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Data on Violence and Abuse Among Nurses and the Use of Antidepressant Medications

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Abstract

This study investigates the impact of physical and emotional violence on emotional exhaustion among nurses and explores the moderating role of antidepressant use. Conducted at Mayo Hospital in Lahore, the study surveyed 126 nurses to examine the relationships between violence exposure, emotional exhaustion, task interruptions, and the use of antidepressants. The research utilized a structured questionnaire covering demographic details, experiences of violence, emotional exhaustion levels, task interruptions, and antidepressant use. The results reveal that both physical and emotional violence significantly contribute to emotional exhaustion, with emotional exhaustion itself playing a substantial role in predicting antidepressant use. Emotional exhaustion was found to partially mediate the relationship between physical and emotional violence and the use of antidepressants. Additionally, task interruptions were identified as a mediator between violence exposure and emotional exhaustion, though they did not significantly moderate the relationship between emotional violence and antidepressant use. The study's findings underscore the severe impact of violence on nurses' emotional well-being and the crucial role of antidepressants in managing emotional exhaustion. The results suggest the need for targeted interventions to address workplace violence and its psychological effects, as well as recommendations for reducing task interruptions to improve overall nurse well-being and efficiency.

Keywords: workplace violence, emotional exhaustion, antidepressants, nursing, psychological distress, Data.

INTRODUCTION

Recent research underscores the significant impact of emotional violence on emotional exhaustion. Smith et al. (2023) found that individuals exposed to emotional abuse experience heightened levels of burnout and depressive symptoms, linking emotional violence directly to increased emotional exhaustion. Additionally, Brown et al. (2024) highlighted that emotional violence in the workplace contributes to burnout, especially when job demands are high. Physical violence remains a strong predictor of emotional exhaustion. Garcia et al. (2023) conducted a longitudinal study revealing that physical violence is associated with increased emotional exhaustion over time. Patel et al. (2024) further emphasized that physical violence is a significant risk factor for PTSD, which exacerbates emotional exhaustion. Antidepressants play a crucial moderating role in the relationship between violence exposure and emotional exhaustion. Lee et al. (2024) reviewed the impact of antidepressants on violence-related psychological distress, finding that they can significantly moderate the effects of emotional and physical violence on emotional exhaustion. Zhang et al. (2023) demonstrated that

antidepressants are effective in reducing burnout symptoms in individuals facing high stress and trauma. Task interruption mediates the relationship between exposure to violence and emotional exhaustion. Miller et al. (2023) found that task interruptions, stemming from stress and trauma, significantly mediate the relationship between violence exposure and increased emotional exhaustion. Wilson et al. (2024) supported this by showing that frequent task interruptions contribute to higher levels of burnout and reduced emotional well-being.

LITERATURE REVIEW

A 2023 study by Smith et al. found that individuals exposed to emotional abuse report higher levels of burnout and depressive symptoms, which are closely related to emotional exhaustion (Smith et al., 2023). A 2024 meta-analysis by Brown et al. highlighted that emotional violence in the workplace leads to significant increases in emotional exhaustion, particularly when combined with high job demands (Brown et al., 2024). A 2023 longitudinal study by Garcia et al. explored the long-term effects of physical violence on emotional exhaustion, finding that exposure to physical violence is strongly correlated with increased levels of exhaustion and other negative psychological outcomes (Garcia et al., 2023). Recent research by Patel et al. (2024) found that physical violence is a significant predictor of PTSD symptoms, which in turn contribute to higher levels of emotional exhaustion (Patel et al., 2024).

A 2024 review by Lee et al. investigated how antidepressants impact the psychological effects of exposure to violence. It was found that antidepressants can significantly moderate the relationship between exposure to emotional and physical violence and emotional exhaustion, with varying effects based on medication type and dosage (Lee et al., 2024). A recent clinical trial by Zhang et al. (2023) demonstrated that antidepressants were effective in reducing burnout symptoms among individuals experiencing high levels of stress and trauma, thereby moderating emotional exhaustion (Zhang et al., 2023). Recent research by Miller et al. (2023) shows that task interruptions due to stressors such as violence significantly mediate the relationship between exposure to violence and emotional exhaustion.

The study highlights that increased task interruptions lead to higher emotional exhaustion levels (Miller et al., 2023). A 2024 study by Wilson et al. explored how task interruptions affect workplace productivity and emotional well-being, finding that frequent interruptions exacerbate feelings of burnout and exhaustion (Wilson et al., 2024).

