

## The educational preparation of nurses in a developing economy and patient mortality

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**Table 1. Patient demographic and clinical characteristics**

	Total sample (n=11,918) n (%)	Dead (n=359) n (%)	Not dead (n=11,559) n (%)
Age (mean, s. d.)	36.2 (16.1)	27.2 (17.5)	36.5 (16.0)
Female	9263 (77.7%)	281 (78.3%)	8,982 (77.7%)
Nationality			
Africa	720 (6.0%)	19 (5.3%)	701 (6.1%)
MENA	7412 (63.0%)	232 (64.6%)	7280 (63.0%)
East Asia	554 (4.6%)	19 (5.3%)	535 (10.7%)
South Asia	2819 (23.7%)	80 (22.3%)	2739 (23.7%)
West	310 (2.6%)	9 (2.5%)	301 (2.6%)
Unknown	3 (0.0%)	0 (0.0%)	3 (0.0%)
Diagnosis priority			
0 (low)	10973 (92.1%)	90 (25.1%)	10883 (94.2%)
≥1 (high)	945 (7.9%)	269 (74.9%)	676 (5.8%)
Length of stay (days) (mean, sd)	3.40 (9.5)	4.28 (3.2)	2.2 (3.3)

**Table 2. Nurses Demographic and educational characteristics**

<b>Demographic and education characteristic</b>	<b>Whole sample n=7,415</b>	<b>Baccalaureate or higher n=4,075 (55%)</b>	<b>Licence/diploma n=3,340 (45%)</b>
Age (mean, sd )	37.5 (8.1)	36.61, 9.13	38.52, 7.38
Females (n, %)	7038 (94.9%)	3698, 48.65%	3430, 46.25%
<b>Nationality Group</b>			
MENA (n, %)	1286 (17.3%)	648, 8.74%	638, 8.6%
South Asia (n, %)	4252 (57.3%)	2199, 29.65%	2053, 27.68%
Africa (n, %)	162 (2.2%)	76, 1.02%	86, 1.16%
East Asia (n, %)	1690 (22.8%)	863, 11.63%	827, 11.15%
West (n, %)	25 (0.3%)	15,2%	10, 1.3%
<b>Satisfaction (mean, sd)</b>	3.99 (0.22)	-	-
Workload	4.16 (.58)	-	-
Renumeration	2.95 (.78)	-	-
Autonomy and decision making	3.15 (.65)	-	-
Interaction with nursing colleagues	4.5 (.45)	-	-
Management and administration	3.96 (.76)	-	-
Professional development	3.6 (.55)	-	-
Staffing ratio (mean, sd)	7.27 (1.48)	-	-
Number of bachelor nurses (n, %)	2,485(33.5%)	-	-

**Table 3. Multiple logistic regression results**

<b>Variable</b>	<b>OR (95% CI)</b>	<b>P-value</b>
<u>Education</u>		
License	1	
Diploma	2.09 (0.86, 5.04)	0.103
Bachelor/MS	1.34 (0.57, 3.22)	0.489
<u>Acuity</u>		
≤1	1	
≥2	28.9 (17.9, 46.7)	0.001*
Patient age (in years)	0.99 (0.96, 1.01)	0.291
<u>Patient gender</u>		
Male	1	
Female	0.90 (0.54, 1.50)	0.693
Length of Stay (days)	1.15 (1.13, 1.18)	<0.001*
Nurse Age (in years)	1.01 (0.97, 1.06)	0.532
<u>Nurse gender</u>		
Male	1	
Female	0.58 (0.30, 1.13)	0.109
<u>Nurse Nationality</u>		
Africa	1	
East Asia	0.70 (0.18, 2.73)	0.610
MENA	0.76 (0.20, 2.89)	0.692
South Asia	0.66 (0.18, 2.42)	0.531
EU/US	0.10 (0.02, 0.70)	0.020*
Staffing	1.93 (1.72, 2.16)	<0.001*
Satisfaction	2.04 (0.63, 6.53)	0.232

\*significant at the 5% level