

Supplemental Material

Table S1. Demographic, social and economic characteristics of the ICU staff.

Variable	Multibed design (n=86)	Single-bed design (n=70)	p
Profession (%)			0.20
Physician	10 (11.6)	3 (4.3)	
Nurse	69 (80.3)	63 (90)	
Respiratory therapist	7 (8.1)	4 (5.7)	
Age (years)	35 (30-39)	33 (29-39)	0.58
Male (n=152)	28 (33.3)	18 (26.5)	0.38
Working years in ICU	7 (4-11)	5 (3-9)	0.21
Marital status (%)			0.62
Single	27 (31.4)	24 (34.3)	
Married	49 (57)	39 (55.7)	
Divorced	8 (9.3)	7 (10)	
Widowed	2 (2.3)	0 (0)	
Offspring (n=155)			0.10
0	46 (53.5)	34 (49.3)	
1	13 (15.1)	18 (26.1)	
2	16 (18.6)	10 (14.5)	
3	10 (11.6)	3 (4.3)	
≥ 4	1 (1.2)	4 (6.8)	
Religion (n=155)			0.17
Catholic	32 (37.2)	30 (43.5)	
Protestant	22 (25.6)	15 (21.5)	
Jewish	1 (1.2)	0 (0)	
Spiritualist	15 (21.7)	12 (14.0)	
Atheist	0 (0)	6 (7.0)	
Others	9 (13.0)	13 (15.1)	
Shift			0.51
Morning	20 (23.3)	22 (31.4)	
Afternoon	30 (34.9)	21 (30)	
Overnight	36 (41.9)	27 (38.6)	
Weekly hours worked	36 (36-40)	36 (36-40)	0.60
Work in other hospital (%)	21 (24.4)	13 (18.6)	0.43
Psychiatric treatment (%)			0.61
Never	75 (87.2)	58 (82.9)	
Current	6 (7)	5 (7.1)	
Previous	5 (5.8)	7 (10)	
Smoking	9 (10.4)	2 (2.9)	0.16
Alcohol use (n=155)			0.38
No	37 (43)	27 (39.1)	
1-2 times/month	23 (26.7)	27 (39.1)	
1 time/week	20 (23.3)	11 (15.9)	
≥ 2 times/week	6 (7)	4 (5.8)	
Illicit substances use (n=150)	2 (2.4)	2 (2.9)	1.0
Hobby	45 (52.3)	33 (47.1)	0.62
Weekly physical activity	35 (40.7)	29 (41.4)	1.0
Monthly absenteeism			0.60
0	69 (80.2)	56 (80.2)	
1-3	11 (12.8)	11 (15.7)	
3-5	1 (1.2)	1 (1.4)	
5-10	3 (3.5)	0 (0)	
>10	2 (2.3)	2 (2.9)	
Intend to leave work (n=155)	20 (23.3)	16 (22.9)	0.66
Conflict in ICU at the last week			0.35

No	72 (83.7)	57 (81.4)	
Yes, with ICU staff	7 (8.1)	9 (12.9)	
Yes, with patients or visitors	5 (5.8)	1 (1.4)	
Yes, with staff and patients	2 (2.3)	3 (4.3)	
Monthly income in reais			0.20
1000-3000	22 (25.6)	22 (31.4)	
3000-5000	31 (36.1)	32 (45.7)	
5000-8000	23 (26.7)	11 (15.7)	
>8000	10 (11.6)	5 (7.2)	

Note. ICU = intensive care unit. Six staff members did not answer the question about the use of illicit drugs, four did not answer the question about gender, one about the offspring, religion, use of alcohol and intention to leave the work at the hospital. In January 2019, the current exchange rate was 1.0 US dollar to 3.7 Brazilian reais.

Table S2. Physical and psychological stress symptoms that family visitors and ICU staff have experienced in the last 24 hours.

Symptoms	Family visitors		ICU Staff	
	Multi-bed design (n = 95)	Single-bed design (n = 81)	Multi-bed design (n = 86)	Single-bed design (n = 70)
Cold hands or feet	15 (15.8)	9 (11.1)	7 (8.1)	10 (14.3)
Dry mouth	22 (23.2)	14 (17.3)	10 (11.6)	24 (34.3)
Knot in the stomach	25 (26.3)	21 (25.9)	15 (17.4)	19 (27.1)
Increased sweating	8 (8.4)	3 (3.7)	10 (11.6)	4 (5.7)
Muscle tension	31 (32.6)	33 (40.7)	51 (59.3)	50 (71.4)
Jaw clenching	19 (20.0)	13 (16.0)	20 (23.3)	17 (24.3)
Transient diarrhea	11 (11.6)	9 (11.1)	5 (5.8)	6 (8.6)
Insomnia	25 (26.3)	24 (29.6)	19 (22.1)	26 (37.1)
Tachycardia	10 (10.5)	7 (8.6)	12 (14.0)	18 (25.7)
Hyperventilation	2 (2.1)	4 (4.9)	2 (2.1)	2 (2.9)
Sudden and transient hypertension	4 (4.2)	6 (7.4)	2 (2.1)	3 (4.3)
Appetite change	31 (32.6)	27 (33.3)	19 (22.1)	29 (41.4)
Surge of motivation	1 (1.1)	6 (7.4)	15 (17.4)	13 (18.6)
Sudden enthusiasm	3 (3.2)	2 (2.5)	11 (12.8)	9 (12.9)
Sudden desire to start new projects	5 (5.3)	3 (3.7)	23 (26.7)	26 (37.1)

Note: Fifteen questions derived from Lipp's stress symptoms inventory for adults.

