

QUALITY OF LIFE of INTENSIVE CARE NURSES in BELGIUM

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[‡] on behalf of the ICCollege Belgium

Quality of Life



SURVEY

A. Demographic data

B. 15 Statements on work- personal life balance

C. Validated questionnaires

GENERAL HEALTH QUESTIONNAIRE 12 ITEMS	SF 12	
SYMPTOM CHECKLIST OF DEPRESSION SUBSCALE 20 ITEMS	CES D	
BURN OUT QUESTIONNAIRE	MASLACH	22 ITEMS
ALCOHOL/SUBSTANCE ABUSE QUESTIONNAIRE ITEMS	AUDIT	10+1
SLEEP QUALITY	BECK DEPRESSION INVENTORY (PART)	4 ITEMS

D. Top 3-stressors (Choice of 16 items)

E. Do burnout and depression affect therapeutic attitude ?

clinical scenario

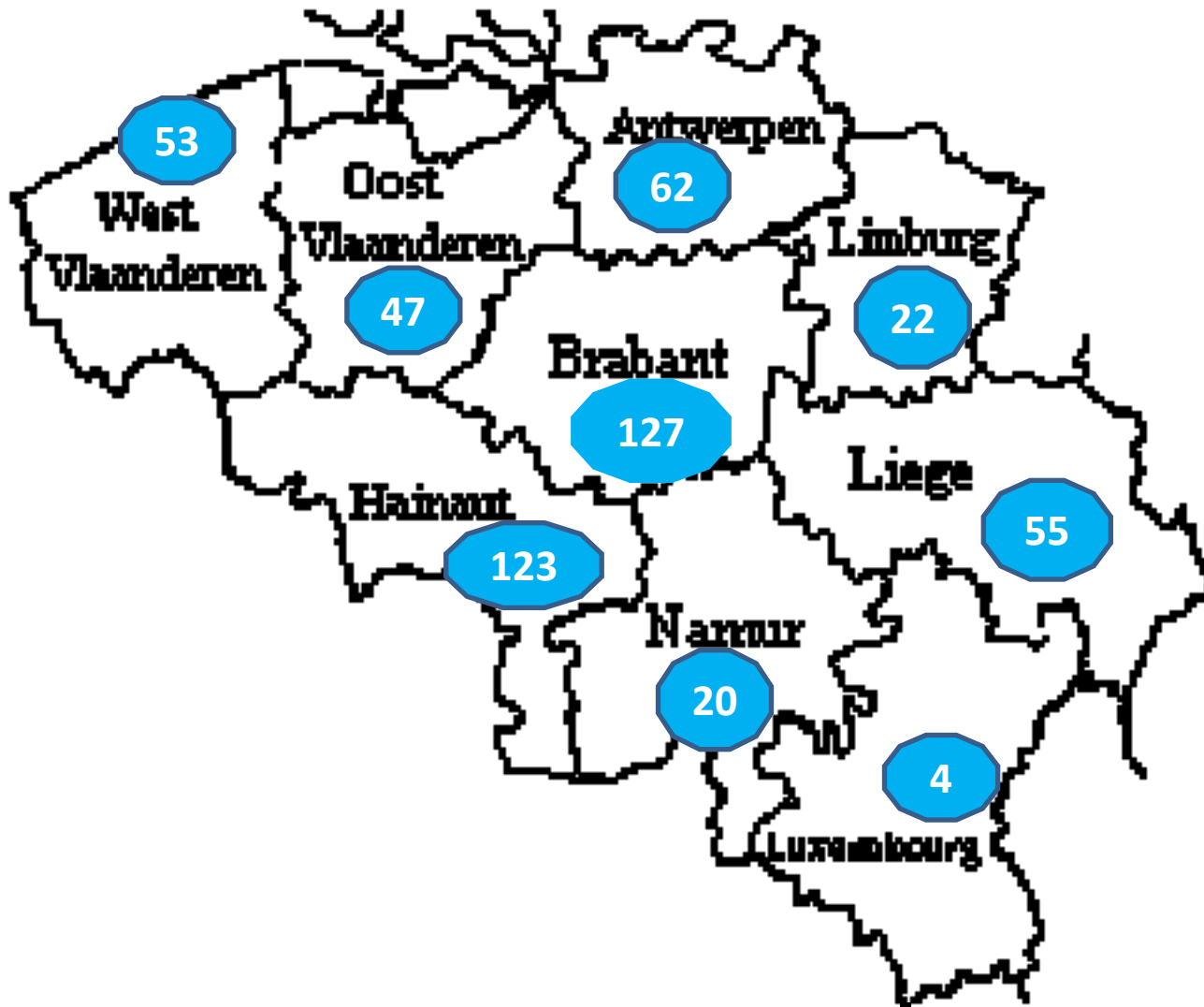
F. Questions specific for head nurses(9 items)

