

**CROSH
CRSST**

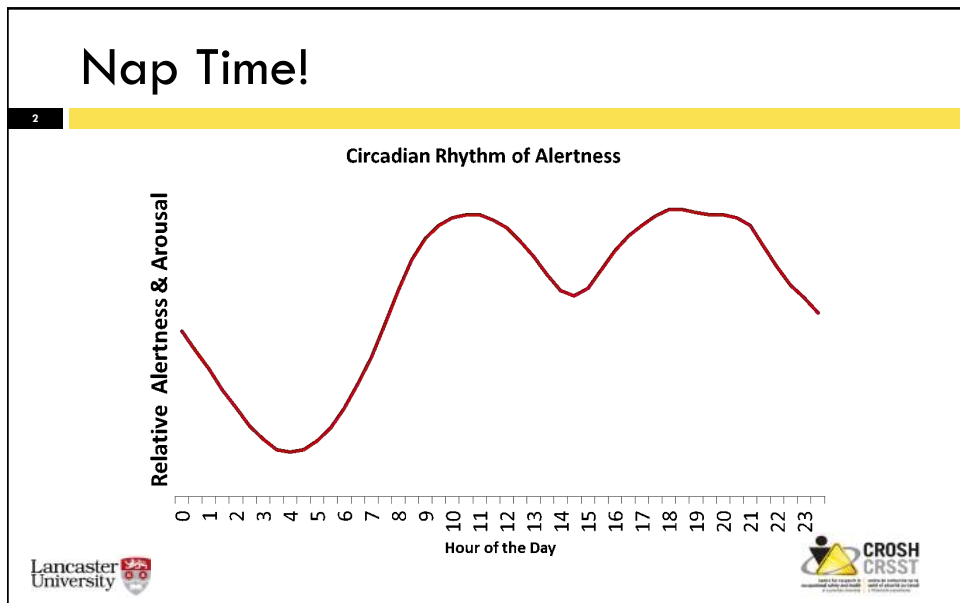
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à l'Université Laurentienne

PSYCHOSOCIAL & ORGANIZATIONAL RISK FACTORS

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Overview

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- What are psychosocial risk factors?
- Linking psychosocial risk factors with fatigue
- Psychosocial risk factors, fatigue and safety at work

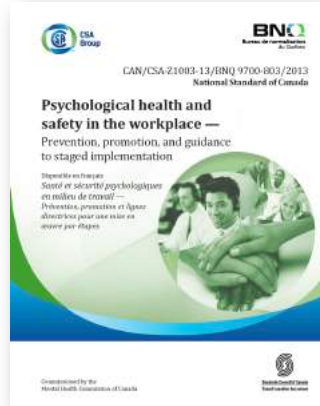
What are psychosocial factors?

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- Elements that impact an employee's psychological response to work and work conditions
- Have the potential to cause psychological health problems
- Psychosocial factors include the way work is carried out (e.g., deadlines, workload, work methods) and the context in which work occurs (including all interpersonal relationships and interactions)

Managing Psychosocial Factors

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The Standard provides a framework to create and continually improve a psychologically healthy and safe workplace, including...



...the identification and elimination of hazards in the workplace that pose a risk of psychological harm to a worker;



...the assessment and control of the risks in the workplace associated with hazards that cannot be eliminated;



...implementing structures and practices that support and promote psychological health and safety in the workplace; and

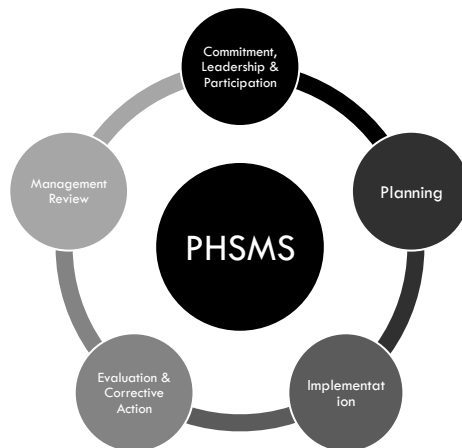


...fostering a culture that promotes psychological health and safety in the workplace.



