

Project Deliverable

Summary and Findings of Study

Burnout, a prevalent issue in healthcare, is crucial to consider due to its impact on patient outcomes (Jun et al., 2021). Per the literature, fifty to fifty-five percent of nurses experience burnout depending on subspecialty and location (Jun et al., 2021). In terms of defining this phenomenon, burnout is characterized by three components: emotional exhaustion, depersonalization, and decreased personal accomplishment (Jun et al., 2021). This topic is significant given burnouts association with retention of staff and patient outcomes (Garcia et al., 2019). Furthermore, poor patient outcomes and weak retention of staff can negatively affect fiscal operations of a given healthcare institution (Garcia et al., 2019). There is a gap in the literature as it pertains to breadth of knowledge pertaining to nurse anesthetists in particular and burnout. This study evaluated nurse anesthetists and their perceptions of work environmental factors that affect burnout.

Evaluation of nurse anesthetists and their perceptions of burnout was performed by means of survey that was delivered through NYSANA (New York State Association of Nurse Anesthetists). 31 nurse anesthetists responded. The survey consisted of an open-ended question that allowed participants to elaborate on environmental factors that they perceive to affect burnout, several demographic questions, questions that evaluate burnout by means of the Oldenburg Burnout Inventory, and several questions that require the participant to rank certain factors that affect burnout per the literature in terms of how those factors affect them on an individual basis.

Emerging themes noted as it pertains to what participants consider to affect burnout levels are inclusive of long work hours, hours that conflict with family or children's activities, acuity of

patients, workload, pressure to perform or turn over operating rooms quickly between cases, working with staff who are disruptive in the sense that they request to leave work early, who lack of professionalism, and present with frequent work schedule changes. Additional themes noted in responses include work environments that don't adhere to anesthesia standards, noise levels, lack of breaks, workplace violence, lack of ancillary services, interpersonal dynamics between CRNAS and surgeons, limited ability to use skills as a CRNA such as performing nerve blocks, lack of leadership, feeling hopeless as it pertains to fixing the work environment, lateral violence, and normalization of bad behavior amongst surgeons and nurses. Summative information pertaining to burnout scores can be noted on the tables to follow.

Recommendations to Elicit Change in Practice

Based on responses of the survey and analysis of results, it is recommended for administration and policy makers of healthcare institutions to make a variety of changes in the work environment. Certain changes include maintaining low levels of noise, addressing unprofessional behavior in the workplace, addressing incivility amongst all staff members, to provide forums for employees for voice their concerns without retaliation, limit mandatory work hour requirements, allow nurse anesthetists to have an option to practice to their full scope of practice, ensure there is adequate staffing to produce quality of work expected of employees, and encourage realistic operating room turnovers given staffing and expectations. Future studies can be aimed at evaluating the efficacy of certain changes or interventions implemented to reduce burnout levels.

Table 1*Demographics of Study Participants*

		Frequency	Percent
Years of Experience as a Nurse	0-4 years	1	3.2
	5-9 years	3	9.7
	10-14 years	6	19.4
	15-19 years	4	12.6
	20-24 years	2	6.5
	Greater than 25	15	48.4
Years of Experience as a Nurse Anesthetist	0-4 years	6	19.4
	5-9 years	4	12.9
	10-14 years	5	16.1
	15-19 years	4	12.9
	20-24 years	4	12.9
	Greater than 25 years	8	25.8
Gender	Male	7	22.6
	Female	24	77.4
Setting of Employment	Hospital setting	24	77.4
	Non-hospital setting	7	22.6
Population participants work with	Adults only	10	32.3
	All ages	21	67.7

Table 2*Participants' Self Perceptions of Burnout*

	Amount	Percentage
Burned Out	7	12.9
Not Burned Out	24	87.1
Total	31	100

Table 3*Participants' Calculated Burn Out per the Oldenburg Inventory*

	Amount	Percentage
Burned Out	2	6.5
Not Burned Out	29	93.5
Total	31	100

Table 4*ANOVA Tests Generated For Significance*

Variables Compared		Sum of Squares	dF	Mean Square	F	Significance
Burnout total and experience in years as a nurse	Between Groups	49.122	5	9.824	.319	.897
	Within Groups	770.233	25	30.890		
Burnout total and years of experience as a nurse anesthetist	Between Groups	239.780	5	47.956	2.069	.103
	Within Groups	597.575	25	23.138		
Burnout total and long hours worked	Between Groups	33.098	2	16.549	.589	.561
	Within Groups	786.527	28	28.081		
Burnout total and lack of feedback	Between Groups	183.412	5	36.682	1.442	.244
	Within Groups	635.943	25	25.438		
Burnout total and poor relationships	Between Groups	86.623	4	21.656	.768	.556
	Within Groups	732.732	26	28.182		
Burnout total and workplace incivility	Between Groups	19.355	3	6.452	.218	.883

Within 800 27 29.630
Groups

Table 5

T Tests Generated for Significance

Variables Compared		Significance		
		Two-sided p	Mean Difference	Standard Error Difference
Burnout total and gender	Equal Variances Assumed	.454	-1.71429	2.26100
	Equal Variances not assumed	.486	-1.71429	2.36189
Burnout total and age ranges participants work with (Adults vs all ages)	Equal Variances Assumed	.673	.86667	2.03590
	Equal Variances Not Assumed	.703	.86667	2.22618
Burnout total and whether or not participant has experienced burnout	Equal Variances Assumed	.183	2.64091	1.93409
	Equal Variances Not Assumed	.198	2.64091	1.98264
Perceived burnout and calculated burnout	Equal Variances	.043	5.61111	2.65031

	Assumed			
	Within Groups	.007	5.61111	1.55028
Hospital workers and non-hospital worker scores of the Oldeberg Inventory Disengagement Subscale	Equal Variances Assumed	.259	1.07071	1.14812
	Equal Variances Not Assumed	.336	1.07071	1.08260
Hospital workers and non-hospital worker scores on the Oldeberg Inventory Exhaustion Subscale	Variances Assumed	.018	2.76768	1.10706
	Equal Variances not assumed	.028	2.76768	1.13288