Intro

- Internet-based survey
- Participation on voluntary basis
- Strict commitment for anonymity and confidentiality
- Two languages French and Dutch
- Survey from January 28th 2011 > March 24th 2011

Results

- Responders : 525 ICU nurses
- 227 Dutch / 298 French speaking
- 513 Valid questionnaires
- 103 Hospitals
- 76 Head nurses (14.8 %)



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A. Demographic data (1)		
Age (y)	34 median Mean 36.1+/-9.6	Interquartile range P25-P75 28-44 (min 21- max 60)
Gender : female/ male	69.2 %/ 30.8%	
Marital status : -married/couple -single -divorced -widow(er)	70.9% 23.2% 5.1% 0.6%	
Number of children at home 0 1 2 3 >3	42.5% 15.8% 28.1% 11.5% 2.1%	

A. Demographic data (2)		
Profession partner: -nurse -other	24.2% 75.8 %	
Your professional status: -employee -functionary	81.1% 18.9%	
Professional Activity -Full time -Part-time Rank Head nurse Deputy head nurse ICU Nurse	73.3% 26.7% 15% 3.7% 81.3%	Average 71.8+/-11.9 % of full time

A. Demographic data (3)		
Basic training -A1 nursing Supplementary training : -Professional title ICU nurse -BANABA -Master title -Other (wound care,..)	95.5% 72.9% 14.8% 24.6% 2.5%	
Nursing career : Nursing diploma since (years) Professional experience as ICU nurse(years) Expected future career as ICU nurse (years)	14.1 mean 12.7 mean 14.3 mean	9.6 SD 9.2 SD 9.8 SD
Present professional activity ICU only ICU+Emergency department ICU+ mobile squad ICU +other service	94.5% 2.3% 1.2% 1.9%	 52% ICU 46.7% ICU 59.5% ICU

A. Demographic data (4)		
Type hospital public private university	26.7% 54.8% 18.5%	
Type ICU -medical/surgical -medical -surgical -paediatric -neuro -cardiology -other	81.9% 3.3% 6.0% 2.1% 1.9% 1.4% 4.1%	
Number of beds in “your” ICU ICU Bed occupancy rate Shift system -three -two	12.6 mean 79.8% 96.9% 3.1%	6.1 SD
Working hours: -three shifts (m/a/e)* -two shifts (m/e) Night shifts/month	7.8/7.7/10.3 hrs 11/11.5 hrs 3.8	3.6 SD
*m/a/e :morning /afternoon/evening shift		

A. Demographic data (5)			
Patients per ICU nurse	max	3.6	1.4 SD
	min	1.6	0.8 SD
	today	2.5	1.0 SD
Continuous education			
Scheduled in working hours ?		81.3 % yes	18.7% no
Number of educational days/year		3.5 d	
Subscribed to professional nursing journal		26.7% yes	
Member ICU nurse society		25.9% yes	
Member Intensive care medicine or nursing society		12.7% yes	
Net salary/month (mean)		1986.6€	1408.3 €SD

A. Demographic data (6)

Extra legal salary

Cell phone

0.4%

Insurance for hospitalization

44.4%

Service cheque

39.7%

Corporate insurance system

11.8%

Lease car

0%

Other

6.4%

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Table 1: Work-life Balance questions

