# A Comparative Study on the Level of Moral Distress of Medical-Surgical Nurses in Hail Saudi Arabia during the Covid-19 Pandemic

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#### Abstract

This study is a part of a wider study. The purpose of this study is to look at the differences between the level of moral distress of medical-surgical nurses in Hail Saudi Arabia and their demographics. This study used a descriptive-comparative research design using the Moral Distress Questionnaire through an online survey. There are 274 respondents in this study. The statistical test used is frequency, percentage, mean, standard deviation, t-test, and one-way ANOVA. Results include regarding sex, t-test scored t (272) =-4.48; p=<0.001. Concerning civil status, t-test scored t (272) =0.35; p=0.72. Regarding age, one-way ANOVA score F(3,270) =1.78; p= 0.15. About the place of work, t-test scored t (272) =3.73; p=<0.001. Regarding years of experience one-way ANOVA scored F(2,269) =2.61; p= 0.04. Finally, on religious affiliation one-way ANOVA scored F(2,271) =2.32; p=0.10. The researchers conclude that the level of their moral distress varies with their sex, place of work, and years of experience. However, moral distress does not change with their civil status, age, and religious affiliation.

Keywords: Covid-19, Hospital, Moral distress, Nursing Practice.

## Introduction

Moral distress is the passionate expression that emerges from a circumstance when a nurse feels that the morally right move is not quite the same as what the person in question is entrusted with an action. When strategies or methods keep a nurse from doing what is correct, that presents an ethical issue. This problem, named "moral distress", can cause nurses to feel feeble, on edge, and surprisingly discouraged. Frequently, nurses go through a few hours per day with patients and families. They experience the delight, yet additionally, the misery and stress that affliction can cause them. The unique idea of the nurse-patient relationship adds to the commonness of the problem [1]. According to [2], one of the moral anguishes' nurses' experiences during the COVID-19 pandemic is moral distress.

Before the Covid-19 happened in 2019, [3] conducted a study on the prevalence of severe moral distress among healthcare providers in Saudi Arabia; the authors found that 75.70% have mild moral distress 24.30% experienced severe moral distress. In 2018, another study was conducted in Brazil with the same theme and found out that nurses have a moderate risk of developing moral distress [4]. Furthermore, [5] looks at the association between mental health nurses' moral distress and secondary traumatic stress syndrome; 47.60% of their 206 respondents reported experiencing a morally distressing situation. Moreover, [6] conducted the same research theme on medical intensive care unit nurses and found out that they have a moderate level of moral distress. Literature is scarce on medicalsurgical nurses regarding their moral distress during the Covid-19 pandemic, and this

research paper could add to the absence of literature. Hence the conduct of this study.

The objective of this study is to look at the differences between the level of moral distress of the respondents across their demographics. This study will answer the following questions:

- 1. What is the profile of the respondents regarding sex, civil status, age, place of work, years of experience, and religious affiliation?
- 2. What is the level of moral distress of the respondents?
- 3. Is there a significant difference between the moral distress of the respondents across their profiles?

The hypothesis that guided this study is there is no significant difference between the moral distress of the respondents across their profiles.

#### **Materials and Methods**

The study used a descriptive-comparative research design; this study describes the studied variables and compares moral distress with the different demographics of the respondents; Hence, the said research design was utilized [7].

The study will use purposive sampling. According to [8], 718 nurses work in government hospitals in Hail and approximately 230 nurses are working in private hospitals based on the interview of the researchers for a total of 948 nurses. Therefore, using the Lynch formula through Creative Research Systems [9], the researcher needs at least 274 respondents to represent the population adequately [10].

To be eligible for the study, a nurse should meet the following criteria: 1—a registered nurse in Saudi Arabia; 2. Working in hospital; 3. They are assigned in the medical-surgical areas. The exclusion will include the following: 1. Other nurses who are stationed in other clinical areas; 2. Supervisors and Chief Nurses.

A survey form using google form was the primary data gathering tool for this research; the data was extracted from parts 1 and 2 of the survey. Part I covered the demographic profile

of the respondents that includes sex, civil status, age, place of work, years of experience, and religious affiliation. Part 2 was adapted from the Moral Distress Questionnaire by [11]., but the measurement was modified to suit the study. The adapted questionnaire is composed of 12-items that were organized as 0=never, 1=rarely, 2=sometimes, 3=often, 4=always. Further, items 1-3 used reversed scoring.

