Nursing Job Satisfaction in the Age of COVID-19

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Introduction

- The COVID-19 outbreak is directly affecting the field of nursing by the influx of patients and the additional physical and emotional labor to care for them.
- Additional stress has been found to exist when employees feeling unequipped to meet the needs when there are excessive demands at work (Lee et al., 2019).
- While it has been found that nurses need stress reduction programs and experience decreased job satisfaction during a natural disaster (Powell et al., 2019)., a gap of information lies in the potential correlation between COVID-19
- This needs to be researched to keep this profession proactive.
- Research Question: "Does COVID-19 affect nursing job satisfaction?"
- I predicted that the COVID unit nurses will have decreased workplace engagement and increased stress leading to decreased job satisfaction compared to nurses that work in other units. T
- The purpose of this study was to find whether COVID-19 patients cause increased stress on nurses working with COVID-19 patients, cause a decrease in the nurses workplace engagement, and whether those nurses have higher or lower job satisfaction than nurse who do not work with COVID-19 patients.

Methodology

- The study was conducted in February 2021 at Freeman Health System. Nurses who work on various floors took an anonymous survey that was typed out and handed to them. The surveys were filled out in the presence of the researcher.
- Survey was composed of secondary questions derived from Utrecht Workplace Engagement Scale, McCloskey/Mueller Satisfaction Scale, and the Expanded Nursing Stress Scale.
- Demographic questions such as age, gender, years of experience being a nurse, department worked on, number of shifts worked per week, and number of shifts worked in a COVID unit per week were asked.
- The scales were altered to all be 1-4 point Likert response scales ranging from 1 ("never") to 4 ("every day") for workplace engagement, 1 ("very dissatisfied") to 4 ("very satisfied") for nursing job satisfaction, and 1 ("never stressful") to 4 (extremely stressful") in the nursing stress scale.
- The data from 60 participants were collected in March 2021 and then analyzed with SPSS software using multiple regression analysis.

Results

- The results fail to reject the null hypotheses as there is no relationship between stress and working in COVID-19 unit, there is no relationship between the stress nurses experience and their job satisfaction, and there is no relationship between lower job satisfaction in nurses who work in COVID-19 units compared to nurses who work in non-COVID units since the results do not yield to be at the 95% level.
- There was a negative correlation found to job satisfaction and working on COVID units, but it was not statistically significant.
- While it was found that the participants that were more stressed did have lower job satisfaction, the results did not conclude that working on a COVID unit lead to more stress or direct low job satisfaction.
- The results did indicate less job satisfaction in specifically salary and sense of control/responsibility, which was significant at the 10% level.

Table 1:

OLS Regression: Job Satisfaction

Model		Unstandardized Coefficients B	Std. Error	t	Sig.	95.0% Confidence Interval for B Lower Bound	Upper Bound
1	Intercept	25.032	6.451	3.881	.000	12.088	37.976
	100% of Shifts in COVID Unit	-3.711	2.547	-1.457	.151	-8.823	1.400
	Total Stress Index	-.091	.031	-2.935	.005	-.153	-.029
	Total Workplace Engagement	10.043	1.811	5.544	.000	6.408	13.678
	Age	-.064	.080	-.802	.426	-.225	.097
	Years Worked as a Nurse	-.056	.104	-.542	.590	-.265	.152
	Total Shifts Worked Weekly	-1.138	.932	-1.221	.227	-3.008	.732
	Gender	-.793	2.014	-.394	.696	-4.835	3.249

***This is technically not the correct form of regression to use for this data. The correct form of regression was estimated and is included in Table 2 and the results are similar. This model was used due to the fact that there is not enough statistical power for the correct model to be used, so this OLS model is used in its place.
Model Fit:
Adjusted R-Square = 0.438
F-Stat = 7.345 ($p < 0.001$)
N = 59

The model in Table 1 demonstrates that working 100% of one's shifts on a COVID-19 unit is negatively correlated with job satisfaction, but not statistically at the 95% level

Table 2:

