

**Prevalence of Bed Sores among Patients: A Cross-Sectional Study****Omprakash Kumar<sup>1</sup>, Ram Uday Kumar<sup>2</sup>, Sushant Kumar Sharma<sup>3</sup>**<sup>1</sup>Senior Resident, Department of General Surgery, Sri Krishna Medical College and Hospital, Muzaffarpur, Bihar.<sup>2</sup>Senior Resident, Department of General Surgery, Sri Krishna Medical College and Hospital, Muzaffarpur, Bihar.<sup>3</sup>Professor, Department of General Surgery, Sri Krishna Medical College and Hospital, Muzaffarpur, Bihar.

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Conflict of interest: Nil

**Abstract****Background:** The prevalence of pressure ulcers during hospital stays is rising despite advancements in medical technology and preventative initiatives. The purpose of this study was to assess the frequency of bedsores among hospitalized patients.**Methods:** All patients (n=244) with pressure ulcers who were admitted to SKMCH, Muzaffarpur, Bihar, within more than 48 hours were included in this analytical cross-sectional study. Hospital records were used to collect patient data, including age, gender, history of hypertension, history of diabetes, length of hospital stay, and body mass index. The Braden Scale was used to evaluate ulcers. Stata software version 14.1 was used to analyze the data, describing the quantitative variables with mean and standard deviation and the qualitative variables with numbers and percentages.**Results:** All patients (n=244) with pressure ulcers who were admitted to SKMCH, Muzaffarpur, Bihar, within more than 48 hours were included in this analytical cross-sectional study. Hospital records were used to collect patient data, including age, gender, history of hypertension, history of diabetes, length of hospital stay, and body mass index. The Braden Scale was used to evaluate ulcers. Stata software version 14.1 was used to analyze the data, describing the quantitative variables with mean and standard deviation and the qualitative variables with numbers and percentages. A significant relationship was present between the length of hospitalization and the degree of bedsores. In the ulcers of the scapula, the Braden score was significantly higher.**Conclusion:** Patients over 60 had a higher incidence of pressure ulcers. The degree of pressure ulcers was five times higher in the diabetic participants, and the length of hospital stay also enhanced the ulcer's severity. Compared to patients with low BMI, those with high BMI had fewer but more severe pressure ulcers.**Keywords:** Pressure, Ulcer, Prevalence, Patients.**DOI:** 10.25258/ijcpr.18.2.283

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**Introduction**

When the soft tissue between the bony protrusion and the outside surface is compressed for an extended period of time, it can cause pressure ulcers, which are localized skin injuries that result in ischemia, cell death, and tissue necrosis due to capillary compression and blood flow restriction.[1] The patient may experience excruciating pain and be less able to engage in social and physical activities.[2]

These ulcers are among the most important causes of morbidity and mortality which need high quality clinical care in healthcare centers.[3] They lead to prolonged hospitalization, reduced quality of life, and increased use of hospital resources. [1,4,5] Pressure ulcers are generally divided into four

stages in terms of severity[6], namely stage I: ulcers with inflexible skin erythema; stage II: loss of the outer layer of the skin; stage III and IV: large wounds, including damaged fat, muscle, and bone.[7] Pressure ulcers are developed by numerous factors, which according to the results of studies, they are caused by personal and environmental factors.[8]

Local risk factors include immobility during sleep for more than 2h, pressure on bony protrusion at an angle of more than 45 degrees, blockage of capillaries and lymphatic drainage, and increase in body temperature and humidity (e.g., due to sweating or urinary incontinence).The systemic risk factors leading to the development of this disease

are aging; decreased mobility due to fractures, paraplegia, coma, and extensive surgery; malnutrition (reduced protein intake and lack of oral nutrition); vascular disease; and low blood pressure.[9] Despite advances in medical technology and the use of preventive programs, the incidence of pressure ulcers during hospitalization is increasing [10]. Epidemiological information on the occurrence of pressure ulcers is limited in the United States; however, it is estimated at about 1-3 million cases per year.[11]. The prevalence of bedsores in European countries is reported to be 18%.[12] Bedsores (pressure ulcers) are a significant health issue in India, with reported prevalence rates in hospitalized patients ranging from 1.8% to over 47%, although a commonly cited figure for general hospital settings is 4.94%.