1. I would choose again for a professional career as ICU nurse
2. The job as ICU nurse gives me satisfaction
3. My choice for ICU nursing was on voluntary basis/on demand of the nursing director/an intermediate step to another nursing activity/by need of internal mutation within the hospital .
4. I will stay ICU nurse until the end of my career
5. I feel I am appreciated in my job as ICU nurse by the hospital management/colleagues ICU nurses /colleagues non- ICU nurses/ICU patients/medical ICU staff/medical non ICU staff .
6. My professional knowledge as ICU nurse is up to date
7. My salary is proportional to my engagement
8. If possible I would prefer less clinical workload
9. I have (had) enough time for my family
10. I have a valuable social/professional network
11. Intensive Care Nursing is well known by the general public/ by my family/partner/children
12. My job content is well known by
13. Since the beginning of my career I became more sarcastic/distant, stand-offish/less empathic
14. My present workload allows me to deliver patient care of high quality
15. I have chosen for the job as ICU nurse because of the technical aspect/the team aspect

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General Health Q SF-12			
Domain (during the last 4 weeks...)	Category	ICU nurses 2011	ICU doctors 2008*
General health status	Quite +really bad	8.6%	11.6 %
Physical shortcomings (did you perform less than planned by..)	yes	28.1%	17.3%
Emotional shortcomings (did you perform less than planned by..)	yes	17.2%	15.3%
Bodily pain (during normal activities at home or at work)	Moderate to a lot	15.2%	14%
Limitation of physical functioning in moderate to average activities	Moderate to a lot	23%	17%
Problems with psychological functioning (depressed , tense)	Often to very often	29%	15%
Lack of vitality	Often to always	34%	31%
Problematic social functioning (due to emotional or physical problems)	Often to always	19.9%	12%

General Health Q SF-12		
Domain (during the last 4 weeks...)	Category	ICU nurses 2011 : RISK factors
General health status	Quite +really bad	F=D ; less professional experience ; women ; older age ; nr of nightshifts ; less continuous education.
Physical shortcomings (did you perform less than planned by..)	yes	F<D (24.3% vs 33.2% p<0.05) ; older age ; women> men(p=0.04) ; part-time>full time(p=0.03)
Emotional shortcomings (did you perform less than planned by..)	yes	F>D (22.9% vs 9.2% p=0.0004) ; less professional experience ; no extra legal benefits
Bodily pain (during normal activities at home or at work)	Moderate to a lot	
Limitation of physical functioning in moderate to average activities	Moderate to a lot	
Problems with psychological functioning (depressed , tense)	Often to very often	F>D (p=0.02)
Lack of vitality	Often to always	F>D (p=0.0003) ; older age ; singles
Problematic social functioning (due to emotional or physical problems)	Often to always	F=D

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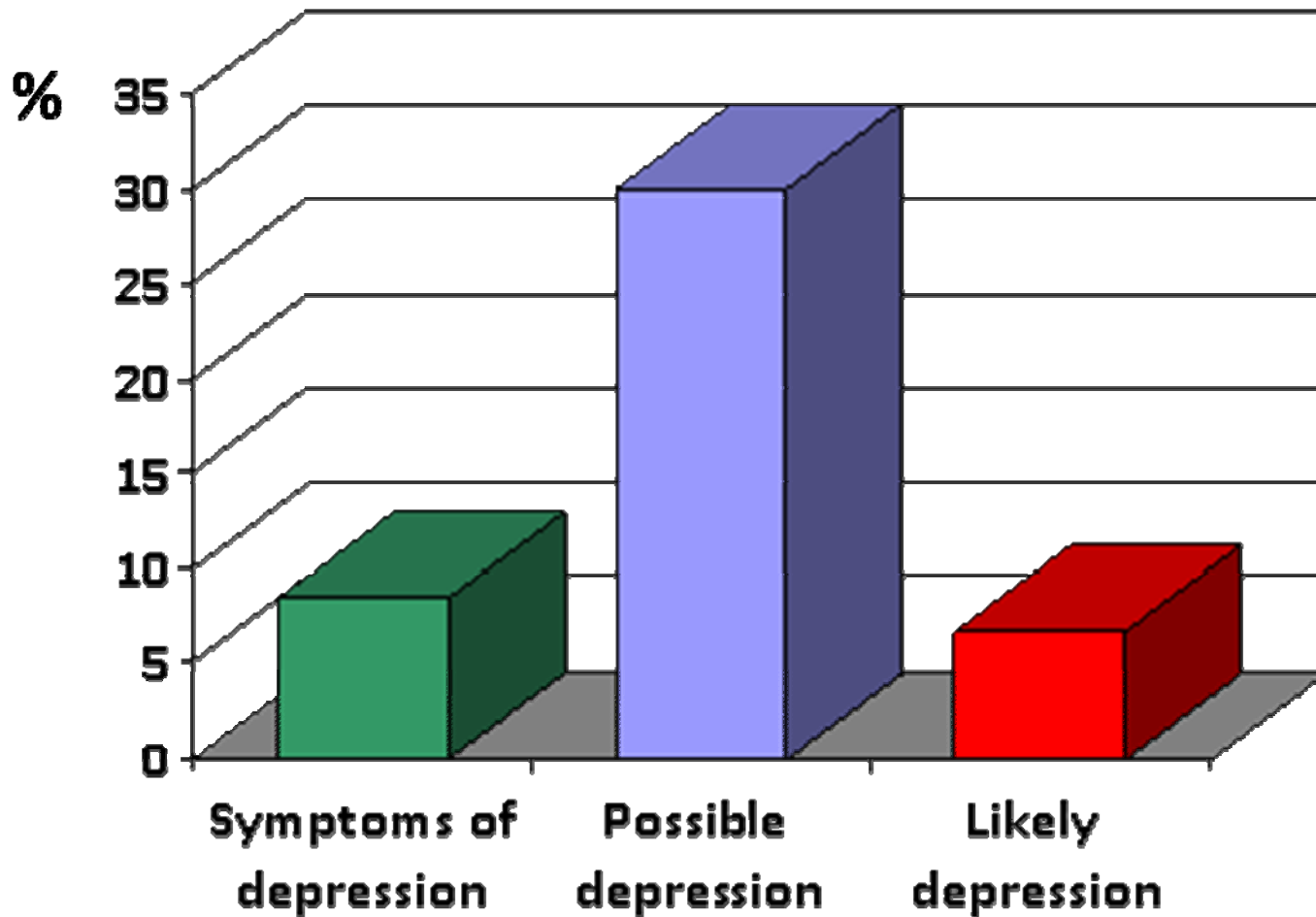
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CES-D depression scale in Belgian ICU nurses (n=513)