Proposed Management System

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Background

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Commissioned by:



Mental Health
Commission
of Canada
Commission de
la santé mentale
du Canada

Approved by:



Standards Council of Canada
Conseil canadien des normes

Prepared by:



Assessing Psychosocial Factors

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GuardingMinds
@ WORK

Protégeons la Santé Mentale
AU TRAVAIL



Psychosocial Factors

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Psychological Support

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- Comprises all supportive social interactions available at work, either with co-workers or supervisors
- Equally important are the workers' perceptions and awareness of organizational support



Psychological Support

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- Organizations with good psychological support can state:
 - Offer services or benefits that address worker psychological and mental health;
 - Workers feel part of a community in which they carry out job tasks;
 - A process is in place to intervene if an employee is distressed;
 - Workers feel supported when dealing with personal/family issues;
 - Organization supports workers who are returning to work following an absence due to mental health condition; and
 - People in the organization have a good understanding of worker mental health



Organizational Culture

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- The mix of norms, values, beliefs, meanings and expectations that group members hold in common and use as behavioural and problem solving cues
- Enhances psychological health and safety when characterized by trust, honesty, respect, civility and fairness



Organizational Culture

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- An organization with good organizational culture can state:
 - All people in the workplace are held accountable for their actions;
 - People at work show sincere respect for others' ideas, values, and beliefs;
 - Difficult situations at work are addressed effectively;
 - Workers feel that they are part of a community at work; and
 - Workers and management trust one another.



Civility & Respect

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- Is present in a work environment where workers are respectful and considerate in their interaction with one another, as well as with their serving clientele
- Based on showing esteem, care, and consideration for others, and acknowledging their dignity



Civility & Respect

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- An organization with good civility and respect can state:
 - People treat each other with respect and consideration in the workplace;
 - The organization effectively handles conflicts between stakeholders (workers, customers, clients, public, suppliers, etc);
 - Workers from all backgrounds are treated fairly in our workplace; and
 - The organization has effective ways of addressing inappropriate behaviour by customers or clients.



Psychological Job Demands

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- Psychological demands of the job will allow organizations to determine whether any given activity of the job might be a hazard to the worker's health and well being
- Assessment should include time stressors (e.g., deadlines); breaks and rest periods; incentive systems; job monotony; and hours of work (e.g., overtime, weekends)



Psychological Job Demands

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- An organization with good psychological demands can state:
 - The organization considers existing work systems and allows for work redesign
 - The organization assesses worker demands and job control issues such as physical and psychological job demands
 - The organization emphasizes recruitment, training, and promotion practices that aim for the highest level of interpersonal competencies at work



Involvement & Influence

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- Workers are included in discussions about how their work is done and how important decisions are made
- Opportunities for involvement can relate to a worker's specific job, activities of a team/ department, or issues involving the organization as a whole



Involvement & Influence

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- An organization with good involvement and influence would be able to state that:
 - Workers are able to talk to their immediate supervisors about how their work is done;
 - Workers have some control over how they organize their work;
 - Worker opinions and suggestions are considered with respect to work;
 - Workers are informed of important changes that can impact how their work is done; and
 - The organization encourages input from all workers on important decisions related to their work.



