

## **Attitude, Experiences and Opinion of Critical Care Nurses regarding physical restraint working at Tertiary Care Hospitals of Peshawar**

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### **Abstract**

The management of delirium and agitation in critically ill patients presents a complex challenge, often leading to the consideration of physical restraints as a solution. However, the implications of restraint extend beyond mere physical restriction, encompassing psychological, legal, and ethical dimensions. The study described aims to assess critical care nurses' experiences, attitudes, and opinions regarding physical restraint practices at a tertiary care hospital in Peshawar. This study highlights a shifting focus towards alternative strategies, such as early sedation withdrawal and enhanced de-escalation skills training, amidst concerns regarding patient autonomy and well-being. Furthermore, it explores the impact of socioeconomic factors and race on restraint use, underscoring disparities in healthcare delivery. Additionally, subjective experiences of psychiatric patients subjected to restraints reveal nuanced perceptions, including feelings of powerlessness and acceptance. The subsequent methodology delineates a descriptive cross-sectional study conducted in critical care units across tertiary care hospitals in Peshawar, Pakistan, aiming to elucidate critical care nurses' attitudes towards physical restraint usage. Utilizing a convenient sampling technique, data was collected through a validated questionnaire, emphasizing ethical considerations and ensuring participant consent. The study's results shed light on the socio-demographic characteristics of respondents and their perspectives on physical restraint, indicating a spectrum of opinions regarding its efficacy and ethical implications. These findings contribute to the ongoing discourse on physical restraint practices in healthcare, informing future research endeavors and interventions aimed at optimizing patient care while preserving autonomy and dignity.

### **Introduction**

Critically ill patients face a significant risk of developing delirium and agitation, which can hinder their adherence to life-saving treatments. To address this issue, the utilization of physical restraints may seem like a straightforward solution. The historical context of using physical restraints is examined, and the global prevalence of their application in critical care units is scrutinized. The article also assesses various studies investigating the use of physical restraints, with a specific focus on the impact on patients' physical well-being.<sup>(1)</sup> The utilization of physical restraints extends

across various age groups and health and human service settings. Instances of fatal outcomes occurring shortly after their application elevate this matter to one of life-or-death significance, necessitating the attention of professionals. Definitions of restraint encompass a wide spectrum, ranging from the specific and objective definition provided by the Health Care Financing Administration (HCFA) to the broader interpretation offered by the Joint Commission on Accreditation of Health Care Organizations (JCAHO).<sup>(2)</sup> Physical restraints are manual methods employed in intensive care units (ICUs) to limit a patient's physical movement, primarily for their safety. While they have traditionally been considered a protective measure to prevent unplanned extubation, falls, and unforeseen incidents, multiple studies have highlighted their limitations and drawbacks. Across the globe, there has been a push for restraint minimization in ICUs, yet the most effective educational interventions in this regard continue to be a subject of exploration. <sup>(3)</sup>.

