

## CONFERENCE ABSTRACT

### *Exploring the Knowledge, Attitudes, and Practices of Critical Care Nurses in Iran towards Pressure Ulcer Prevention*

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**Background:** Pressure ulcers (PUs) pose a significant health problem that can be prevented in various healthcare settings, particularly in intensive care units (ICUs). PU increases the risk of morbidity and mortality and is associated with poor prognosis in ICU patients. ICU prevalence rates for PU have been estimated to range from 21% to 39.3% worldwide (Coyer et al., 2022). According to a recent meta-analysis, the prevalence of PU in Iran's ICUs was 19.59% (Sohrabi Akhkand et al., 2020). Despite these alarming facts, PU is often preventable with adherence of healthcare providers to evidence-based PU prevention guidelines. One of the most important factors influencing PU prevention is adequate knowledge of ICU nurses to evaluate and manage risk factors and implement preventative approaches (Wu et al., 2022; Ghorbani Vajargah et al., 2023).

**Aims:** This study aimed to examine the knowledge, attitudes, and practices (KAP) of ICU nurses in Iran towards PU prevention.

**Methods:** In a multicenter cross-sectional study, after approval from institutional ethics committee (IR.MAZUMS.REC.1399.591) and written informed consent, 183 ICU nurses working in four hospitals affiliated with Mazandaran University of Medical Sciences in Sari, Iran, were evaluated. The study was carried out between July and October 2020. Data collection involved a four-part questionnaire consisting of demographic characteristics, the Pieker Pressure Ulcer Knowledge Test (PPUKT), the Attitude toward Pressure Ulcer Prevention (APUP) tool, and an assessment of nurses' practices related to PU prevention.

**Results:** The mean age of participants was 32.82 (SD = 5.93) years and the mean years of working experience was 8.26 (SD = 6.02) years. Of the nurses, 56.2% were female, 63.4% were married, 87.4% were residents in an urban area, and 76.5% had a BSN degree. The mean scores for ICU nurses' KAP regarding PU prevention were 70.57 (SD = 13.51), 52.82 (SD = 6.16), and 22.44 (SD = 5.20), respectively. As presented in Table 1, a positive correlation was observed between nurses' attitudes and their practices ( $r = 0.232$ ,  $P = 0.002$ ), while a negative correlation was found between their knowledge and attitudes ( $r = -0.156$ ,  $P = 0.035$ ) towards PU prevention. Also, the results showed a positive correlation between the years of ICU work experience among nurses and their knowledge of PU prevention ( $r$

= 0.159, P = 0.032). The same result was also observed for the overall years of working experience, although this correlation was marginally significant (r = 0.145, P = 0.051). Based on a one-way ANOVA, there was a direct relationship between knowledge and income and knowledge were higher in high-income nurses (P = 0.017).

**Table 1.**

Means, Standard Deviations, and correlations among study variables.

	Descriptive statistics			Correlational analysis		
	Possible range	Observed range	Mean (SD)	Knowledge	Attitude	Practice
<b>Knowledge</b>	0-100	39.02-100	70.57 (13.51)	1		
<b>Attitude</b>	0-100	32.69-67.31	52.82 (6.16)	-0.156	1	
<b>Practice</b>	0-44	10-37	22.44 (5.20)	-0.119	0.232	1

**Conclusion:** The findings of this study indicate that the KAP levels of Iranian ICU nurses regarding PU prevention were desirable, positive, and relatively desirable. Therefore, it is recommended that nurse managers and policy makers address the major barriers and related factors that may affect ICU nurses' practices in preventing PUs.

## References

- Coyer F, Labeau S, Blot S. Preventing pressure injuries among patients in the intensive care unit: insights gained. *Intensive Care Medicine*. 2022; 48(12):1787-1789. <https://doi.org/10.1007/s00134-022-06838-3>.
- Ghorbani Vajargah P, Mollaei A, Falakdami A, Takasi P, Moosazadeh Z, Esmaili S, Emami Zeydi A, Karkhah S. A systematic review of nurses' practice and related factors toward pressure ulcer prevention. *International Wound Journal*. 2023; 20(6):2386-2401. <https://doi.org/10.1111/iwj.14062>.
- Sohrabi Akhkand S, Seidi J, Ebadi A, Ghanei Gheshlagh R. Prevalence of pressure ulcer in Iran's intensive care units: A systematic review and a meta-analysis. *Nursing Practice Today*. 2020; 7(1):12-20.
- Wu J, Wang B, Zhu L, Jia X. Nurses' knowledge on pressure ulcer prevention: An updated systematic review and meta-analysis based on the Pressure Ulcer Knowledge Assessment Tool. *Frontiers in Public Health*. 2022; 10:964680. <https://doi.org/10.3389/fpubh.2022.964680>.