

Exploring Deployment Experiences of Army Medical Department Personnel

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ABSTRACT The purpose of this study was to describe Operation Iraqi/Enduring Freedom and Operation Desert Storm/Shield deployment experiences from the perspectives of 39 Army Medical Department personnel using a qualitative method in 2004. Thematic content analysis revealed themes from data collected during twelve focus groups. The themes with the most discussion that transcended across wars, branches, echelons of care, and grade were leadership and readiness concerns, followed closely by safety issues. The majority of discussion was about deficiency needs during deployment and the data suggests that problems experienced during deployment are timeless and are not unit-specific; issues were strikingly similar across the two wars, as well as across the varying AMEDD roles and types of medical units. Therefore, the findings of this study may be generically applicable to deployed AMEDD personnel with the potential to alter current policy regarding leadership, readiness, and safety for future AMEDD deployments.

INTRODUCTION

Challenges during deployment are typically found in formal after-action reports, but these often do not address the in-depth, detailed experiences of service members. However, anecdotal evidence suggests that the War on Terrorism has created serious challenges for Army Medical Department (AMEDD) personnel that effect patient care, readiness, and retention. Because these challenges from service members' viewpoints are not codified, issues may not effect policy change. Qualitative research approaches are useful for gaining in-depth understanding of the perceptions, beliefs, and values of participants.¹ Medical personnel's first-hand view of patient care can provide leaders and policy makers with useful information for quality improvement. In addition, when considering the retention and readiness of seasoned medical personnel, it is crucial to understand their deployment experiences from their own perspectives. Therefore, the purpose of this study was to examine deployment experiences of AMEDD personnel. From the analysis of these experiences, suggestions for changes in patient care and readiness are provided.

A search of the literature revealed 10 studies that were mostly qualitative. This small body of research is multiservice, includes nonmedical personnel, and when medical personnel were studied, primarily included nurses.²⁻¹¹ It is interesting to note that safety, stress, and readiness findings of deployment experiences were similar across these studies, despite the inclusion of different services, branches, missions, and environments.

METHODS

This study used basic qualitative description to provide a summary of deployment experiences in everyday terms of those events.¹² Qualitative research with focus groups is a way of listening to and learning from people and generates large amounts of data in an efficient manner. Group interactions also facilitate recall of additional experiences when communicating with others with similar experiences.

Similar to the concepts of reliability and validity in quantitative research, scientific rigor was built into this study by complying with the four basic tenets of qualitative trustworthiness: credibility, dependability, confirmability, and transferability.¹³ Credibility was supported by researchers checking each transcript for accuracy and conducting focus groups until no new information was being heard (data saturation). Dependability was supported by including focus group questions that guided each discussion, as well as research team members participating in a peer debriefing immediately following each focus group and periodically throughout the study. In addition, all team members were involved in the multiple steps of data analysis to counteract possible bias. At the time of the study, the research team was composed of active duty members with deployment experience, civilians with no military experience, and a retired (before 2001) military researcher to ensure as balanced an approach and analysis as possible. Confirmability was supported by a computer-enhanced audit trail of process and analytic memos. A report on participant demographics

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Presentations: Podium 2008: 18th Annual Asia-Pacific Military Medicine Conference, Singapore; podium 2005: 15th Annual Asia-Pacific Military Medicine Conference, Hanoi, Vietnam; podium 2005: 18th Annual Pacific Nursing Research Conference, Honolulu, HI; poster 2004: Phyllis J. Verhonick Nursing Research Conference, San Antonio, TX.

This manuscript was received for review in October 2008. The revised manuscript was accepted for publication in February 2009.

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 2009		2. REPORT TYPE		3. DATES COVERED 00-00-2009 to 00-00-2009	
4. TITLE AND SUBTITLE Exploring Deployment Experiences of Army Medical Department Personnel				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Office of Research and Extramural Programming, School of Nursing and Denial Hygiene, University of Hawaii. 2528 McCarthy Mall, Webster Hall. Room 407, Honolulu, HI, 96822				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 7	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

and a detailed description of the results enhanced the applicability of the findings for others, or transferability.