Logistic Regression: High Job Satisfaction

	B	S.E.	Wald	df	Sig.	Exp(B)
100% of Shifts in COVID Unit	-.596	1.379	.187	1	.666	.551
Total Stress Index	-.024	.015	2.630	1	.105	.976
Total Workplace Engagement	1.890	.957	3.899	1	.048	6.622
Age	-.041	.039	1.057	1	.304	.960
Years Worked as a Nurse	.009	.051	.034	1	.854	1.009
Total Shifts Worked Weekly	-.454	.529	.737	1	.390	.635
Gender	-.502	.996	.254	1	.614	.605
Constant	-.059	3.226	.000	1	.985	.942

Model Fit:
Pseudo R-Squared = 0.156
Chi-Squared = 10.164 ($p < 0.179$)
N = 59

The model in Table 2 represents the proper estimates of the dependent variables in the sample and also demonstrates that working on 100% of one's shifts on a COVID-19 unit is negatively correlated with job satisfaction, but not statistically at the 95% level.

Table 3:

OLS Regression: Job Satisfaction in Extrinsic Rewards

Model		Unstandardized Coefficients B	Std. Error	t	Sig.	95.0% Confidence Interval for B Lower Bound	Upper Bound
1	Intercept	2.374	1.156	2.054	.045	.054	4.694
	100% of Shifts in COVID Unit	-.807	.457	-1.769	.083	-1.723	.109
	Total Stress Index	-.004	.006	-.764	.448	-.015	.007
	Total Workplace Engagement	.266	.325	.820	.416	-.385	.918
	Age	-.011	.014	-.789	.433	-.040	.017
	Years Worked as a Nurse	.029	.019	1.571	.122	-.008	.067
	Total Shifts Worked Weekly	.138	.167	.828	.412	-.197	.473
	Gender	-.200	.361	-.555	.581	-.925	.524

Model Fit:
Adjusted R-Square = 0.039
F-Stat = 1.345 ($p < .249$)
N = 59

The model in Table 3 demonstrates that there was a negative correlation between working on a COVID unit and salary satisfaction. This was also statistically significant at the 10% level, signifying 90% confidence.

Table 4:

OLS Regression: Job Satisfaction in Control and Responsibility

Model		Unstandardized Coefficients B	Std. Error	t	Sig.	95.0% Confidence Interval for B Lower Bound	Upper Bound
1	Intercept	8.351	2.564	3.257	.002	3.206	13.495
	100% Shifts in COVID Unit	-1.755	1.012	-1.734	.089	-3.787	.276
	Total Stress Index	-.038	.012	-3.126	.003	-.063	-.014
	Total Workplace Engagement	2.967	.720	4.121	.000	1.522	4.411
	Age	-.026	.032	-.822	.415	-.090	.038
	Years Worked as a Nurse	-.036	.041	-.863	.392	-.118	.047
	Total Shifts Worked Weekly	-.396	.370	-1.069	.290	-1.139	.347
	Gender	-.348	.801	-.435	.666	-1.954	1.259

Model Fit:
Adjusted R-Square = 0.359
F-Stat = 5.712 ($p < .001$)
N = 59

The model in Table 4 demonstrates a definite negative correlation between working on a COVID unit and being satisfied in their sense of control and responsibility at work and was statistically significant at the 10% level, signifying 90% confidence.

Discussion

- The main obstacle of this study was only having 60 nursing participants. With more participants, I would have had more statistical power to then be able to use the correct model (Logistic Regression).
- Another obstacle was that while there were still increased patient admittances in COVID units at the time of the study, it does not measure how nurses felt during the early stages of the pandemic.
- This was also not a representative sample, it only included nursing staff from one healthcare facility.
- Possible applications of said results for future studies would be to survey more nurses from more locations and see if the results of this study increase.
- A longitudinal study could also be conducted if another outbreak occurs.

Conclusion

- This study could not significantly reject the null hypotheses, but it did yield results that were significant.
- The research findings of this study did advance the understanding of the area under investigation in regards to the nursing profession. The nursing job satisfaction had not been studied in regards to COVID-19 before this study.
- The findings create an argument that suggests that COVID-19 did disrupt the workplace in these nurses' jobs and did lead to less satisfaction in certain areas.
- This study paves the way to investigate this further, with larger and representative sample sizes.
- This also allows hospitals to investigate incentives to assist in the satisfaction of nurses' salaries when they have a high admittance of COVID-19 patients in their care.
- This also allows for investigation into how to make nurses feel greater satisfaction in their sense of control and responsibility.

References

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