Table S3. Demographic, social and economic characteristics of family visitors.

Variable	Multibed design (n=95)	Single-bed design (n=81)	P
Kinship (%)			0.50
Spouse	50 (52.6)	39 (48.1)	
Parent	13 (13.7)	7 (8.6)	
Offspring	25 (26.3)	26 (32.1)	
Sibling	7 (7.4)	9 (11.1)	
Age (years)	54 (42-62)	49 (42-59)	0.23
Male (n=152)	25 (26.3)	27 (33.3)	0.32
Marital status (%)			0.34
Single	11 (11.6)	14 (17.7)	
Married	73 (76.8)	59 (74.7)	
Divorced	10 (10.5)	4 (5.1)	
Widowed	1 (1.1)	2 (2.5)	
Religion (%) (n=173)			0.56
Catholic	56 (60.2)	49 (61.3)	
Protestant	8 (8.6)	10 (12.5)	
Spiritualist	17 (18.3)	16 (20.0)	
Atheist	3 (3.2)	2 (2.5)	
Others	9 (9.7)	3 (3.8)	
Previous diagnosis of anxiety or depression (%)	18 (18.9)	18 (22.2)	0.70
Lived with the patient (%) (n=173)	62 (67.4)	56 (69.1)	0.87
Previous knowledge of ICU (%)	73 (76.8)	62 (76.5)	1.00
Employment (%)			0.12
Working at the moment	46 (50.1)	50 (64.9)	
Retired	34 (37.4)	18 (23.4)	
Unemployed	11 (12.1)	9 (11.7)	
Education (%)			0.13
Elementary	11 (11.6)	6 (7.6)	
High school	28 (29.5)	15 (19.0)	
College or higher	56 (58.9)	58 (73.4)	
Monthly income in reais (%) (n=167)			0.15
< 1000	4 (4.4)	0 (0)	
1000-3000	21 (23.0)	12 (15.8)	
3000-5000	22 (24.2)	21 (27.6)	
5000-8000	13 (14.3)	8 (10.5)	
> 8000	31 (34.1)	35 (46.1)	

Note. Twenty-four family visitors did not answer the questions about gender, nine about living with the patient, three about the monthly income and religion.

Table S4. Patients' characteristics at admission and during ICU stay.

Variable	Admitted in multibed rooms (n=95)	Admitted in single-bed rooms (n=81)	p
Age in years	65 (53-74)	62 (51-70)	0.22
Male (%)	57 (60%)	41 (51%)	0.13
SAPS3 at admission	61 (47-70)	63 (51-73)	0.18
ECOG			0.43
0 - 1	59 (62.1)	61 (75.3)	
2 - 4	36 (37.9)	20 (24.7)	
Type of admission			0.26
Medical (%)	51 (53.7%)	53 (65.4%)	
Elective postoperative (%)	39 (41%)	24 (29.6%)	
Emergency postoperative (%)	5 (5.3%)	4 (5%)	
Previous location			0.20
Surgery room (%)	61 (15.0)	12 (12.0)	
Ward (%)	248 (61.0)	49(49.0)	
Emergency room (%)	98 (24.0)	39 (39.0)	
Type of cancer			0.07
Solid tumor (%)	88 (92.6%)	66 (81.5%)	
Hematological malignancies (%)	5 (5.2%)	13 (16%)	
Without cancer	2 (2.2%)	1 (2.5%)	
Metastatic solid tumor	48 (54.5%)	32 (78.5%)	0.14
Reasons of ICU admissions			0.63
Postoperative monitoring	39 (41.1%)	25 (31%)	
Sepsis or septic shock (%)	21 (22.1)	15 (18.5)	
Respiratory distress (%)	14 (14.7%)	17 (21%)	
Neurologic abnormalities (%)	9 (9.5)	9 (11.1)	
Cardiac abnormalities (%)	2 (2.1)	1(1.2)	
Hemorrhagic shock (%)	2 (2.1%)	5 (6.2%)	
Others (%)	8 (8.4)	9 (11.1)	
During ICU stay			
Mechanical ventilation (%)	23 (24.2%)	19 (23.4%)	0.99
Hemodialysis (%)	7 (7.3%))	7 (8.6%)	0.68
ICU length of stay (days)	3 (2-6)	3 (1-5)	0.99
ICU outcome			0.86
Discharged to ward	82 (86.3)	68 (80.0)	
Death (%)	08 (8.4)	12 (14.8)	
Transferred for other hospital	5 (5.2%)	1 (1.2%)	

Notes. ICU = intensive care unit; SAPS 3 = simplified acute physiology score; ECOG = Eastern Cooperative Oncology Group performance status. Categorical and continuous data are presented as percentages and median (25%-75% interquartile range [IQR]). respectively.