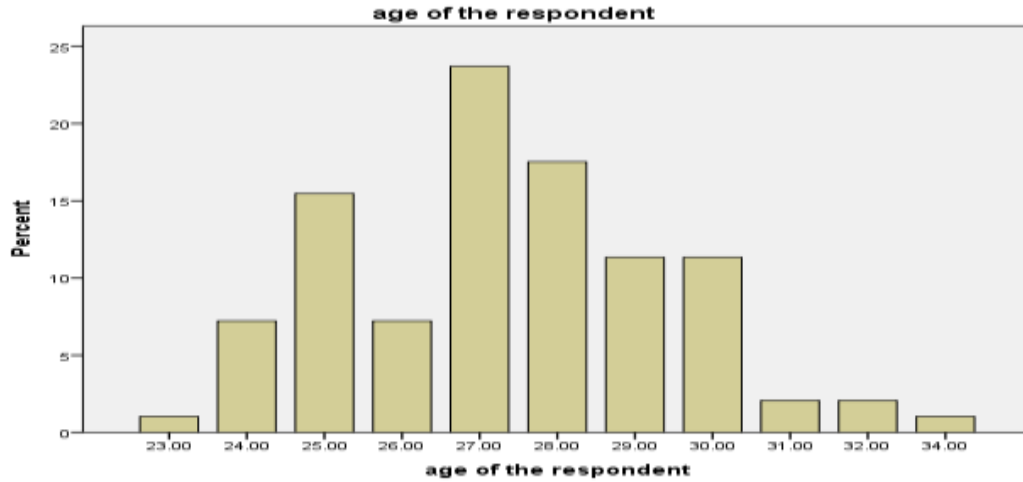
### Methodology

The study employed a descriptive cross-sectional design, focusing on the critical care areas of tertiary hospitals in Peshawar, namely Lady Reading Hospital, Khyber Teaching Hospital, and Hayatabad Medical Complex. With an overall population of 128, a sample size of 97 was determined using Rao soft software, distributed among the hospitals as 50 from LRH, 25 from KTH, and 22 from HMC Peshawar, ensuring a margin of error of 5% and a confidence interval of 95%. Convenient sampling was utilized for data collection, targeting Registered Nursing Officers of Adult ICUs, including medical, surgical, and cardiac units, while excluding those unwilling to participate and pediatric ICU RN Officers. Data collection involved the use of a validated questionnaire, featuring two sections: one covering demographic data and the other exploring critical care nurses' experiences, attitudes, and opinions on the use of physical restraint for adult ICU patients. Ethical considerations included approval from the college's Graduate Committee and the administration of the study settings, alongside obtaining informed consent from participants. Data analysis was conducted using SPSS version 22.0, incorporating descriptive statistics to compute averages, standard deviations for continuous variables, and frequencies and percentages for categorical variables.

### Results

In the realm of critical care nursing, where the welfare of critically ill patients is paramount, healthcare providers confront intricate ethical and practical dilemmas daily. Among these challenges, the use of physical restraints has remained a focal point for critical care nurses. While physical restraints may be deemed necessary at times to ensure patient and staff safety, they provoke discussions about patient autonomy, dignity, and the intricate balance between therapeutic interventions and ethical considerations. Regarding the sociodemographic profile, Figure 4.1 illustrates the age distribution of participants in our study. The majority fall within the 25 to 30 years age bracket, with 23.7% aged 27 and 17.5% aged 28. Furthermore, the data depicts participants spanning various ages, ranging from 23 to 34 years old.

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The 2nd part of socio-demographic fig 4.2 provides a clear breakdown of the gender distribution among the respondents in our study. It shows that the majority of respondents are female, constituting 59.8% of the valid responses, while 40.2% are male. This information is important for understanding the gender representation within your respondent sample. Figure 4.2