Participants

The accessible sample consisted of 101 redeployed medical personnel from Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF) ideally within 3 months of returning, or from Operation Desert Shield/Storm (ODS/S) from two Army posts in southwestern United States. The final sample consisted of 39 medical personnel who were 38 years old on average, male (66%, $n = 26$), deployed to both Kuwait and Iraq (44%, $n = 17$), and experienced their first deployment (59%, $n = 22$). The majority were officers (82%, $n = 32$): 40% ($n = 15$) nurses, 31% ($n = 13$) physicians, 18% ($n = 7$) enlisted, 5% ($n = 2$) dentists, and 5% ($n = 2$) dietitians. The majority (72%, $n = 29$) were deployed to echelon III facilities. Six (15%) participants described their experiences from ODS/S. All participants were deployed for a minimum of 2 months; the average duration was 8 months.

Procedure

After obtaining Institutional Review Board (IRB) approval, e-mail addresses of redeployed personnel from OIF/OEF were obtained from troop commanders. ODS/S participants were solicited by word-of-mouth and posters. Focus group sessions were conducted outside of the normal duty location, lasted between 60 and 120 minutes, and were recorded by a court reporter. A trained facilitator used a set of questions to guide the discussion. Data analysis consisted of thematic content analysis, using the software program, NVIVO (2002), to assist with managing the data. Analysis proceeded with a literal reading, followed by an interpretive reading, and ended with a reflexive reading.¹⁴

FINDINGS

Eleven focus groups and one individual interview yielded over 24 hours of transcription and 3,429 passages. The data were ultimately reduced to 25 separate substantive themes.

Content Analysis

Three basic research questions guided the study:

- How do deployment experiences vary among the echelons of care (echelons above division III and echelons at division II and below I)?
- How do deployment experiences vary between AMEDD personnel deployed for Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF) and Operation Desert Storm/Operation Desert Shield (ODS/S)?

These two questions were combined to compare and contrast the themes. Only those themes expressed by 90% or more of the participants per category are listed in order of frequency (see Table I). Notable is the consistency of concepts across the participants, regardless of echelon, branch, war, or grade. The themes with the most discussion by category of participant were: (1) leadership, (2) readiness, and (3) safety.

- What is the nature of deployment experiences as perceived by AMEDD personnel?

Collectively, the 39 subjects spoke most about five topics: (1) leadership (402 passages), (2) readiness (332 passages), (3) patient care (253 passages), (4) redeployment (203 passages), and (5) communication (174 passages) (see Figure 1). The top three aggregated themes are further explored in the analysis below.

Leadership

(Operational definition: The ability to influence others' behaviors to a desired outcome)

The deployment environment is a unique situation where excellence in leadership is vital to the well-being of all soldiers, inclusive of medical personnel. Unfortunately, the majority of data were about leaders who failed to meet the expectations of subordinates; only a small portion described "good" leaders. The good leaders were said to think and care, to know what they were doing and know what their subordinates were doing. They had good interpersonal skills and kept the staff informed. They were also visible; those leaders who made rounds, asked questions, and expressed a genuine concern for their subordinates were considered good leaders. These medical personnel said they would have followed good leaders anywhere to do anything; they also knew that you shouldn't undermine good leaders' authority; followership was important. Good leaders were perceived as protecting their subordinates. Importantly, there was a covert expectation that leaders have two priorities, and only two: (1) Care for subordinates and (2) Care for patients. Anything that interfered with these two priorities was a sign of ineffective leadership.