This study aimed at investigating the prevalence of pressure ulcers in these groups due to the importance of this health issue and the high costs of related treatment.

### Materials and Methods

All patients (n=244) who were admitted to Sri Krishna Medical College and Hospital in Muzaffarpur, Bihar between May 2025 and November 2025 for longer than 48 hours were checked for pressure ulcers in this analytical cross-sectional study. Using a specially created checklist, the patients' medical records were examined to determine whether or not they developed pressure ulcers. Ulcer pressure was a prerequisite for inclusion. The ulcer was divided into three stages, namely stage I: the skin was not broken; however, a reddish in the color of the skin occurred; stage II: a break in the skin and pain occurred; and stage III: the ulcer was deeper than the second stage. Body mass index (BMI) was categorized into four groups of less than 18.5 (underweight), between 18.5 and

25 (normal weight), between 25 and 30 (overweight), and more than 30 (obesity). Moreover, the variables, including age, gender, history of blood pressure, history of diabetes, length of hospital stay, and BMI, were gathered. The results of wound evaluation were determined by number using the Braden Scale with six categories of criteria, namely sensory perception, moisture, activity, mobility, nutrition, and friction or shear). Patients with a previous history of bedsores were excluded from the study. Finally, the collected data were encoded and entered into STATA software (version 14) and were analyzed using mean and standard deviation to describe the quantitative variables and number and percentage to describe qualitative variables.

Ordered logistic regression models were also applied to analyze the relationship between different variables. The reason for the selection of ordered logistic regression in this study was related to the ordered form of the dependent variable (i.e., degree of pressure ulcers).

### Results

The mean age of patients was calculated at  $61.7 \pm 18.6$  years, among whom 53.7% of the cases were male. The majority of the patients had normal weight and were over 60 years (36.1% and 55.7%, respectively); moreover, 33.2% of the patients were smokers.

Hypertension was reported in 50% and diabetes in 76% of the patients. It was found that 43.4% of the patients had less than 10 days of hospitalization. Most of the cases developed grade 2 ulcers (58.6%).

The examination of the frequency of pressure ulcers based on the Braden score showed that about 50% of the subjects were high-risk (Table 1).

**Table 1: Number of Cases distribution and percentage of pressure ulcers based on demographic variables and Braden Scale**

Variable	Category	No. of cases	Percentage
Age	Less than 60 years old	108	44.3%
	More than 60 years old	136	55.7%
History of smoking	Yes	81	33.2%
	No	163	66.8%
Body mass Index	Underweight (less than 18.5)	20	8.2%
	Normal weight (18.25-5)	88	36.1%
	Overweight (25-30)	65	26.6%
	Obese (over 30)	40	16.4%
	Not clear	31	12.7%
History of hypertension	Yes	112	45.5%
	No	132	54.1%
History of diabetes	Yes	185	75.8%
	No	59	24.2%
Length of hospital stay	Less than 10 days	106	43.4%
	10-20 days	70	28.7%

	More than 20 days	68	27.9%
Braden scale	Mild	67	27.5%
	High-risk	112	45.9%
	Very high	65	26.6%
Ulcer stages	Stage 1	28	11.5%
	Stage 2	143	58.6%
	Stage 3	73	29.9%

The number of cases of pressure ulcers was assessed based on both the Wound Healing Index and the length of hospitalization. The results suggested that an increase in the length of hospital stay (more than 10 days) led to a higher number of high-risk victims (Table 2).

**Table 2: Comparison of pressure ulcer cases calculated using the Braden Scale based on length of hospital stay**

Braden Score	Length of hospital stay	No. of cases
Mild	Less than 10 days	47
	10-20 days	48
	More than 20 days	11
High Risk	Less than 10 days	12
	10-20 days	32
	More than 20 days	26
Very High	Less than 10 days	8
	10-20 days	32
	More than 20 days	28

Table 3 presents the findings of the study on the relationship between different variables and the degree of pressure ulcers using ordered logistic regression. It was revealed that the patient's age and gender had no significant relationship with the degree of pressure ulcer; nonetheless, there was a positive and significant relationship between the history of diabetes and pressure ulcers. The odds ratio (OR) for this variable was estimated at 5.822 (P-value=0.000), which indicated that the degree of pressure ulcer was about 5.8 times higher in patients with diabetes. No significant relationship was found between smoking history and pressure ulcers.