CES-D depression scale in Belgian ICU nurses

Total CES-D score	N respondents/ total	% Belgian ICU nurses	% Belgian ICU doctors 2008
16 =Symptoms of depression	43/513	8.4	5.2
17-23 = Possible depression	154/513	30.0	17.5
>23 = Likely depression	34/513	6.6	8.6

CES-D depression scale in Belgian ICU nurses

Risk factors for **Depression** :

1. F=D (7.8% vs 5.0% p=0.22)
2. Younger age
3. Female > Male ICU nurses
4. Private hospitals>public>university hospitals
5. Non members of professional organisations more at risk .

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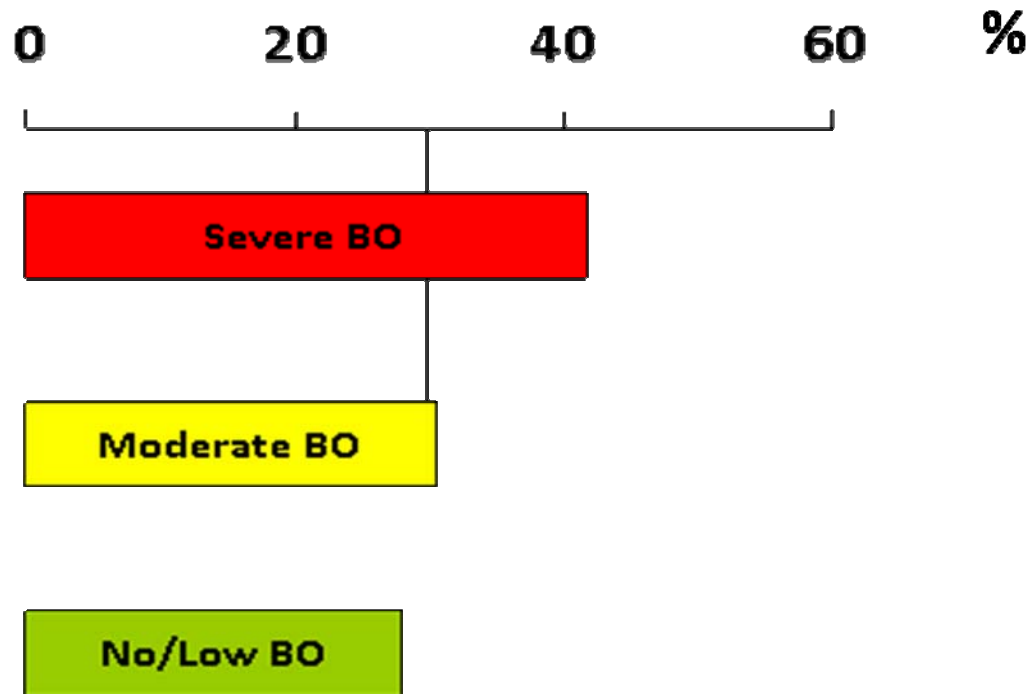
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Prevalence of burnout: total MASLACH Burnout Inventory in ICU nurses (BO=burnout)