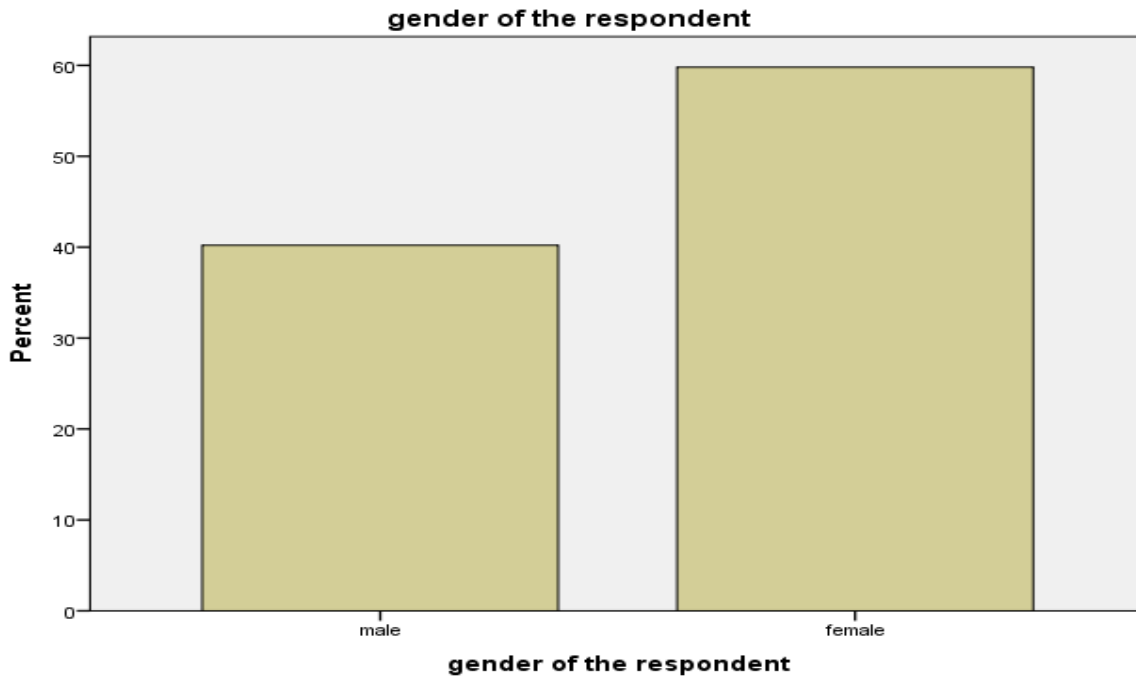


Fig 4.2

In the 3rd part of the socio-demographic figure 4.3 provides a clear breakdown of the distribution of respondent experience levels in our study. It shows the variety of experience levels among the respondents, ranging

from 1.00 to 8.00. The majority of respondents fall into the middle experience levels (3.00 to 5.00), with 23.7% reporting an experience level of 3.00. This information is important for understanding the range and distribution of experience levels within our respondent sample.

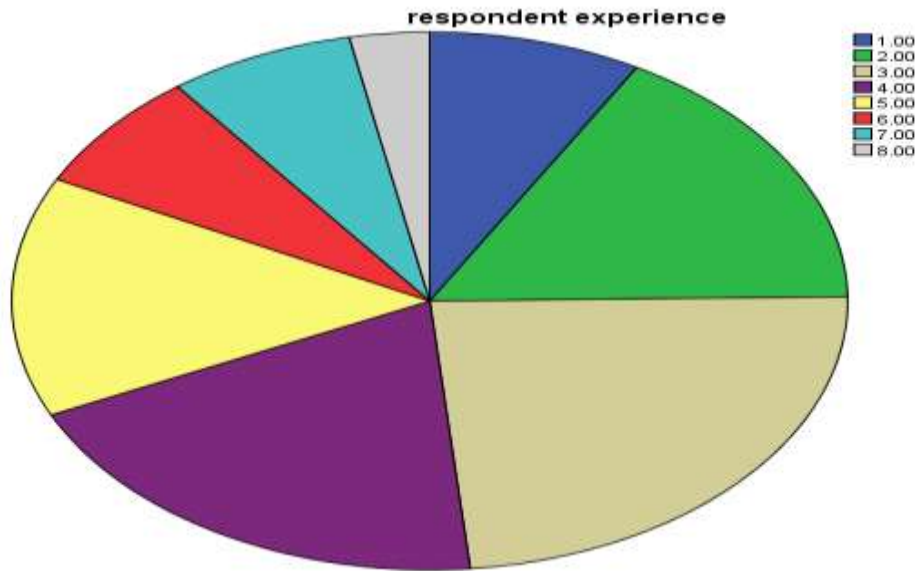


Fig 4.3

In the 4th part of socio-demographic fig 4.4, provides a clear breakdown of the distribution of participant education levels in our study. It shows that the majority of participants have a BSN or Post-RN education (82.5%), followed by those with a diploma (14.4%), and a smaller percentage have an MSN (3.1%). This information is important for understanding the educational background of the study participants and how it may relate to their perspectives and experiences.