However, the number of hospitalization days had a significant relationship with the degree of bed sore, meaning that in patients who were hospitalized for 10-20 days, the likelihood of pressure ulcers was 2.37 times higher (P-value=0.031). For those who

were hospitalized for more than 20 days, the degree of the ulcers was reported to be 4.18 (P-value=0.001). It was revealed that the history of hypertension was inversely and significantly correlated with pressure ulcers; in other words, the cases with a history of hypertension had lower degrees of ulcers. Furthermore, the degree of pressure ulcers was lower in patients with high BMI than in those with low BMI; nevertheless, the finding was significant (OR=0.272, P-value=0.044). Considering the ulcer area, the degree of bed sore was significantly lower in bed sores found in the head (OR=0.074759, P-value=0.0039). The cut-off point 1 and cut-off point 2 contained the estimated cut-off point on the latent variable used to differentiate stage I of ulcer pressure from stage

II and stage II from stage III, respectively when the values of the predictor variables were evaluated at zero.

**Table 3: Relationship between different variables and the degree of pressure ulcers**

Scar degree	Odds ratio	Std. Err.	P-value	Lower limit	Upper limit
Age	1.009	0.009	0.329	0.990	1.027
Gender (male)	1.674	0.702	0.219	0.735	3.810
History of diabetes-Yes	5.822	2.435	<0.001	2.565	13.21
Being smoker	1.037	0.449	0.932	0.444	2.425
<b>Hospitalization</b>					
Between 10-20 days	2.371	0.951	0.031	1.080	5.204
More than 20 days	4.18	1.760	0.001	1.832	9.544
History of hypertension	0.431	0.155	0.020	0.212	0.876
<b>Body mass Index</b>					
Normal	0.320	0.199	0.068	0.094	1.0891
Overweight	0.272	0.176	0.044	0.076	0.968
Obesity	1.632	1.157	0.490	0.406	6.552

Ulcer area					
Back	448,495.2	4.03E+08	0.988	0	
Scapula	2.439	1.543	0.159	0.705	8.428
Spine	0.598	0.619	0.620	0.078	4.549
Head	0.074	0.094	0.039	0.006	0.881
Elbow	0.521	0.713	0.634	0.035	7.627
Cut-off point 1	-2.363	0.969		-4.262	-0.464
Cut-off point 2	1.679	0.960		-0.203	3.561

Table 4 tabulates the findings of the study on the relationship between different variables and the Braden scale using an ordered logistic estimator. Accordingly, the patient's age and gender had no significant relationship with Braden scales. Nevertheless, a history of diabetes had a positive and significant relationship with Braden scales. The OR coefficient for this variable was obtained at 6.953 (P-value<0.001), suggesting that Braden was about 56 times higher in cases with diabetes. No significant relationship was found between smoking history and pressure ulcers.

However, the number of hospitalization days had a significant relationship with the degree of bedsore. In patients who were hospitalized for 10-20 days,

the probability of pressure ulcer was 3.47 times higher (P-value=0.001), and for those with more than 20 days of hospitalization, the degree of ulcers was 3.75(P-value=0.001).The history of hypertension was inversely and significantly related to the Braden score, meaning that cases with a history of hypertension had a lower score (OR=0.3919737, P-value=0.004).It was also reported that the subjects with high BMI had a lower degree of pressure ulcers, compared to those with low BMI, which was significant (OR=0.197, P-value=0.008).

Additionally, the Braden score was significantly higher in the ulcers of the scapula (OR=0.074759, P-value=0.0039).