Prevalence of global burnout in Belgian ICU nurses with the MBI (Maslach Burnout Inventory) .

Severe burnout	Moderate burnout	Low/no burnout
SBO -8>+34	MBO -9>-21	LBO -22>-45
41.7%	30.2%	27.9%
33% *	30.5%*	36.5%*

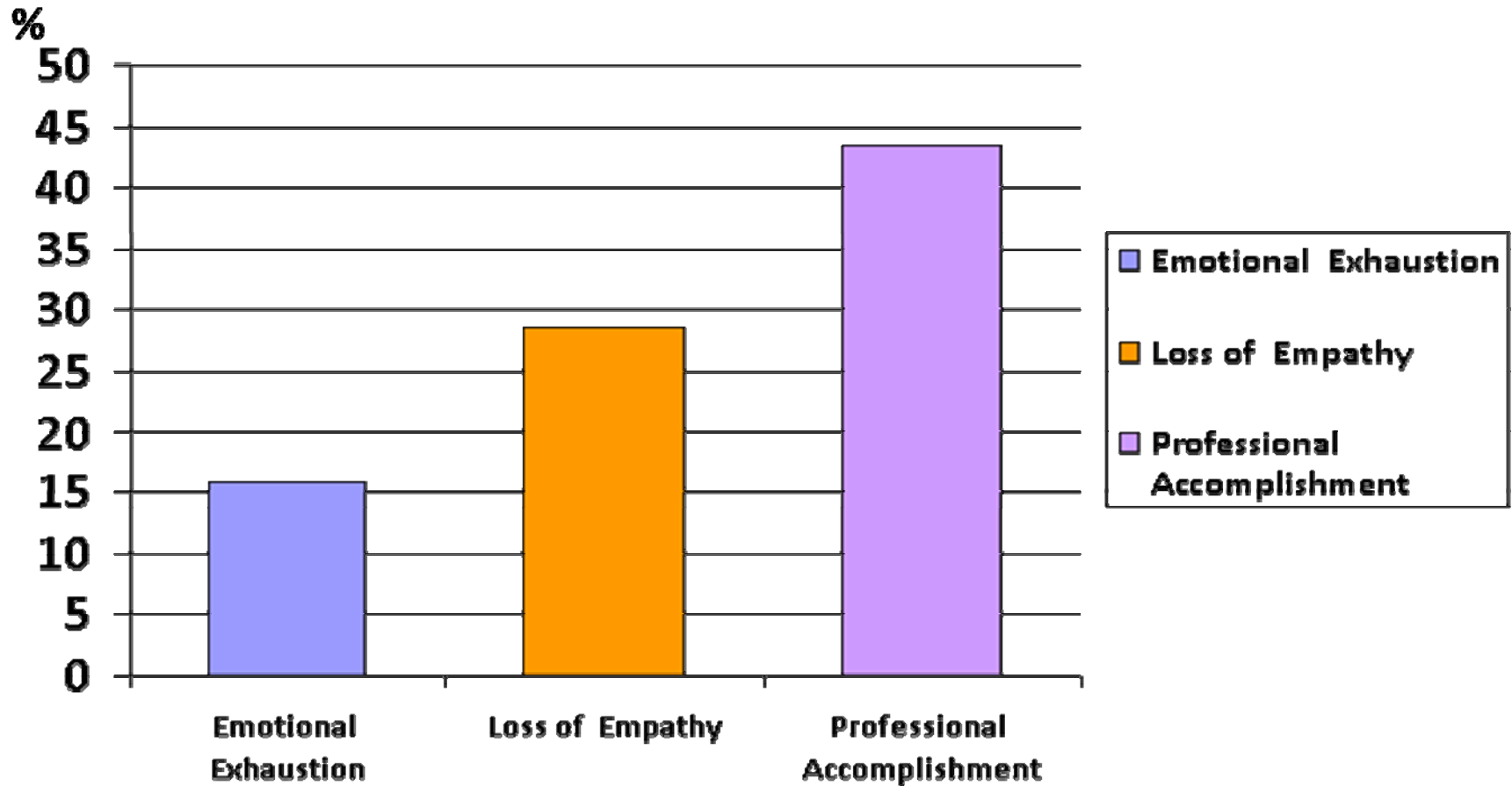
*data Belgian ICU doctors 2008

Prevalence of burnout: total MASLACH Burnout Inventory in ICU nurses (BO=burnout)

Risk factors for **Severe Burnout** :

1. F>D (47.7 % vs 33.2% p= 0.003)
2. Young age / less professional experience
3. University hospital> private>public hospital
4. Insufficient time for continuous education
5. More than 3 nightshifts per month
6. Non members of a professional organisation/non subscribers to professional journals .

MASLACH Burnout Inventory: prevalence of burnout in the 3 sub domains in ICU nurses (n=513)



MASLACH Burnout Inventory: prevalence of burnout in the 3 sub domains in ICU nurses (n=513)

Burnout sub domains		Belgian ICU nurses	Belgian ICU doctors
Emotional Exhaustion	<27	15.8%	15.4%*
Loss of Empathy	<10	28.5%	38.2%*
Low Professional accomplishment	>33	43.3%	32.4%*

*data 2008

Burnout in Intensivists

	UK (1)	France (2)	Italy(3)	Belgium
Emotional exhaustion	26%	19%	36%	15.4%
Loss of empathy	34%	37%	56%	38.2%
Professional accomplishment	19%	39%	28%	32.4%

