenting . . . that I gave something. And then, boom! I was out running more drills or attending more meetings. That was absolutely ludicrous. I couldn’t have been getting but maybe 3 hours of sleep every night. That’s another reason why you kind of need another nurse.

**Step 8: Returning to Participants to Validate Descriptions**

Lincoln and Guba’s\(^{14-15}\) criteria for evaluating the quality of an inquiry (transferability, dependability, confirmability, and credibility) were applied to this study. To confirm the credibility of the findings, exhaustive descriptions were shared with each participant. Once some minor changes were made, all 12 participants agreed that the exhaustive description accurately reflected their experience as the nurse on an aircraft carrier.

**Step 9: Reviewing the Relevant Literature**

An exploratory search using electronic databases revealed only 1 article about nursing on aircraft carriers\(^{16}\); thus, findings from this study will fill a huge void. Nonetheless, I was later directed to look at literature regarding the practice of nursing in non-traditional environments, and discovered that rural nursing also requires adaptability and flexibility, and that nurses in rural communities fear the “what ifs” as well, but welcome the autonomy that nurses aboard ships also value.\(^{17,18}\)

**Step 10: Distributing the Findings to the Nursing Community**

I had the honor of presenting my findings to the Chief of the Nurse Corps, the Nurse Corps assignment officers, and the Director of Aerospace Medicine Programs and their staffs in 2002. At this moment, the participants’ highest recommendation to assign a second nurse to each carrier has not been implemented (primarily because the role of the ship’s nurse has been modified since this study, with the addition of new personnel to the Medical Department on each carrier). However, before this study, each carrier nurse reported to a non-nurse in the Force Surgeons’ offices in both San Diego, CA and Norfolk, VA, which meant that non-nurses were telling the ships’ nurses how to perform nursing care on the carriers. The Navy Nurse Corps has since placed a senior nurse in the Force Surgeon’s office on both coasts, which was 1 of the highest recommendations the participants advocated.

**DISCUSSION**

The nurses valued the opportunity to perform a tour of duty outside of a traditional hospital. When they went out to sea on the carriers, they finally understood what the Navy was all about. They were also committed to the organizational values of their ships’ commands. The leadership style and empowerment opportunities available to the ships’ nurses positively related to their sense of job satisfaction. What’s more, group cohesion definitely promoted both organizational and professional job satisfaction for the participants. In their role as the ship’s nurse, they constantly remembered that they represented the United States in their role as Naval officers:

I think being part of a big command that has such an enormous mission, you get this great sense of pride that just comes out of you. It’s like, “Wow!” You see yourself steaming in with the whole battle group and you are part of something that is striving to represent this country. You’re working up so that you can deploy and essentially be the ambassador. That’s how we were made to feel. It was impressed upon us that you’re the ambassador. So to be part of that as a nurse, you’re thinking, “I was in nursing school. Never did I think I’d be considered an ambassador of my country representing this ship ashore.”

When reviewing the transcripts, I came to the realization that gender made no difference in the experience of shipboard nursing on aircraft carriers—the interviews of the male versus the female participants were much more alike than different. Furthermore, the women participants never saw themselves as women first. They envisioned themselves primarily as Naval officers and could not understand why people asked them if they felt out of place when reporting to the male-dominated ships. They just considered themselves to be doing their duty: “People did their jobs. . . . There were times where I won’t say you forget that you’re a woman, but you’re just doing your job so you don’t think of it.”

Obviously, the participants’ experience as the ship’s nurse on an aircraft carrier was a momentous, career life-event for each nurse, since they all remarked on how lucky they were to have had such an assignment because many Navy nurses never set foot on a ship throughout their entire careers. The participants filled innovative roles that allotted for more autonomy than the nurses had previously experienced. Shipboard nursing on aircraft carriers provided a diversified opportunity that the nurses will remember for the rest of their lives. A prevailing thought among the interviews was
exemplified by the comment: “Gosh, it’s a good feeling to be called ‘ship’s nurse.’ There’s only one of you.”

CONCLUSION
The findings have provided valuable insight into nursing practice in a service-unique environment and will also assist Navy Nurse Corps leaders with making appropriate assignments for nurses seeking a job on a ship. Additionally, since there is a paucity of literature on this topic, the results have given a public voice to this extraordinary experience of military nursing. Moreover, any nurse who is a sole practitioner may recognize some commonalities. As I conclude this article, I cannot help but think about the nurses currently stationed on our aircraft carriers. They are playing an integral part in their ships’ readiness and one cannot help but appreciate their role in maintaining our nation’s freedom. I only hope that the findings from this study will make their job better for generations to come.

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References