

# Nurse Burnout

Measurement at a Large Army Hospital

Gary M. Lang, LTC, AN  
Elizabeth A. Pfister, 1LT, AN  
Michelle J. Siemens, 1LT, AN  
Joshua Gadd, 1LT, AN  
Caryn Shaw, 1LT, AN

# Background

- Nursing personnel at WRAMC and the WTB are exposed to intense patient interactions related to: 1) caring for Operation Iraqi and Enduring Freedom (OIF/OEF) troops, and 2) the busy nature of working in the largest Army hospital in the United States
- Investigators have found that nurses who engage in intense nurse-patient relationships and work extended hours are at increased risk of developing burnout (Lederer, Kinzel, Trefalt, Traweger, & Benzer, 2006; Lee, Song, Cho, Lee, & Daly, 2003; Maslach & Jackson, 1981; Ozyurt, Hayran, & Sur, 2006)

# Problem Statement

- It was not known what the level of burnout was among nursing personnel at WRAMC
- Investigators had not examined burnout among nursing personnel at Army hospitals since 2001 before hostilities began in Afghanistan and Iraq

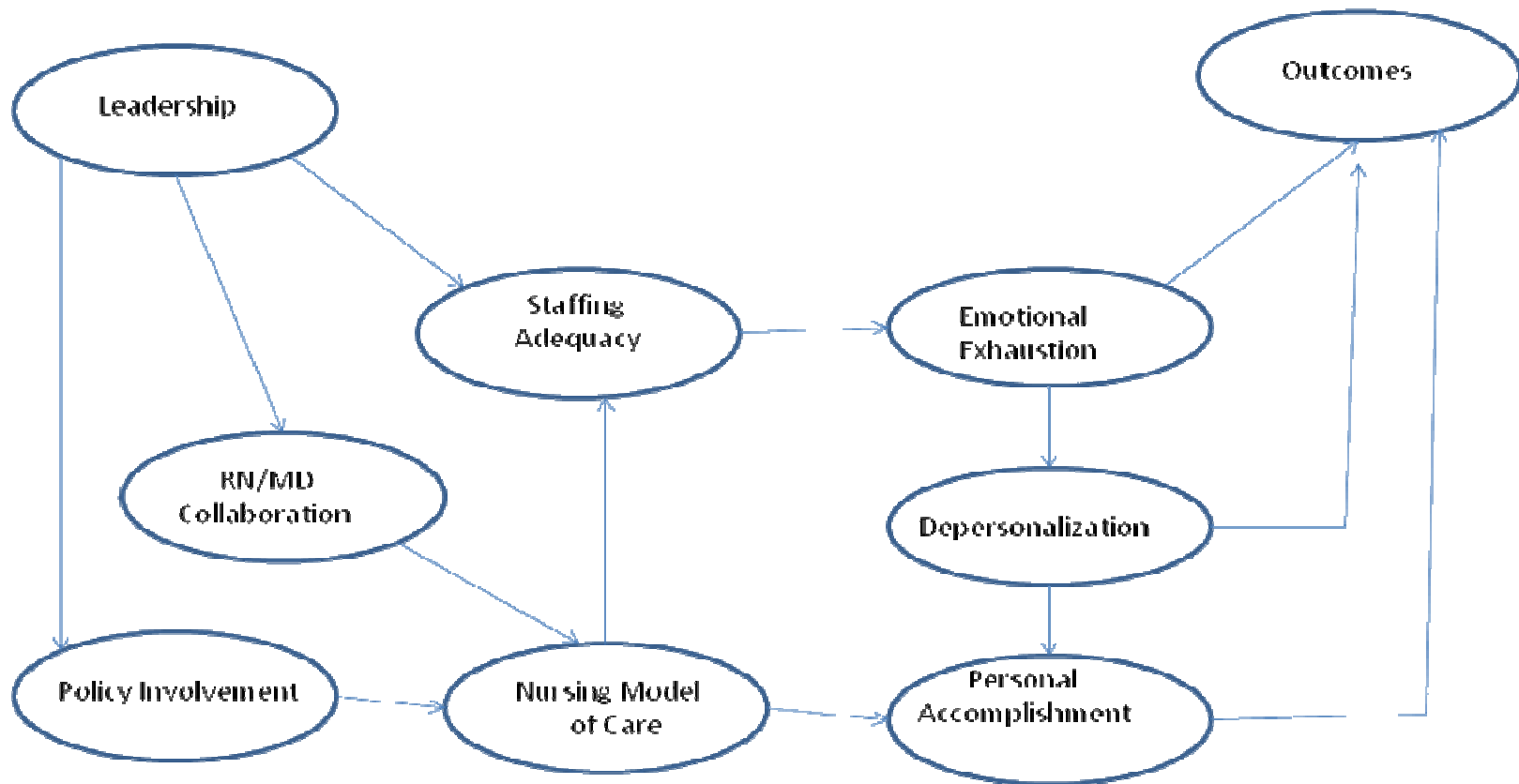
# Aim

Primary aim was to determine if there were differences in the level of burnout among army and civilian nursing personnel who work at Walter Reed Army Medical Center