Workload Management

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- Assigned tasks and responsibilities can be accomplished successfully within the time available
- It is not just the amount of work that makes a difference but also the extent to which the workers have the resources to do the work well




Workload Management

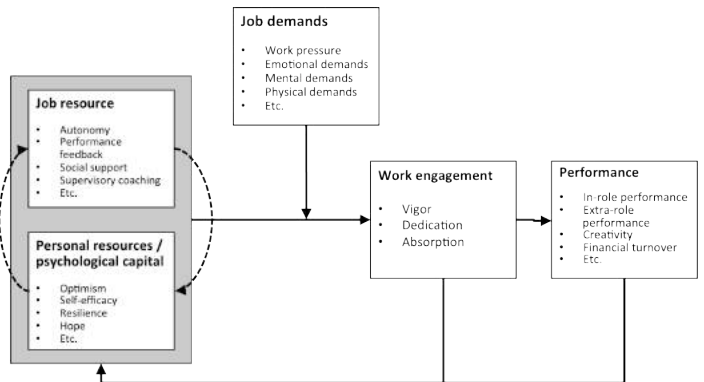
→ An organization with good workload management would be able to state that

- The amount of work workers are expected to do is reasonable for their positions;
- Workers have the equipment and resources needed to do their jobs well;
- Workers' work is free from unnecessary interruptions and disruptions; and
- Workers have an appropriate level of control over prioritizing tasks and responsibilities when facing multiple demands.



Job Demands-Resource Model





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graph LR
    JD[Job demands] --> WE[Work engagement]
    PR[Personal resources / psychological capital] --> WE
    WE --> P[Performance]
    P --> PR
    
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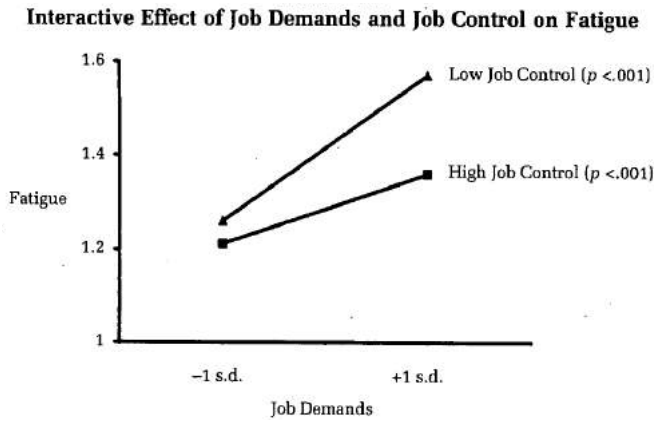
The diagram illustrates the Job Demands-Resource Model. It shows a flow from Job Demands (Work pressure, Emotional demands, Mental demands, Physical demands, Etc.) and Personal Resources / psychological capital (Optimism, Self-efficacy, Resilience, Hope, Etc.) to Work Engagement (Vigor, Dedication, Absorption). Work Engagement then leads to Performance (In-role performance, Extra-role performance, Creativity, Financial turnover, Etc.). There is a feedback loop from Performance back to Personal Resources / psychological capital.

JD-R Model of Work Engagement (Bakker & Leiter, 2010, p. 187)

Impact of JD-R

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Conceptual Model

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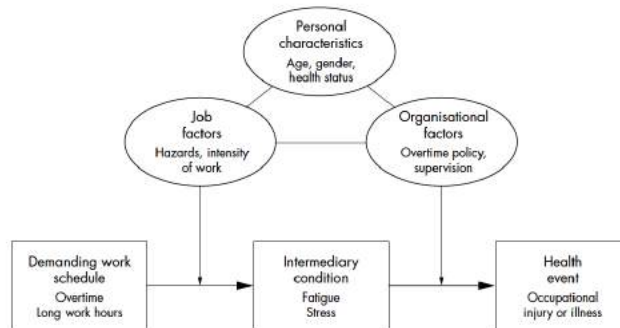


Figure 1 Conceptual model of the relationship between demanding work schedules and occupational injuries and illnesses (adapted from Schuster and Rhodes⁴²).