1. Guntupalli K et al. Intensive Care Med 1996;22:625
2. Embriaco N et al. Am J Resp Crit Care Med 2007;175:686
3. Raggio R. et Al. Minerva Anesthesiol 2007;73:195

Prevalence of burnout: total MASLACH Burnout Inventory in ICU nurses (BO=burnout)

Risk factors for **Emotional exhaustion**:

1. F>D (21 % vs 8.7% p= 0.0001)
2. Young age / less professional experience
3. University hospital >public > private hospital

Prevalence of burnout: total MASLACH Burnout Inventory in ICU nurses (BO=burnout)

Risk factors for **Loss of Empathy**:

1. F>D (32.7 % vs 22.6% p= 0.01)
2. Young age / less professional experience
3. University hospital >public > private hospital

Prevalence of burnout: total MASLACH Burnout Inventory in ICU nurses (BO=burnout)

Risk factors for

Low Professional Accomplishment:

1. F<D (39.9 % vs 47.9% p= 0.06 ns)
2. Young age / less professional experience
3. University hospital > public > private hospital

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Percentage of ICU nurses with problematic/pathologic alcohol abuse

ALCOHOL ABUSE	% respondents	
problematic	2.1	AUDIT score > 11
pathologic	7.6	AUDIT score > 8

Percentage of ICU nurses with problematic/pathologic alcohol abuse

Risk factors :