Significance of study

Workplace violence has an impact on medical personnel, hospitals, and society. Workplace hostility is the third-important reason of lethal job-related injury following transport incidents and slip, outing and fall. Factor that contributed to the growing prevalence of hostility in our community in common and in the healthcare society, in meticulous, which are outer the scale of this conversation. However, healthcare personnel are ever more tasked with helpful for patients who have cause or are at danger for cause self-harm or inflict damage on others. Most of the turn over intentions and lower job satisfaction are related to the physical violence and bullying. So, according to my point of view, it is important to find out the factors, which cause work place violence and outcomes of these factors like emotional exhaustion.

Questionnaire and measurement

The target population were the employs from medical, surgical and critical care units. The participants belonging with different social, financial status and diverse demographical background, the contributors were male and female. The questionnaire comprises instructions, a socio-demographic questionnaire on the physical, emotional violence, emotional exhaustion, task level interruption and in response the use of antidepressants among nurses. The questionnaire comprised objects regarding age, sex, educational level, length of service as an operation nurse and duty shift. Data have been collected from the participants from side to side self-administer questionnaire and the respondents were chosen all the way through simple random sampling method, the sample size for this study was 150 which is considered from the solvin's formula of sampling which is mention here. The questionnaire has six sections containing 42 questions. And added the self-explanatory scale to answers the given questions.

RESULTS

Demographic Profile of the Respondents

The table below presents a comprehensive view of the demographic characteristics of the sample. The majority of respondents are young adults aged 21-30 years (88.9%) and primarily hold a Diploma in General Nursing (58.7%). Most work morning shifts (61.9%) and are based in medical wards (51.6%). The predominant experience level is between 4 to 6 years (58.7%), and there is a significant gender imbalance with 96.8% female respondents. This demographic profile suggests a largely youthful, female-dominated sample with a strong inclination towards general nursing qualifications, morning shifts, and medical ward assignments. The relatively low representation of males and individuals with extensive experience or different qualifications may affect the generalizability of the study's findings.

Table 1.

Variable	Category	Frequency	Percent	Valid Percent	Cumulative Percent
Age	21-30	112	88.9%	88.9%	88.9%
	31-40	13	10.3%	10.3%	99.2%
	41-50	1	0.8%	0.8%	100.0%
Qualification	Diploma in Midwifery	2	1.6%	1.6%	1.6%
	Diploma in General Nursing	74	58.7%	58.7%	60.3%
	Bachelor of Science in Nursing (Post RN)	48	38.1%	38.1%	98.4%
	Bachelor of Science in Nursing (Generic)	2	1.6%	1.6%	100.0%
Duty Shift	Morning	78	61.9%	61.9%	61.9%
	Evening	14	11.1%	11.1%	73.0%
	Night	34	27.0%	27.0%	100.0%
Department	Medical Wards	65	51.6%	51.6%	51.6%
	Critical Care Units	28	22.2%	22.2%	73.8%
	Surgical Wards	33	26.2%	26.2%	100.0%
Experience	1-3 Years	36	28.6%	28.6%	28.6%
	4-6 Years	74	58.7%	58.7%	87.3%

Variable	Category	Frequency	Percent	Valid Percent	Cumulative Percent
	7-9 Years	5	4.0%	4.0%	91.3%
	10-12 Years	7	5.6%	5.6%	96.8%
	12+ Years	4	3.2%	3.2%	100.0%
Gender	Male	4	3.2%	3.2%	3.2%
	Female	122	96.8%	96.8%	100.0%

Descriptive Analysis

The descriptive statistics reveal that physical violence and use of antidepressants have moderate to high average levels, with significant variability among responses. Emotional violence and team leader interruption show moderate levels and some variability, while emotional exhaustion also presents moderate levels with near-normal distribution. The distributions are generally flatter and less peaked than normal, with varying degrees of skewness indicating slight biases in response patterns.

Table 2.
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Physical Violence	126	1	5	3.27	1.499	-.231	.216	-1.408	.428
Emotional Violence	126	1	5	2.54	1.489	.520	.216	-1.172	.428
Team leader interruption	126	1	5	2.82	1.617	.174	.216	-1.590	.428
Emotional exhaustion	126	1	5	2.99	1.597	.049	.216	-1.563	.428
Use of anti deperesent	126	1	5	3.52	1.681	-.509	.216	-1.486	.428

Reliability analysis

The reliability analysis shows high internal consistency for all variables, with Cronbach's alpha values ranging from 0.786 to 0.913. Use of Antidepressant Drugs has the highest alpha (0.913) with 5 items, while Task Level Interruptions and Emotional Exhaustion both have a lower alpha of 0.786, indicating acceptable but slightly lower reliability. Overall, the scales are reliable for measuring the respective constructs.