Care for Subordinates. Most often when medical personnel expressed dissatisfaction with leadership, the situations were about compromising their own personal safety; fear seemed to be an underlying concept. If the leader was perceived as caring only for him/herself, participants could not trust that their safety needs were addressed. These behaviors of self-interest ranged from inequities in creature comforts, "bucking for a star," taking leave when others couldn't, taking a subordinate's uniform because they were higher in rank, leaving theater earlier than the unit (abandoned), and jockeying to get the unit into the fight. "We're not happy, 'til you're not happy" was the unofficial motto of one unit because their leaders were thought to be inattentive to subordinate needs. Not only did they express a loss of faith in the leadership, but in the Army, morale, unit cohesion, job satisfaction, and retention were negatively affected. The following quotes are from two participants who shared their perceptions about caring for subordinates:

"Soldier care is not just medical care. And I think that's one of the things that needs to be highlighted with that. That soldier care is a whole atmosphere, if you will, or the whole tenor established by the command. It's provid-

TABLE I. Theme Comparison and Contrast

Theme	Branch					War		Echelon			Grade	
	AM SC	D C	M C	NC O	N C	ODS/S	OIF/OEF	I	II	III	Officers	Enlisted
<i>n</i> =	2	2	13	7	15	6	33	1	5	27	32	7
Leadership	x	x	x	x	x	x	x	x		x	x	x
Readiness	x	x		x	x	x	x	x	x	x	x	x
Safety	x		x		x	x	x	x	x		x	

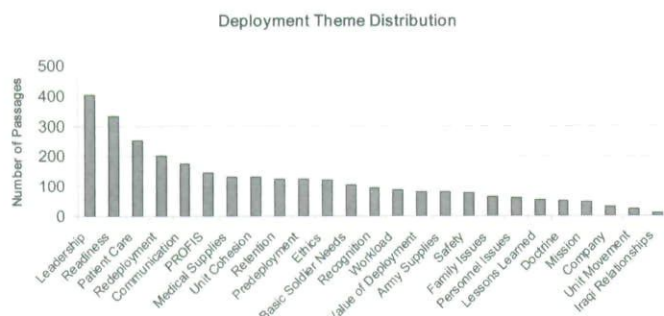


FIGURE 1. Deployment theme distribution.

ing an environment when you get there (you have) sanitary conditions. Hand washing stations are established. Showering is made available. You don't have to eat MREs and you can get some hot chow. Those things are as big a part, and maybe even more important in some cases, to the well-being and welfare of our soldiers. That you can get cold water rather than drinking this warm hyperchlorinated water that's available to you. Because all of those things project to the soldiers, especially if you're watching your Air Force counterparts living like they're living in the Ritz. And you're thinking, well, I have no AC. I don't have a cot to sleep on. I'm drinking warm to hot water that is so chlorinated that it's difficult to down. I'm eating this MRE. We scrounge for one AC unit for our EMT tent. What's wrong with this picture? And so I think it projects a powerful point to the soldiers. Well, the people that are in charge don't give a damn."

"And I—and I think that's very disconcerting for individuals, where there's so much uncertainty and so many things are wrested away from your control, to feel that your command is not standing in your corner and willing to take whatever shots come, and willing to do whatever they need to do to take care of you. If you know that's happening to the best of their ability, I think you'll—you'll do anything for them. But if you don't have that sense that they're doing that, it undermines a tremendous sense of security and—and I think a tremendous sense of pride. Because if you feel your commander's out there, and they're going—doing whatever they need to do on your behalf, you know, you'll do incredible things against incredible odds. But when you—when the converse of that happens, it—it really undermines that—that sense of pride, that sense of security, that sense that we're in this together, and, hey, our com-

mand is doing what they can on—on our behalf. And—and so command climate was a definite problem."

Care for Patients. Leaders are responsible for resourcing medical personnel so they can do their job and adequately plan for contingencies and, according to these participants, neither occurred. Medical personnel expressed a need to know the basic plan of patient care and who was in charge and if and how their patient care needs were being represented at higher headquarters. When information was inadequate, participants closed down and did what they were told to do - no more, no less; one participant said, "I just became a village idiot."