Impact of high work demands

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- Significant predictors of fatigue include hectic work (high job demands), overtime work and physically strenuous work (Akerstedt et al., 2002)
- Long shifts (>16hours) and long weekly working hours (>55hours) are associated with short sleep, sleep disturbances and increases in sleepiness and subsequently, fatigue (Virtanen et al., 2009; Sallinen & Kecklund, 2010)



High Work Demands and Safety

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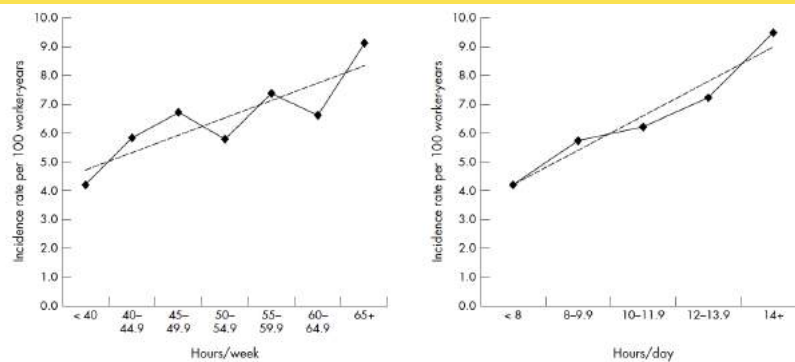
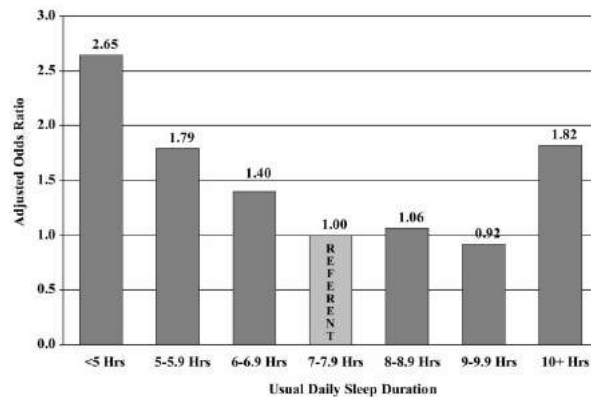


Figure 3 Trends in incidence rates of reported work related injuries and illnesses in jobs with and without exposure, for two exposure categories (hours/week and hours per day), by amount of exposure. NLSY aggregated data covering 1987-2000.



Sleep Duration and Injury

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FIGURE 3 Multivariate logistic regression adjusted odds ratio estimates for usual sleep duration.



Psychosocial Safety Climate

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- Measures the climate of an organization as specifically related to the psychological well-being of employees
- Defined as “policies, practices, and procedures for the protection of worker psychological health and safety” (Dollard & Bakker, 2010, p. 580)

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Mitigating Fatigue

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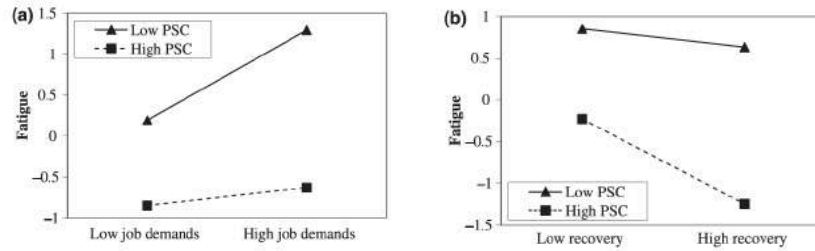


Figure 2. (a, b) Psychosocial safety climate (PSC) interactions with job demands and daily recovery for acute fatigue.



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Psychosocial Risk Factors & Fatigue

Judith Horrigan, RN, MScN, PhD. Candidate

Overview

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- Present findings from study:
- Evaluating the quality of northeastern Ontario nurses' worklife in urban, rural, and remote acute care settings
- Discuss factors & consequences associated with nurse fatigue
- What can be done to address nurse fatigue?



Background

- 44
- The majority (63%) of Registered Nurses (RNs) in Ontario work in urban, rural, and remote acute care hospital settings (Ontario Health Quality Council [OHQC] 2010)
- Nurses are reported to be the sickest workers averaging 20.9 sick days off work per year compared with all other occupations (OHQC, 2010; Shields & Wilkins, 2006b).
- Annual costs to the healthcare system associated with illness, disability, injury, and absenteeism of nurses, \$711M (Canadian Federation of Nursing Unions [CFNU], 2011).