1. Full-time > part time
2. Male > female

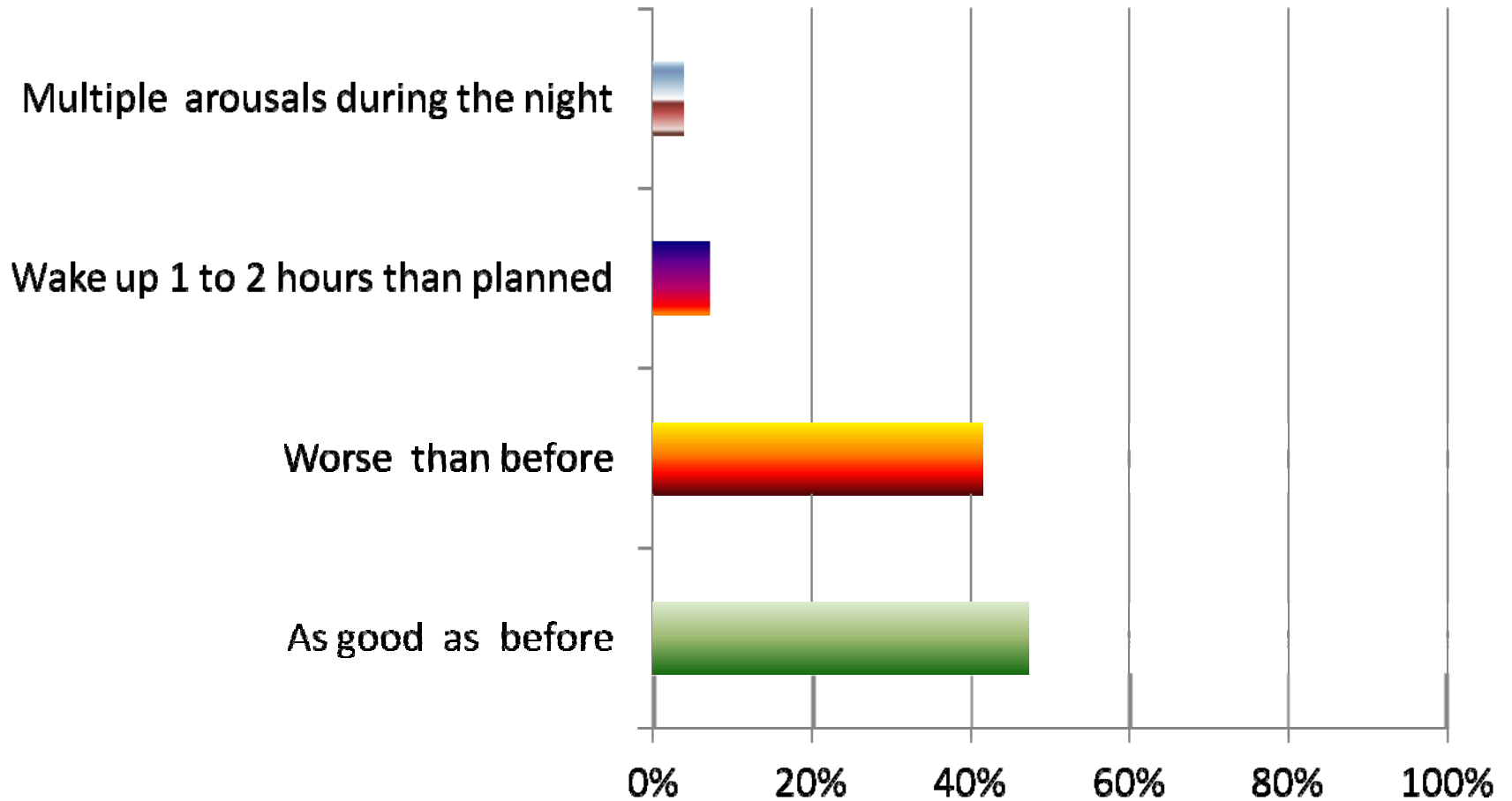
Percentage of ICU nurses with substance abuse
once in a life time and during the last year

SUBSTANCE ABUSE	Once % respondents	Last year % respondents
Opiates	3.7	0.2
Stimulant drugs	3.7	1.6
Hypnotics/anxiolytics	18.5	20.5
Hallucinogenic drugs	2.1	0
Volatile sniffing agents	1.0	0.4
Cannabis	15.4	4.7

Percentage of ICU nurses with substance abuse
once in a life time and during the last year

SUBSTANCE ABUSE	Once % respondents	Last year % respondents	
Opiates	3.7	0.2	F<D
Stimulant drugs	3.7	1.6	
Hypnotics/anxiolytics	18.5	20.5	F>D
Hallucinogenic drugs	2.1	0	
Volatile sniffing agents	1.0	0.4	
Cannabis	15.4	4.7	F>D

SLEEP QUALITY in ICU nurses



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Important stressors for ICU nurses

1. Administrative overload 3
2. Effects of workload on personal /family life
3. Inability to achieve accuracy and state of the art care due to clinical workload/overload 1
4. Shortage/allocation of ICU beds
5. Fear to make wrong decisions
6. Fear to make mistakes in treatments or technical acts
7. Inability to deliver high end quality of care 2
8. Confrontation with the ICU patient's family
9. Not comfortable with End-of-life decisions

Important stressors* for ICU nurses

	ALL	F	D
Administrative overload	3	3	2
Effects of workload on personal /family life			
Inability to achieve accuracy and state of the art care due to clinical workload/overload	1	1	1
Shortage/allocation of ICU beds			
Fear to make wrong decisions			
Fear to make mistakes in treatments or technical acts			
Inability to deliver high end quality of care	2	2	3
Confrontation with the ICU patient's family			
Not comfortable with End-of-life decisions			

* F speaking ICU nurses rate stressors higher than D speaking ICU nurses !