"So I knew that we were not getting the support from the upper echelon, that it was not being well coordinated. And I think that's one of the keys here is that what we would have expected for the medical brigades to be there to help coordinate that medical care and to be sure that we were able to provide all the services to these different units and to, again, assist. One of the problems for the AMEDD is that we don't have direct control over all your medical assets; some of your medical assets are out in the TO&E unit and some of your medical assets are somewhere under the corps, and again, exactly who has control and how that fits can be extremely confusing."

Participant 1: "We didn't plan for EPWs [enemy prisoners of war] and we didn't plan for a humanitarian mission. In fact, we were told up front we weren't doing a humanitarian mission. Unfortunately, the reality is that you're going to be asked to do a humanitarian mission, and you have to be prepared to deal with that."

Readiness

(Operational definition: Arriving in theater physically, mentally, socially, spiritually, and intellectually prepared for deployment)

Half Ready: Medic or Soldier. Participants stated they were ready to fulfill their medical mission except when they were asked to perform in a setting unfamiliar to them, i.e., dentists triaging casualties and medics more comfortable working in the motor pool than providing emergency medical care or "medichanics." However, AMEDD personnel did not have confidence in their soldier's skills and expressed the need both as a safety concern and for self-esteem.

"I think the docs in the AMEDD as a whole are inadequately prepared to go to war. If they sit in the aid station and are protected by somebody else, they're fine, you know. But if they need to be out front, then, you know, they need a little more truly military training as opposed to a lecture on this or that. So, I'd had some previous military training. I wasn't actually commissioned in the medical corps to begin with. And that came in handy. But not everybody had that luxury."

Soldier no. 4: "The AMEDD does not have warrior ethos. We are trained. But, I mean, we're trained much differently. That's the way I see it. I was infantry a couple years. I understand where (they) come from and I had a hell of a time getting back to the warrior ethos and thinking like that, knowing that I have to do everything the enlisted guys are doing. But it didn't take long to figure it all out."

Soldier no. 2: "I wasn't coming home in a box."

Patient Care

(Operational definition: Issues pertaining to the delivery of health care)

Just-in-Time Healthcare. Participants were frustrated with what they perceived to be a maldistribution of resources that affected their ability to do their job. One example that was frequently mentioned was that the specialist who was needed to care for the particular patient could not be located within theater or was at another site. As a result, there was confusion about where to send the patient, even in emergent situations. The ability to track patients once they left the facility was also challenging for informants because of dysfunctional communication and shortages of medical supplies negatively impacted quality patient care.

"... there's an orthopedist 30 miles away at the combat support hospital but the convoy's not leaving today and the guy just showed up from an outlying forward operating base and he's going to be stuck with us for 3 days, and (so) are we going to send a convoy for one guy to go see an orthopedist or maybe there will be a helicopter leaving on a maintenance run up that way or something. So basically that's where more of my frustrations came from was, you know, commanders..."

"It was easier to call Fort X for a consultation then it was to locate the specialist in theater."

"You talk about reusing needles and things like that. We ran out of gloves. We ran out of soap. So at first we were just washing the gloves with soap and water after we'd use them. Then we ran out of soap, so we just used water and just kind of rinse them off a little bit. IM injections were being given with 18-gauge needles. We had a huge problem with supplies. We ran out of colostomy bags. I think they only had two. And, you know, we'd try to reuse colostomy bags. At one point, we started making our own out of IV

bags and tincture of benzoin and stuff like that. I mean, we got quite creative. But then they would ration them because they didn't want to run out of them again. So we'd end up in the same scenario, using the wrong supplies again."

Broken Soldiers/Broken System. Participants in this study claimed that the requirements for care of soldiers with chronic conditions were not adequately anticipated. Some soldiers were deployed in good health, but developed problems, i.e., chest pain. Others were deployed with stable chronic conditions on medications, but the therapies in theater were inadequate. One person summarized the concerns of many of the participants: "A boatload of people who sucked up resources and weren't going to be useful - they were detrimental and unsafe."