Research Questions

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1. How do northeastern Ontario RNs and nurse leaders evaluate the QOWL in rural and remote hospitals, and the QOWL in medical surgical practice areas in large and small urban hospitals?
2. What are the similarities and differences of RNs evaluation of the QOWL in urban, rural, and remote hospitals?
3. What QOWL factors are associated with stress for northeastern Ontario RNs?



QNWL Defined

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- “the degree to which registered nurses are able to satisfy important personal needs through their experiences in their work organization while achieving the organization’s goals”

(Brooks, 2001, as cited in Brooks & Anderson, 2005, p. 323)



Occupational Stress Definition

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□ Occupational Stress:

“the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker”

(NIOSH, 1999 as cited in Salazar & Beaton, 2001).

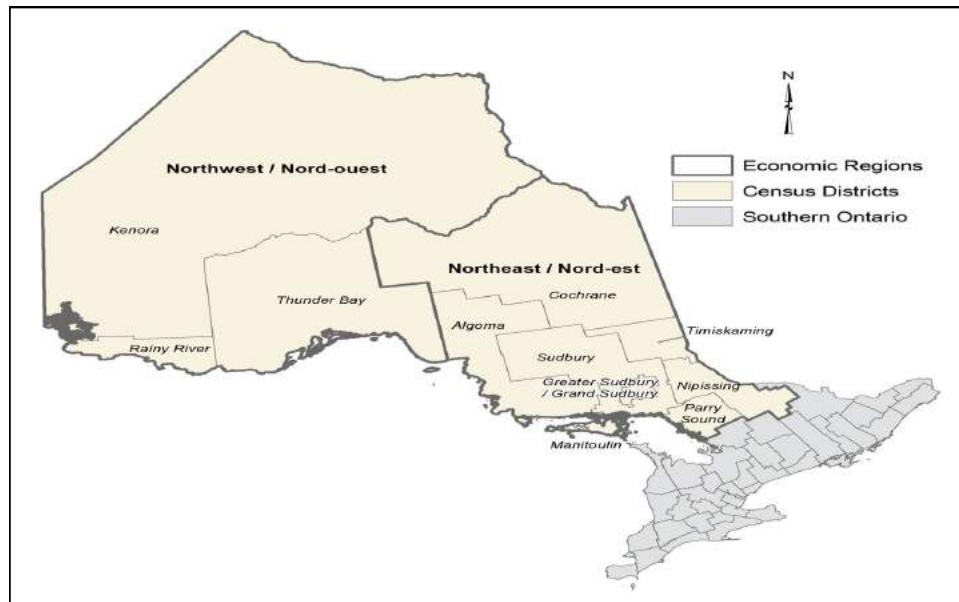


Methods

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- Mixed methods
- sequential explanatory design in two phases
- Phase I – quantitative data
- Phase II – qualitative data
- Ethics approval received from Laurentian University and from the four hospital sites





Phase I Instrument


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- Questionnaire: 13 pages, 3 scales plus questions related to demographic data
- Quality of Work Life (QOWL Scale): 42 items
 - Cronbach's alpha 0.85 – total scale
- Practice Environment Scale (PES): 31 items
 - Cronbach's alpha 0.93 – total scale
- Nursing Stress Scale (NSS): 34 items
 - Cronbach's alpha 0.89 – total scale




Phase I Response Rates

51				
Table 1	Setting	Sample RNs (N)	Response Rate %	
	Large Urban: A hospital > 100 beds	104	61.5	
	Small Urban: B hospital >100 beds	29	64.4	
	Rural: C hospital <100 beds	30	46.2	
	Remote: C hospital <100 beds	10	25.0	
	Total	N=173	54.2	