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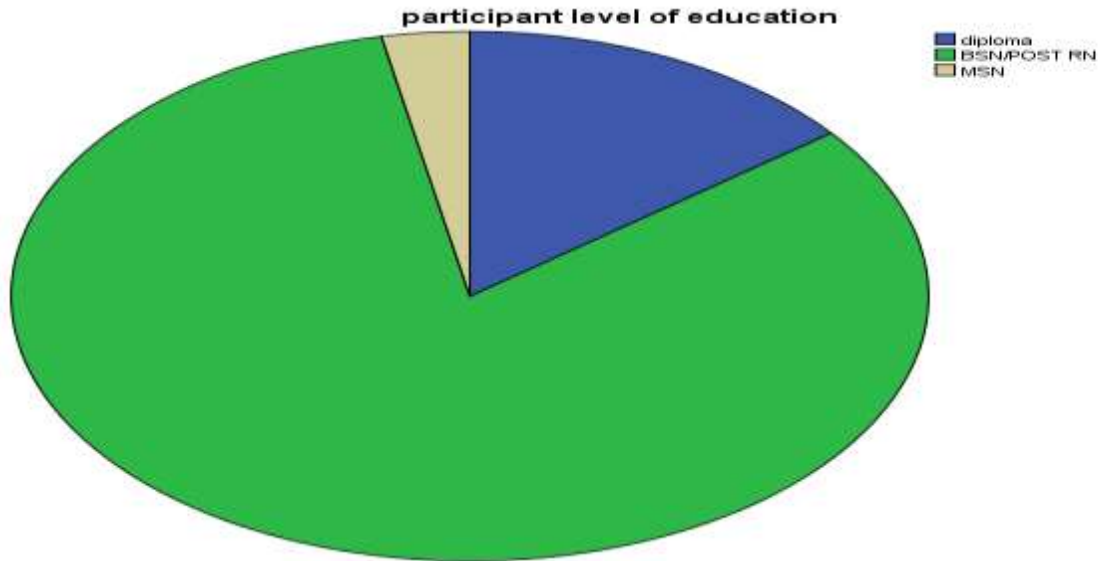


Figure 4.4

By using physical restraint, a patient's sedation can be reduced more safely." - On average, respondents had a mean rating of approximately 2.20, with a standard deviation of around 0.11. This suggests that respondents, on average, were somewhat positive about the idea that physical restraint can safely reduce a patient's sedation. "I do not believe in the use of physical restraints with patients in ICU." - On average, respondents had a mean rating of approximately 2.39, with a standard deviation of around 0.10. This indicates that respondents, on average, were somewhat opposed to the use of physical restraints in the ICU.

These statistics provide a summary of the responses to each statement, showing the central tendency (mean), the spread of opinions (standard deviation), and the range of responses. Researchers and healthcare professionals can use this information to understand the general sentiments and variations in opinions within their surveyed population. Shows in the table 4.5 the responses of the participants. Table 4.5

**Descriptive Statistics**

	N	Range	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Std. Error	Statistic
By using physical restraint, a patient’s sedation can be reduce more safely.	97	4.00	2.1959	.10932	1.07664
It is preferable to use physical restraint rather than increase the patient’s sedation	97	32.00	2.4845	.33647	3.31384
The use of physical restraint allows for other duties to be completed	97	4.00	2.1856	.10188	1.00343
Medical staff are more keen to suggest the use of restraint than the nursing staff	97	22.00	2.4227	.24207	2.38413
Physical restraint is prescribed and applied unnecessarily	97	20.00	2.1546	.21853	2.15223
Getting a colleague to hold the patient’s hand is preferable to using physical restraint when nursing care is required	97	31.00	2.5876	.38601	3.80173
Physical restraint as a management option has to be suggested as medical staff would not think of it	97	4.00	2.4021	.11320	1.11486
Physical restraint is used more when we are short staffed	97	4.00	2.1134	.08530	.84009
Physical restraint is sometime applied without prescription	97	3.00	2.1031	.08480	.83522
Patients sometimes end up re-sedated even when we use physical restraint	97	3.00	2.1134	.08010	.78894
Families do not appear to mind the use of physical restraint a they know it’s for the patient’s safety	97	4.00	2.2371	.07997	.78758
I do not believe in the use of physical restraints with patients in ICU	97	4.00	2.3918	.09892	.97422
Valid N (list wise)	97				