# Methods

- Design: Cross-sectional study using a paper and pencil survey
- Worklife Model
- Sample/Setting
- Instrumentation
  - Demographic and work related questionnaire
  - Maslach Burnout Inventory

# Worklife Model



Laschinger H, Leiter M. The impact of nursing work environments on patient outcomes: The mediating role of burnout/engagement. *Journal of Nursing Administration*. 2006;36(5):259-267.

Leiter M, Laschinger H. Relationship of work and practice environment to professional burnout: testing a causal model. *Nursing Forum*. 2006;55(2):137-146.

# Sample

- Army Nurse Corps Officers (all specialties)
- Non-Commissioned Officers and Enlisted soldiers:  
Medics and Licensed Practical Nurses
- Civilian registered nurses, Licensed Practical Nurses  
and nursing assistants

# Setting



# Recruitment

- Provided briefings to senior, middle and first line supervisors
- Asked leaders to refrain from asking staff to participate to prevent the perception of undue influence
- Recruited during all shifts to include weekends
- Response: Sample  $n = 393$ , of 600



# Burnout Defined



- Emotional Exhaustion: inability to give anymore of oneself



- Depersonalization: cynical attitude toward patients

- Reduced Personal Accomplishment: feeling that one's job is no longer rewarding



# Operational Definition: Maslach Burnout Inventory

- Items (questions) = 22
- Subscales = 3
  - Emotional exhaustion
  - Depersonalization
  - Reduced personal accomplishment
- Reliability and validity established in the literature

# Data Analysis

Descriptive Statistics

T-test

Ordinal Logistic Regression

# Sample Characteristics

	Army (n = 187)	Civilian (n = 176)	Total (n22 - 63 = 363)
RN	123 (66)	97 (55)	220 (61)
LPN	22 (12)	47 (27)	69 (19)
Medic/Aide	41 (22)	32 (18)	74 (20)
Day Shift	69 (38)	106 (60)	175 (50)
Night Shift	36 (20)	41 (25)	77 (22)
Combination D/N	77 (42)	24 (15)	101 (28)
8 Hour Shift	25 (14)	72 (43)	97 (28)
12 Hour Shift	146 (80)	79 (47)	225 (65)
Combination 8/12	11 (6)	16 (10)	27 (7)
Care for OIF/OEF Pts			
Yes	128 (68)	124 (71)	252 (69)
No	59 (32)	52 (29)	111 (31)
Age (Years)			
Mean	30 (sd 8)	43 (11)	
Range	19– 59 range	22 - 63	

# T-test

	Army (n =187)	Civilian (n = 176)	T	p
Burnout Domains	Mean (SD)	Mean (SD)		
Emotional Exhaustion	25 (12.84)	19 (12.32)	4.22	< .001
Depersonalization	8 (6.61)	5 (5.38)	4.27	< .001
Personal Accomplishment	39 (6.87)	39 (7.92)	- .22	.830
	High	Moderate	Low	
Emotional Exhaustion	$\geq 27$	19 – 26	$\leq 18$	
Depersonalization	$\geq 10$	6 – 9	$\leq 5$	
Personal Accomplishment	$\leq 33$	34 – 39	$\geq 40$	

# Ordinal Logistic Regression

## Emotional Exhaustion

	Estimate $\beta$	SE	Wald	p
Practice Group Army	.473	.238	3.95	.007
Shift Days	- .384	.271	4.63	.031
Shift Length 8 Hours	- .827	.445	3.46	.063
Overtime No	- .386	.222	3.01	.082
Care for OIF/OEF Pts No	- .471	.235	4.02	.045

# Ordinal Logistic Regression

## Depersonalization

	Estimate $\beta$	SE	Wald	p
Practice Group Army	.673	.235	8.22	.004
Shift Days	- .413	.289	2.04	.153
Shift Length 8 Hours	- .928	.451	4.24	.039
Overtime No	- .184	.226	.666	.415

# Discussion

- Moderate burnout identified among both groups
- Army personnel had significantly higher levels of emotional exhaustion and depersonalization
- Factors associated with burnout included being in the army group, working other than day shift and routinely caring for OIF/OEF patients

# Discussion

- Leadership called ad hoc meetings to discuss the findings & identify strategies to address the problem
- Leadership took incremental steps to optimize the practice environment: 8 hour shifts for nurse residents
- Unfortunately, leaderships continue to believe that 12 hour & rotating shifts fill staffing needs

Questions?