Phase I Results

52				
Table 2	Demographic Data	Frequency (%)	N	
Age (in years):	20 - 39	100 (60.6)	M=35.89	165
	40 - 65	65 (39.4)	SD=11.02	
Gender:	Female	161		173
	Male	10		
Marital Status:	Married/Common Law	117 (67.6)		172
	Other	54 (31.2)		
Education:	Nursing Diploma	101 (58.4)		172
	Baccalaureate	71 (41.0)		
Job Status:	Full Time (> 30 hours/wk)	129 (74.5)		172
	Part Time (< 30 hours/wk)	43 (24.9)		
Number of Years as RN:	< 1- 9*	101 (60.1)	M=10.28	168
	10 - >30	67 (39.9)	SD=10.19	
	*Majority had <1-4 years as an RN	63 (37.5)		



Phase I Results

53			
Table 3	Days Off, Breaks, & Overtime	Frequency (%)	N
Ability to Take Days Off:	Yes	150 (86.7)	170
	No	20 (11.6)	
Ability to Take Scheduled Breaks:	Yes	77 (44.5)	166
	No	89 (51.4)	
Work Overtime:	Yes	143 (82.7)	172
	No	29 (16.8)	
Exhaustion	Yes	78 (45.1)	167
	No	89 (51.4)	



Phase I Results QOWL Multiple Regression

54				
QOWL Final Model (126 observations used in model). (2 variables & 1 subscale in final model) (126/3 = 42 observations per variable)				
Variable	Description of Variable	Coefficient (beta)	Se	P Value
GH Rating	General Health Rating	5.48	1.57	<0.001
Exhaustion in past year	Exhaustion in the past year	-7.22	2.91	0.015
PES – Staffing (the following 4 items)		15.19	2.32	<0.001
PES G1	Adequate support services allow me to spend time with my patients.			
PES G8	Enough time and opportunity to discuss patient care problems with other nurses			
PES G9	Enough registered nurses to provide quality patient care.			
PES G12	Enough staff to get the work done			
Model R ² =0.353				

Phase I Results NSS Multiple Regression

55				
NSS Final Model (130 observations used in model) (3 variables & 1 subscale for final model) (130/4= 32.5 observations per variable)				
Variable	Description of Variable	Coefficient (beta)	Se	P Value
QOWL - F3	My workload is too heavy	1.98	0.73	.002
QOWL - F5	I am able to balance work with my family needs.	-1.58	0.73	.031
PES - G1	Adequate support services allow me to spend time with my patients.	-5.38	1.27	<.001
Nursing Ability Subscale (the following 5 items)		-3.69	1.52	.020
PES- G3	A supervisory staff that is supportive of the nurses.			
PES- G7	Supervisors use mistakes as learning opportunities, not criticism.			
PES- G10	A nurse manager who is a good manager and leader.			
PES- G13	Praise and recognition for a job well done.			
PES- G20	A nurse manager who backs up the nursing staff in decision- making, even if the conflict is with a physician.			
Model R ² =0.423				

Phase I Results NSS Logistic Regression

56			
NSS (dichotomous) Final Multivariable Model (129 observations used in model) (4 items in model) (129/4= 32 observations per variable)			
Variable	Description	OR (95% CI) calculated with respect to a score of >78	P Value
Age <34	Age <34	2.92 (1.20, 7.14)	.019
Exhaustion: (Yes)	Exhaustion in the past year	3.34 (1.42, 7.84)	.006
PES - G1: Support Services (Increasing Disagreement)	Adequate support services allow me to spend time with my patients.	3.56 (1.78, 7.10)	<.001
PES - G12 Sufficient Staff: (Increasing Disagreement)	Enough staff to get the work done.	2.11 (1.14, 3.92)	.018
C=0.82 (area under the curve). Hosmer-Lemeshow Goodness of fit $\chi^2=10.042$, p=0.262			

Phase I Findings

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- Key factors were found to be in both the QOWL and NSS regression models.
- Adequate support services allow me to spend time with my patients, in the PES staffing subscale item G1, was associated with both the QOWL & NSS multiple regression models, & NSS logistic regression model.