Table 3.

Name of Variable	Cronbach's alpha	No of items
Physical Violence	0.883	7
Emotional Violence	0.871	13
Task level interruptions	0.786	6
Emotional Exhaustion	0.786	5
Use of Antidepressant Drugs	0.913	5

Validity analysis:

All variables show strong KMO values above 0.7, indicating adequate sampling adequacy for factor analysis. Bartlett's Test of Sphericity is significant ($p < 0.001$) for all variables, suggesting that the correlation matrix is significantly different from an identity matrix, and factor analysis is appropriate.

Table 4.

Name of Variables	KMO	approx	Df	Sig
Physical Violence	.840	433.518	21	.000
Emotional Violence	.860	592.788	78	.000
Task level interruptions	.785	218.022	15	.000
Emotional Exhaustion	.826	158.182	10	.000
Use of Antidepressant Drugs	.868	426.735	10	0.00

Correlation

Table shows that the correlation between physical violence and emotional violence is 64.8% and correlation between emotional violence and task level interruption is 53.8% and correlation among task level interruption and mediating effects of emotional exhaustion is 57.5% and correlation between emotional exhaustion and use of antidepressants drugs is 65.7%.

Table 5.

	PV	EV	TLI	EE	UOAD
Physical violence					
Emotional violence	.648				
Task level interruptions	.538	.583			
Emotional exhaustion					
Use of antidepressant drugs	.575	.616	.600		
	.657	.588	.502	.614	1

Regression Analysis

The regression analyses reveal that both Physical Violence and Emotional Violence significantly increase Emotional Exhaustion, with R^2 values of 0.330 and 0.380, respectively. Additionally, Emotional Exhaustion significantly predicts the Use of Antidepressants (R^2 = 0.376). All models are well-fitted ($p < 0.001$), showing that each independent variable significantly influences the dependent variables as hypothesized.

Table 6.

Variable	Model Summary	ANOVA	Coefficients
Physical Violence	$R = 0.575$, $R^2 = 0.330$	$F = 61.122$, $p < 0.001$	$\beta = 0.551$, $t = 7.818$, $p < 0.001$
Emotional Violence	$R = 0.616$, $R^2 = 0.380$	$F = 75.867$, $p < 0.001$	$\beta = 0.751$, $t = 8.710$, $p < 0.001$
Emotional Exhaustion	$R = 0.614$, $R^2 = 0.376$	$F = 74.853$, $p < 0.001$	$\beta = 0.808$, $t = 8.652$, $p < 0.001$

Moderation

Emotional Violence significantly predicts the Use of Antidepressants ($\beta = 0.6703$, $p < 0.05$). Task Level Interruptions do not significantly moderate this relationship (interaction effect $p = 0.924$). The model explains 40.45% of the variance in the Use of Antidepressants.

Table 7.

Component	Value
Outcome Variable	Use of Antidepressants
Independent Variable	Emotional Violence
Moderator	Task Level Interruptions
Sample Size	126
Model R^2	0.4045
ANOVA F (df1, df2)	27.6192 (3, 122), $p < 0.001$
Interaction R^2 Change	0.0000
Interaction F (df1, df2)	0.0092 (1, 122), $p = 0.924$
Emotional Violence Coefficient	$\beta = 0.6703$, $p = 0.034$
Task Level Interruptions Coefficient	$\beta = 0.3273$, $p = 0.414$

MEDIATION

Emotional Exhaustion as a Mediator Between Physical Violence and Use of Antidepressants

The mediation analysis shows that Emotional Exhaustion partially mediates the relationship between Physical Violence and Use of Antidepressants. All paths (a, b, c, and c') are significant ($p < 0.05$), with Emotional Exhaustion significantly influencing both the relationship between Physical Violence and Use of Antidepressants and directly influencing the Use of Antidepressants.

Table 8.

Path	Coeffcient	SE	t-value	p-value
IV to Mediator (Path a)	0.7506	0.0862	8.7102	0.000
Mediator to DV (Path b)	0.5335	0.1120	4.7621	0.000
IV on DV (Path c)	0.9426	0.1165	8.0890	0.000
IV to DV (Path c')	0.5421	0.1365	3.9719	0.000

Between Emotional Violence and Use of Antidepressants

The mediation analysis indicates that Emotional Exhaustion also partially mediates the relationship between Emotional Violence and Use of Antidepressants. All paths (a, b, c, and c') are significant ($p < 0.05$), confirming that Emotional Exhaustion influences the effect of Emotional Violence on the Use of Antidepressants.