A pilot study was also conducted to check the reliability of the questionnaire, and Cronbach's alpha scored 0.72, which means that Part 1 and 2 of the survey are within acceptable limits. The broader aspect of this research study was granted with ethical research approval by the Research Ethics Committee (REC) of the University of Hail, numbered as H-2021-88. The online survey form was communicated to authorities in hospitals in Hail, and in the online form, informed consent was placed before proceeding to the survey.

Data collection commenced on March 24, 2021, ended on April 29, 2021.

The data that was collected was organized using Microsoft Excel and was processed using SPSS version 25. Before the analysis, the collected data had undergone a normality test; both Kolmogorov- Smirnov and Shapiro-Wilk showed that the data was not normally distributed (p=<0.001). Hence, the data needs to be normalized using Derivative of Inverse Function (Idf. Normal). After normalizing the data, the following statistical test was used to answer specific questions:

To answer problem number 1, frequency and percentage were utilized.

To answer question number 2, mean and standard deviation were used. Below is the statistical range and interpretation that was used in this study:

Range - Interpretation
0.00-1.33 - Low Distress
1.34-2.66 - Moderate Distress
2.67-4.00 - High Distress

To answer question number 3, t-test and One-way ANOVA were utilized.

#### Results

Table 1 shows the distribution of the respondents. Regarding sex, a great majority (68.20%) are female, and some (31.80%) are male. On civil status, the majority (51.50%) are married, and almost half (48.50%) are single.

Regarding age, a great majority (63.90%) belongs to the 25-34 age group, few (18.60%), and (13.10%) belongs to the 35-44 years old, and 24 years and below respectively. Finally, very few (4.40) belong to the 45 years old and above age group. Concerning the place of work,

most (72.30%) of the respondents are working in government hospital while, the remaining 27.70% works at private hospitals.

On years of experience, almost half (46.00%) has six years and more working experience, few (19.30%), (15.70%) has 4-5 years, and 2-3 years working experience respectively. Lastly, very few (10.20%) (8.80%) have less than one year and more than one year but less than two years' work experience. Regarding religious afflictions, almost half (45.60%) are affiliated with Islam, many (41.50%) are Christians, and a few (12.80%) are Hindus.

Table 1. Demographic Profile of the Respondents N= 274

Variable		Frequency	Percentage	
Sex	Male	87	31.80	
	Female	187	68.20	
Civil Status	Single	133	48.50	
	Married	141	51.50	
Age	24 years and below	36	13.10	
	25-34 years old	175	63.90	
	35- 44 years old	51	18.60	
	45 years old and above	12	4.40	
Place of work	Government	198	72.30	
	Private	76	27.70	
Years of	Less than one year	28	10.20	
Experience	More than one year but less than 2 years	24	8.80	
	2-3 years	43	15.70	
	4-5 years	53	19.30	
	6 years and more	126	46.00	
Religious	Islamism	125	45.60	
Affiliation	Christianity	114	41.60	
	Hinduism	35	12.80	

Table 2 shows the level of moral distress of the respondents during the Covid-19 Pandemic. The mean (SD) scores reveal that the respondents had experienced low distress (M=0.92; SD= 0.68).

Table 2. The Level of Moral Distress of the Respondents during the Covid-19 Pandemic N=274

Mean	SD	Description
0.92	0.68	Low Moral Distress

Table 3 illustrates the difference between the level of moral distress of the respondents across their profiles.

Regarding sex, a t-test revealed that there is a significant difference between male (M=0.64; SD=0.67) and female (M=1.05; SD=0.65) with

a score of (t (272) =-4.48; p=<0.001). Therefore, the null hypothesis is rejected. It implies that female has a higher level of moral distress than male. Concerning civil status, a t-test revealed that there is no significant difference between single (M=0.94; SD=0.69) and married (M=0.91; SD=0.67) with a score of (t (272) =0.35; p=0.72). Hence, the null hypothesis is accepted. This means that both single and married respondents have the same level of moral distress.

Regarding age, a one-way ANOVA revealed that there is no significant difference between the groups with a score of F (3,270) = 1.78; p= 0.15. Therefore, the null hypothesis is accepted. This indicates that all age groups have the same level of moral distress. As to the place of work, a t-test revealed that there is a significant difference between government hospitals (M=1.01; SD=0.68) and private hospitals (M=0.68; SD=0.59) with a score of (t (272))

=3.73; p=<0.001). Therefore, the null hypothesis is rejected. This means that respondents who are working in private hospitals have a lesser level of moral distress.