Phase I Findings

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- A supervisory staff that is supportive of the nurses, in the PES scale G3, was associated with nurses NSS in the multiple regression model & in the QOWL logistic regression model
- Enough staff to get the work done, in the PES scale G12, &
- Exhaustion were associated with nurses QOWL in the multiple regression model & in the NSS logistic regression models



Discussion

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- In a joint National mixed method research project by the Canadian Nurses Association (CNA) and Registered Nurses Association of Ontario (RNAO), fatigue among nurses & patient safety was explored with
- N= 7,239 Canadian nurses working in a variety of settings across Canada.



Discussion

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- The top five factors linked to nurse fatigue were:
 - increased workload,
 - working short staffed,
 - increasing expectations from patients and families,
 - high levels of patient acuity and
 - unexpected emergency with staffing or patients.

Additional factors included

- feeling of sensory overload, functionally disorganized workplaces & relentless change within the workplace
- (CNA & RNAO, 2010)



Discussion

61

- Nurse fatigue is described as
 - involving some combination of features:
 - physical (e.g., sleepiness) &
 - psychological (e.g., compassion fatigue, emotional exhaustion).
 - may significantly interfere with functioning &
 - may persist despite periods of rest (CNA & RNAO, 2010, p. 12).



Discussion

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Nurse fatigue has been linked to patient safety concerns

- affects nurses' judgment,
- decision-making & problem solving,
- associated with increased errors & near errors.
- >25% indicated they had observed unsafe practice related to fatigue of health professionals, &
- <20% indicated they believed fatigue affected their ability to provide safe, compassionate, competent & ethical care.
- (CNA & RNAO, 2010)



Discussion

63

- Fatigue has had its impact on nurses with
- 25.8% considering resigning;
- 20.2% considering retiring; and
- 25.6% considering leaving the profession due to fatigue.

(CNA & RNAO, 2010, p. 19)



Discussion

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- *Nurse Safety*
- Fatigue negatively affects nurses physical & mental health
- leads to moral distress;
- an impaired ability for self-care & coping with daily life;
- stress;
- impaired concentration & judgment; (CNA, 2012, p. 2).



Summary

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- Clearly nurse fatigue is a significant problem that affects nurses' physical and mental health, patient and nurse safety.
- In the National study 90.4% of nurses reported that policies & procedures to address nurses fatigue were lacking (CNA & RNAO, 2010)



Recommendations for Organizations

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- Adhere to labour laws
- Increased funding;
- Address physical work environment
- Include spaces for recovery;
- Health & wellness programs,
- Opportunities to eat healthy while at work;
- Staffing practices & policies; &
- Decreasing horizontal violence.



Recommendations Professional

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- Incorporate accreditation standards that address nurse fatigue
- Provide education for nursing students that helps students prevent, recognize and manage fatigue;
- Reduce non-nursing tasks being done by nurses that decrease time with and for patients & increases fatigue.

(CNA & RNAO, 2010, p. 26)



Recommendations Nursing Associations

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- Nursing associations having an advocacy role in reducing workplace fatigue.
- Involve the public more in this issue and to raise awareness of the potentially unsafe conditions
- Nursing unions identified as a key group to be involved in collaborative action to address fatigue.

□ (CNA & RNAO, 2010, p. 27)



Recommendations Individual Nurse

69

- *Get adequate rest and recreation*
- *Make sleep, breaks & naps a priority*
- *Create a work-life balance*
- *Eat a healthy balanced diet*
- *Exercise regularly* (CNA, 2012, p. 3).



Conclusion

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- Improving nurses QOWL & Stress will involve:
 - reducing nurses exhaustion/fatigue,
 - the provision of adequate support services, &
 - sufficient staff
- Addressing the fatigue issue could have a major impact on retention in nursing.

(CNA & RNAO, 2010, p. 19)



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Questions?

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