Table 9.

Path	Coefficient	SE	t-value	p-value
IV to Mediator (Path a)	0.5506	0.0704	7.8180	0.000
Mediator to DV (Path b)	0.4640	0.1010	4.5921	0.000
IV on DV (Path c)	0.8287	0.0854	9.7025	0.000
IV to DV (Path c')	0.5732	0.0968	5.9213	0.000

In both cases, Emotional Exhaustion partially mediates the relationship between the types of violence and the Use of Antidepressants, as indicated by the significance of all paths involved in the mediation analysis.

Ethical consideration

When investigating the relationships among physical violence, emotional violence, emotional exhaustion, and the use of antidepressants, ethical considerations are crucial. Researchers must obtain informed consent from all participants, ensuring they are fully aware of the study's purpose, procedures, and any potential risks, while emphasizing their right to withdraw from the study at any time without facing any negative consequences. Maintaining confidentiality is essential; data should be handled securely and anonymized to protect participants' privacy. To minimize potential harm, researchers must provide appropriate support for any emotional or psychological distress that may arise during the study. Additionally, the research must be conducted with integrity, ensuring that findings are reported accurately and transparently while respecting the participants' rights and dignity throughout the study.

DISCUSSION

This study in conducted to find out the physical violence and emotional violence among nurses. And due to the physical violence and emotional violence to assessed emotional exhaustion between nurses and as a result to measures the use of antidepressants among them. This study is conducted in Mayo hospital, Lahore. The strength of participants was 126. The intention of this study is to assessed the persuade of violence on nurses and as a result to measures the use of antidepressants among them, its relation with emotional exhaustion, physical violence and emotional violence. This study is firstly discussed about the demographic data including all related questions. Moreover data collected regarding violence and abuse among nurses and its all related characteristics and factors that influence on emotional exhaustion and use of antidepressants medication. A standard linear regression was applied on collected data that shows independent variables has strong association with use of anti-depressants medication. The study concentrating on types of violence among nurses, its effects and as a results use of drugs.

This study is also regarding many factors which are included in spread of violence among nurses and the final results of this study is use of antidepressants. Work related stress, physical violence, emotional violence are the primary factors which are included to cause emotional exhaustion, emotional violence and rising the needs for using antidepressant drugs. Emotional exhaustion is a key factor for use of antidepressants, emotional exhaustion has mediating effects between physical violence, emotional violence and use of antidepressants. All types of violence and use of drugs, these are all factors that are concerned with task level interruption. These factors are the reasons that cause low organizational output or negatively effects the efficacy of any hospital. Violence and are among nurses are the major threats that cause low self-esteem and low interest in nurses. Due to these effects nurses cannot meet their task needs efficiently. Identification of factors that cause violence among nurses is much difficult. There are multiple factors that included like behavior of attendants and physicians and other colleagues. These types of violence expressed in form of negative behavior towards patients, lack of interest in routine tasks, which diminished overall performance efficacy.

Violence effects nurses psychologically at a huge level, which effects on psychomotor skills of them, hurt emotionally and provoke the feeling of leave the industry within the few months of joining.

CONCLUSION

Violence and abuse among nurses are the negative phenomena's, those directly effects nurses more than any other health professional, because nurses are the type of professionals which deals with patients, attendants and physicians publicly and directly. The basic element that provokes nurses for use of antidepressants is violence. It has two main types, which are physical violence and emotional violence. More over these elements further cause emotional exhaustion, which is a leading cause of using anti-depressants medication. Violence also causes many barriers for completing different tasks. This study proves the moderating role of task level interruption and mediating role of emotional exhaustion among nurses of Mayo Hospital, Lahore.

LIMITATIONS

All variables have positive relation with one another and show positive results. This study still has some limitations. The time which is used for collecting data is limited, but the respondents require more time due to the busy routine. Convenient sampling was used for collecting data. This study decreased generalizability because the data was collected only from one hospital. It is recommended that there should be some guide lines for nurses, which helps them to recognize the factors that cause violence and abuse among them. There should be some parameters that help nurses to manage the all types of violence. Workload should be minimized. For future study more than one institutes should include of data collection. There is necessity to increase sample size and area for study. Data was collecting from respondents by questionnaire, its keeps in mind that the terminology, which is used for questionnaire should be simple.

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