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Case Story:

“Acharnement Therapeutique”

Agree = WRONG response	27.5 %
Disagree	72.5 %

Case Story:

“Acharnement Therapeutique”

Agree = WRONG response	27.5 %
Disagree	72.5 %

Risk factors for the **wrong response** :

1. F > D (30.4% vs 23.5 % p > 0.05 ns)
2. Likely Depression p=0.013
3. Burn out : no influence !

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Head nurse survey		
Support in the job as head nurse None (= “solo practice “) Other head nurse(s) Deputy head nurse(s)	68.4 % 3.9% 27.6%	
Number of people led by head nurse ICU nurses Nurse equivalents in FTE* Others (non nurses) Others in FTE	Mean 28.3+/-17 Mean 23.8+/-18 Mean 2+/-1.9 Mean 1.2+/-1.7	Max 105 Max 90 Max 8 Max 7
Frequency of performance interviews 1/year Several times/year If necessary Never	42.1% 6,6% 43.4% 7.9%	
Rota list How is the rota list made ? Fixed rotation Keeping in account nurses’ wishes Automatically By external person None of the above	27.6% 51.3% 2.6% 2.6% 15.8%	
Time spent on rota list	5.8+/-4.8 hrs	Max 25 hrs

Head nurse survey		
Designated medical staff and medical ICU director Yes No	97.4% 2.6%	
Cooperation with medical staff Excellent Good Average Bad Very bad	21% 51.3% 17.1% - 2.63%	
Are you implicated in the ICU management? yes	92.1%	
Head nurses' involvement in direct patient care Never On necessity Daily	2.6% 44.7% 52.6%	

THXs !

Burnout



“Le médecin m’a conseillé de porter un avertisseur d’incendie”

Comment éviter le Burnout ?

Restez actifs dans les domaines et avec les gens que vous appréciez

1. Administration de temps : une tâche à la fois, apprenez à faire un planning , avancez vos priorités
2. Essayez de découvrir ce qui est vraiment important dans votre vie
3. Assertivité : apprenez à dire non , définissez vos limites, introduisez une pause de technologie journalière
4. Ecoutez vous-même:maux de tête , tendance d'isolement...?
5. Pratiquez régulièrement des exercices physiques après le travail

Comment éviter le Burnout ?

Restez actifs dans les domaines et avec les gens que vous appréciez

6. Cessez de vous tracasser mais agissez (demandez l'avis de bons conseillers, amis..)
7. Evitez le perfectionisme extrême .Déléguez ...
8. Restez vous-même avec vos imperfections : l'amour propre ne dépend pas des idées des autres
9. Organisez des activités amusantes et sociables : un bon livre , le cinéma , un moment de repos..
10. Sourriez et mettez les choses en perspective..

Hoe Burnout vermijden ?

Blijf actief in de domeinen en met de personen die je goed liggen

1. Tijdsbeheer : één taak tegelijk , maak een planning ,stel prioriteiten.
2. Tracht te ontdekken wat echt belangrijk is in je leven .
3. Assertiviteit : leer NEEN zeggen , bepaal je limieten , las één technologie pauze in per dag
4. Luister naar jezelf : hoofdpijn , isolement opzoeken..
5. Doe aan sport na het werk

Hoe Burnout vermijden ?

Blijf actief in de domeinen en met de personen die je goed liggen

6. Stop met piekeren en treed in actie (in overleg met goede raadgevers ,vrienden..)
7. Vermijd extreem perfectionisme . Delegeer..
8. Blijf jezelf met je onvolkomenheden : een zelfbeeld hangt niet af van de ideeën van anderen
9. Organiseer aangename en sociale activiteiten: verdwijn in een boek , filmke , take a break
10. Neem alles niet te zwaar op en relativeer . Zie de zaken in perspectief