Table 4.5

**Discussion**

In this study, the sociodemographic analysis, delineated through Figures 4.1 to 4.4, offers a comprehensive overview of respondent characteristics in our study. Figure 4.1 portrays a diverse distribution of ages among participants, with the majority falling within the 25 to 30-year range. Figure 4.2 emphasizes a predominance of female respondents, comprising 59.8% of valid responses. Figure 4.3 underscores a varied spectrum of experience levels among participants, with the highest concentration falling within the mid-range of 3.00 to 5.00. Meanwhile, Figure 4.4 delves into the educational backgrounds of participants, revealing that 82.5% hold a BSN or Post-RN education, while 14.4%

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possess diplomas, and 3.1% have an MSN. These sociodemographic insights are pivotal for contextualizing respondent perspectives and experiences. Additionally, Table 4.5 presents responses to key statements, such as the notion that "By using physical restraint, a patient's sedation can be reduced more safely," which garnered an average rating of approximately 2.20 with a standard deviation of about 0.11, suggesting a somewhat favorable sentiment toward this approach. Conversely, the statement "I do not believe in the use of physical restraints with patients in ICU" received an average rating of around 2.39 with a standard deviation of about 0.10, indicating a somewhat opposing view regarding the use of physical restraints in the ICU. These statistics encapsulate central tendencies and variations in opinions among our surveyed population, offering valuable insights for both researchers and healthcare professionals.

Contrastingly, a study conducted in Hong Kong revealed persistent misconceptions among nursing staff, supporting the continued use of physical restraints as a favored method for client control in clinical settings. This study aimed to explore the factors predicting staff practices when applying restraints, uncovering insufficient knowledge and negative attitudes toward restraint use among staff. Similarly, a study in Kuala Lumpur identified moderate levels of knowledge and attitude among nurses, coupled with a strong intention to use physical restraints when necessary, indicating a need for improved understanding and consideration of alternatives. Meanwhile, a retrospective study in Egypt shed light on the common use of physical restraints in intensive care units, emphasizing the need for standardized guidelines and policies governing their usage. These studies collectively underscore the importance of addressing misconceptions, enhancing knowledge, and implementing appropriate policies regarding physical restraint practices in healthcare settings.

**Regarding limitations,** potential sampling bias and reliance on self-reported data pose challenges in generalizing findings. The study's focus on healthcare professionals' perspectives in ICU settings limits the exploration of broader factors influencing restraint use. Additionally, the temporal aspect provides a snapshot of opinions and experiences at a specific point in time, warranting further longitudinal research to track attitude evolution.

**In conclusion,** our study contributes valuable insights into the complex landscape of physical restraint in critical care, advocating for ongoing training, policy review, and further research to ensure the highest standards of patient care.

## **REFERENCES**

1. Al-Shahrani AM, Miskeen E, Shroff F, Elnour S, Algahtani R, Youssry I, et al. Premenstrual syndrome and its impact on the quality of life of female medical students at Bisha University, Saudi Arabia. *Journal of Multidisciplinary Healthcare*. 2021;2373-9.
2. Mohr WK, Petti TA, Mohr BD. Adverse effects associated with physical restraint. *The Canadian Journal of Psychiatry*. 2003;48(5):330-7.
3. Lei R, Jiang X, Liu Q, He H. Nurse education to reduce physical restraints use in ICU: a scoping review. *Nursing in Critical Care*. 2022;27(6):824-37.
4. Hine K. The use of physical restraint in critical care. *Nursing in critical care*. 2007;12(1):6-11.