"I do not think that our screening process is appropriate at times. We were getting people who were postchemotherapy, a month back from testicular surgery. We had people who had thyroid cancer and needed to get thyroid function tests done. I don't think people who are screening knew what our facilities were. I was at Camp XX in February. We had no ability to do certain lab tests, like thyroid function tests. You had to send them to the (local) Armed Forces Hospital. And then from there, you don't know what their normal values are. You don't know what kind of tests they're using. You don't know how reliable they are. They have no way of catching back up to you. So I think that there needs to be a more uniform way of how to screen soldiers for their ability to deploy. I think we waste huge resources on people who are not there appropriately who we then have to send back and it just turns into this nightmare."

Participants felt that there was inadequate planning and resources for humanitarian and detainee missions, which should have been anticipated. As a result, there was a great deal of confusion about who to treat, how and where to treat them, and especially, how to transition them to the Iraqi system. According to participants, because there was no place for the Iraqis to go, there were occasions when patients remained in the hospital for 6 months. And because there was no identified standard of care, the local standard of care changed frequently.

"(Iraqi care is) not why we were there (and) we also didn't have the facilities to take care of them. I (cared for) a child who died (because) we did not have the equipment."

"Sometimes I was concerned with the way some days the surgeons or doctors admitting in the ER going strictly by the guideline of A, B, and C. This is who you treat under these circumstances, you know. American soldiers first. And then Iraqis injured by Americans. And then other days, that policy was just out the window, you know. We were treating babies with congenital defects, bringing in specialists from Germany to evaluate the patient. And then you're like, we're low on supplies, but you're spending supplies on this patient. And then, next minute, you have five Americans coming in, and you don't have supplies. So it's just like—as the person giving the care—

which policy are we going by today for treating patients? Some days it would be Iraqis dropped off a patient at the door. We'd treat them. And the next day, they'd say no. It appeared to be on a whim some days."

Participant Effects

Some participants expressed a nonintentional therapeutic effect just by participating in the focus group. Participants stated that participation was helpful to them by validating their experiences in a safe environment with peers and expressing emotions, such as crying and anger.

"Because my overall opinion is that most everything I've ever tried to contribute to the Army (like) after-action reports...goes right next to the Arc of the Covenant in that big Indiana Jones story at the end of the film."

"Those of us with (deployment) experience never really got an opportunity to tell our side of the story...in a constructive manner....We continually struggle with how to do our jobs better because we don't ask the right people what they saw, I think. You can put my name down and tell the General I said that."

"(Participating in this study) was like picking the scab off an abscess."

DISCUSSION

A systematic approach using thematic content analysis of data collected from redeployed AMEDD personnel revealed that challenges exist during deployment; it was no surprise that leadership was the major concern since leadership effects many areas. Even more remarkable is that regardless of rank, position, or war, participants reported that leadership was frequently lacking. This data clearly indicates that these participants perceived that their needs were unimportant to leaders; participants reported that they were "cannon fodder," left "to the wolves," and felt unsafe. Additionally, this data revealed that medical personnel take their responsibility of providing optimal patient care very seriously, but were hampered by the perceived lack of leadership attention to resourcing AMEDD personnel necessary for quality patient care.

From a more holistic view, the data revealed a pattern of expressed needs that corresponds to Maslow's Hierarchy of Needs theory.¹⁵ Over 50 years ago, Abraham Maslow synthesized the human motivation literature and posited that there is a hierarchy of human needs classified into two major areas: Deficiency needs and growth needs.¹⁶ Deficiency needs include physiological, safety, love/belongingness, and esteem needs where the individual does not feel anything if they are met, but feels anxious if they are not met. Deficiency needs must be met before acting upon growth needs, which create motivation for behavior, and all needs must be met in a sequential order before moving to the next higher level (see Figure 2). Each of the 25 themes was matched to a Maslow need; deficiency needs were collectively expressed most often by participants (see Table II).