About years of experience, a one-way ANOVA revealed that there is a significant difference between the groups with a score of F (2,269) = 2.61; p= 0.04. Therefore, the null hypothesis is rejected. To examine further the existing significant difference, a Post Hoc Tukey LSD was performed and revealed that respondents with less than one year of work experience have a higher level of moral distress than the other groups.

Regarding religious affiliation, a one-way ANOVA revealed that there is no significant difference between the groups with a score of F (2,271) = 2.32; p= 0.10. Therefore, the null hypothesis is accepted. This indicates that Muslims, Christians, and Hindus' level of moral distress does not vary.

**Table 3.** The Comparison between the Level of Moral Distress during COVID-19 Pandemic of the Respondents across Their Profile N=274

Variable		Mean	SD	Test Value	df	p-value	Decision
Sex	Male	0.64	0.67	t (-4.78)	272	< 0.001	Reject Ho
	Female	1.05	0.65				
Civil Status	Single	0.94	0.69	t (0.35)	272	0.72	Accept
	Married	0.91	0.67				Но
Age	24 years and below	0.68	0.66	F (1.78)	SSb= 3	0.15	Accept
	25-34 years old	0.95	0.68		SSw= 270		Но
	35- 44 years old	0.97	0.70		SSt= 273		
	45 years old and	0.99	0.46				
	above						
Place of	Government	1.01	0.68	t (3.73)	272	< 0.001	Reject Ho
work	Hospital						
	Private Hospital	0.68	0.60				
Years of	Less than one year	1.21	0.59	F (2.61)	SSb= 4	0.04	Reject Ho
Experience	More than one year	0.69	0.41		SSw= 269		
	but less than 2 years						
	2-3 years	0.80	0.76		SSt= 273		
	4-5 years	1.00	0.69				
	6 years and more	0.92	0.68				
Religious	Islamism	0.89	0.67	F (2.32)	SSb= 2	0.10	Accept
Affiliation	Christianity	1.01	0.62		SSw= 271		Но
	Hinduism	0.74	0.83		SSt= 273		

#### **Discussion**

Regarding the demographics of the respondents, the findings of this study are parallel to the results of [12], wherein his respondents in his reflection in the same locality are dominated by females, married, and are 2-35 years old nurses who have 6-10 years of work experience. Regarding religion, the finding is congruent to the report of Pew Research Center, wherein Saudi Arabia is Muslim-dominated [13].

On the level of moral distress, even in times of the Covid-19 pandemic, the respondents have low moral distress; this may be attributed to the excellent health care system of the country that is comparable with other developed countries [14]. The finding of this study is congruent to the study of [15], wherein they found out that the moral distress score of nurses in the Netherlands is relatively low during the Covid-19 pandemic. Regarding the finding that female respondents have a higher level of moral distress than male is congruent with the conclusions of [16]; they also claim that females tend to report higher levels of symptoms of stress. This finding could also be attributed to the fact that a great majority of the respondents are female nurses.

About the finding that respondents who work in government hospitals have a higher level of moral distress than those who are working in the private hospitals, this has also been reported by [17], that covers moral and ethical climate, wherein they found out that nurses who work in private hospitals have a more positive view in moral at ethical climate than those who are working in government hospitals. However, this may also be attributed that only some of the respondents in the current study are working in private hospitals.

Regarding the finding on the years of experience, the current study's finding contradicts the findings of [18], wherein they found out that there is no significant relationship between years of experience and

moral distress. Further, as nurses gain more experience in facing moral stressors, they are less affected because they use effective defensive mechanisms [19].

The finding of [20] supports the result of this study that moral distress does not vary with civil status and age. Regarding religious affiliation, this study does not find any variation between the level of moral distress; this could be attributed to the relatively low moral distress by the respondents. Regarding the implications of the findings to nursing, the respondents' moral distress is very minimal, but there are certain groups that reported higher levels of moral distress. Hence, those respondents have a higher chance to develop the negative effects of high moral distress and may eventually leave the profession.

## Conclusion

The following conclusions are drawn: the nurse respondents in Hail Saudi Arabia are female-dominated and single in their middle adulthood who work at government hospitals who are experts in their fields and are Muslims. The respondents have low moral distress. The level of their moral distress varies with their sex, place of work, and years of experience. However, moral distress does not change with their civil status, age, and religious affiliation.

In light of the findings from this study, the researchers recommend that nursing service departments could formulate and design amoral distress education seminars or workshops to learn more moral distress that is focused on groups that have higher levels of moral distress (female, nurses in government hospitals, those that have less than a year experience).

### **Conflict of Interest**

The authors declare no conflict of interest.

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