5. Wong AH, Whitfill T, Ohuabunwa EC, Ray JM, Dziura JD, Bernstein SL, et al. Association of race/ethnicity and other demographic characteristics with use of physical restraints in the emergency department. *JAMA network open*. 2021;4(1):e2035241-e.
6. Ferrao SAdS, Bleijlevens MH, Nogueira PJ, Henriques MAP. A cross-sectional study on nurses' attitudes towards physical restraints use in nursing homes in Portugal. *Nursing open*. 2021;8(4):1571-7.
7. Lee T-K, Välimäki M, Lantta T. The knowledge, practice and attitudes of nurses regarding physical restraint: survey results from psychiatric inpatient settings. *International journal of environmental research and public health*. 2021;18(13):6747.
8. Cui N, Qiu R, Zhang Y, Jin J. “Patient Comfort Can Be Sacrificed for Patient Safety”—Perception and Practice Reported by Critical Care Nurses Toward Physical Restraints: A Qualitative Descriptive Study. *Frontiers in Medicine*. 2021;8:573601.
9. Via-Clavero G, Sanjuán-Naváis M, Romero-García M, de la Cueva-Ariza L, Martínez-Estalella G, Plata-Menchaca E, et al. Eliciting critical care nurses’ beliefs regarding physical restraint use. *Nursing ethics*. 2019;26(5):1458-72.
10. Schnitzer K, Merideth F, Macias-Konstantopoulos W, Hayden D, Shtasel D, Bird S. Disparities in care: the role of race on the utilization of physical restraints in the emergency setting. *Academic Emergency Medicine*. 2020;27(10):943-50.
11. Wong AH, Ray JM, Rosenberg A, Crispino L, Parker J, McVaney C, et al. Experiences of individuals who were physically restrained in the emergency department. *JAMA network open*. 2020;3(1):e1919381-e.
12. Fugger G, Gleiss A, Baldinger P, Strnad A, Kasper S, Frey R. Psychiatric patients' perception of physical restraint. *Acta Psychiatrica Scandinavica*. 2016;133(3):221-31.
13. Funayama M, Takata T. Psychiatric inpatients subjected to physical restraint have a higher risk of deep vein thrombosis and aspiration pneumonia. *General Hospital Psychiatry*. 2020;62:1-5.
14. Freeman S, Hallett C, McHugh G. Physical restraint: experiences, attitudes and opinions of adult intensive care unit nurses. *Nursing in Critical Care*. 2016;21(2):78-87.
15. Suen LK, Lai C, Wong T, Chow S, Kong S, Ho J, et al. Use of physical restraints in rehabilitation settings: staff knowledge, attitudes and predictors. *Journal of advanced nursing*. 2006;55(1):20-8.



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16. Eskandari F, Abdullah KL, Zainal NZ, Wong LP. Use of physical restraint: Nurses' knowledge, attitude, intention and practice and influencing factors. *Journal of clinical nursing*. 2017;26(23-24):4479-88.
17. Kong EH, Choi H, Evans LK. Staff perceptions of barriers to physical restraint-reduction in long-term care: A meta-synthesis. *Journal of Clinical Nursing*. 2017;26(1-2):49-60.
18. Kandeel NA, Attia AK. Physical restraints practice in adult intensive care units in E gypt. *Nursing & health sciences*. 2013;15(1):79-85.
19. Chien W-T, Chan CW, Lam L-W, Kam C-W. Psychiatric inpatients' perceptions of positive and negative aspects of physical restraint. *Patient Education and Counseling*. 2005;59(1):80-6.