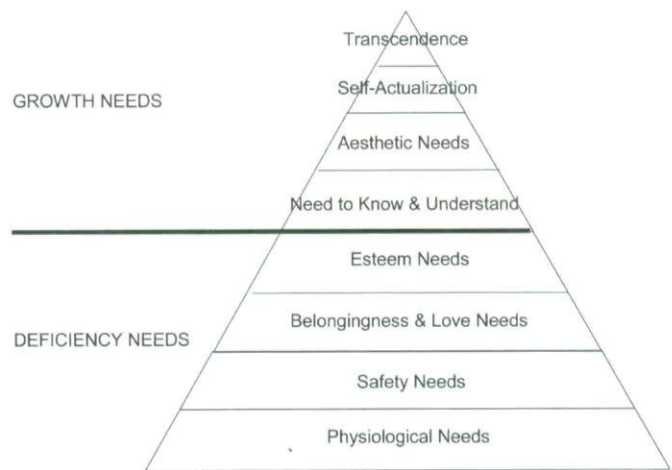


FIGURE 2. Maslow's Hierarchy of Needs.¹⁶

TABLE II. Deployment Needs

Needs	Themes	Number of Passages (Total)
Deficiency Needs		
Physiological Needs	Basic Soldier Needs	105
		(105)
	Leadership	402
	Pre-Deployment	124
	Army Supplies and Equipment	81
Safety Needs	Safety Issues	77
	Unit Movement	25
	Relationships with Iraqis	10
		(719)
	PROFIS	143
	Unit Cohesion	130
	Family Issues	64
		(337)
	Readiness	332
	Patient Care	253
	Redeployment	203
	Medical Supplies and Equipment	130
Esteem Needs	Recognition	94
	Workload	87
	Mission	48
	Company Matters	30
		(1,177)
Growth Needs		
Cognitive Needs	Communication	174
	Ethics	121
		(295)
Aesthetic Needs		(0)
	Doctrine	51
Self-Actualization	Personnel Issues	61
	Retention	125
		(237)
Transcendence	Lessons Learned	53
	Value of Deployment	81
		(134)

The AMEDD, and perhaps the corporate world, are challenged to discover the best method for selecting and developing leaders. However, optimizing human performance during deployment is especially important because of scarce resources and high demand for services. The one overarching recommendation revealed by this data is that the AMEDD needs to focus its leadership development on addressing two priorities during a deployment: Taking care of subordinates, followed by taking care of patients. Only when all soldiers, inclusive of medical personnel, feel safe and secure in knowing that their leader is "thinking and caring" will they have the ability to focus on their work.

These data inform a necessary revision to leadership training. A major element of the new curriculum should be the incorporation of Maslow's Hierarchy of Needs to enhance leader knowledge and attitudes. Behavioral change could be facilitated by an emphasis on what "good" leadership looks like. Another possibility is to evaluate leaders on their ability to meet deficiency needs as perceived by their subordinates. Secondly, use of this technique for debriefing redeploying medical personnel may be, for some, the most important element of redeployment and reintegration.

Unfortunately, the data gathered for this study support previous anecdotal evidence and validates concerns about deployment. These data also suggest that problems experienced during deployment are timeless and are not unit specific, but rather generic; issues were strikingly similar across the two wars, as well as across the varying AMEDD roles and types of medical units.²⁻¹⁰

Therefore, the findings of this study may be generically applicable to deployed AMEDD personnel with the potential to alter current policy regarding leadership, readiness, and patient care for future AMEDD deployments, resulting in an enhanced deployment experience. The importance of meeting AMEDD personnel's deficiency needs cannot be overemphasized and may be part of the tool kit for great leaders who optimize performance and enhance esprit de corps during deployment.

ACKNOWLEDGMENTS

This study was supported by Global War on Terrorism funding via the Great Plains Regional Medical Command.

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