**Table 4: Relationship between different variables and the Braden scale**

Braden	Odds ratio	Std. Err.	P-value	Lower limit	Upper limit
Age	1.010	0.008	0.227	0.993	1.027
Gender	1.465	0.582	0.336	0.672	3.192
History of diabetes	6.953	2.752	<0.001	3.201	15.105
Smoking	2.223	0.920	0.054	0.987	5.005
<b>Hospitalization</b>					
Between10-20 days	3.479	1.292	0.001	1.680	7.204
More than 20 days	3.751	1.453	0.001	1.755	8.014
History of hypertension	0.392	0.128	0.004	0.206	0.744
<b>Body mass Index</b>					
Normal	0.200	0.119	0.007	0.062	0.642
Overweight	0.197	0.120	0.008	0.059	0.652
Obesity	1.322	0.891	0.678	0.353	4.950
<b>Ulcer area</b>					
Back	778145.6	5.96E+08	0.986	0	
Scapula	3.599	2.086	0.027	1.154	11.211
Spine	0.360	0.329	0.264	0.060	2.157
Head	0.725	0.894	0.794	0.064	8.143
Elbow	1.599	2.043	0.714	0.130	19.585
Cut-off point 1	-0.892	0.875		-2.607	0.824
Cut-off point 2	2.198	0.887		0.459	3.937

## Discussion

The effect of pressure ulcers on the quality of life is significant since it influences the physical, psychological, emotional, social, and financial aspects of an individual's life, which according to the characteristics of individuals, can be significant and long-lasting.[13]. In our study, most of the pressure ulcer cases were observed in patients over 60 years. Karimian et al. reported that the highest

and lowest prevalence of pressure ulcers in Iran belonged to the age groups of 60-70 and 40-50 years with the prevalence rates of 22% and 14%, respectively, suggesting that the incidence of pressure ulcer increased by aging.[14]

The results of a study performed by Tubaishat et al. in Jordan indicated a 12% prevalence rate of bedsores among patients over 80 years.[15]In the current study, most patients with bedsores had a

normal weight; however, those with a high BMI had a lower and significant degree of pressure ulcer, compared to cases with low BMI. In another study conducted by Samantha et al., it was found that pressure ulcers were significantly higher in patients with higher BMI than in other groups. This increased risk was related to both ends of the BMI spectrum.[16] Drake et al compared the morbidity rate between the two groups of cases with a BMI greater than 40 and less than 40. In the mentioned study, it was found that obesity increased the risk of pressure ulcers even after controlling Barden risk factors.[17]

Swanson et al. reported that there was a significant difference between the groups with pressure ulcers having BMI more and less than 30.[18] These results were in line with those of a study carried out by Pokorny et al, showing that obese individuals had a higher chance of developing pressure ulcers. Nonetheless, the difference between the two groups was not statistically significant [19], which can be attributed to the effect of weight or obesity, accompanied by high BMI with metabolic syndrome and vascular disorders that increase vascular insufficiency and the risk of pressure ulcers.

In our research, a small percentage of patients were smokers, and no significant relationship was observed between smoking history and pressure ulcers. However, the findings of a study performed by Nassaji et al. revealed a significant difference in the prevalence of pressure ulcers between the two groups of patients with and without a smoking history. In the present study, it was found that smoking could increase the risk of pressure ulcers due to the effect of vasoconstriction on skin capillaries and the reduction of oxygen delivery to the tissue, which is often caused by nicotine, increasing the risk of developing these ulcers.

Furthermore, other factors in cigarette smoke, such as carbon monoxide, may interfere with the wound healing process.[20] In a study conducted by Suriadi et al. on 105 patients admitted to the intensive care unit, it was reported that smoking could increase the risk of bedsores.[21] Krause et al. performed a study on 650 patients with spinal cord injury and showed that smoking was significantly associated with an increased risk of pressure ulcers.[22] However, the findings of several studies were indicative of the existence of no association between smoking and pressure ulcers. [23-25] According to the results of our study, the majority of patients with pressure ulcers (about 76%) had a history of diabetes, which had a positive and significant relationship with pressure ulcers. Casimiro et al. found that the risk of pressure ulcers in patients with diabetes was 1.54 times more than that in the normal population,

which was predictable according to our information about diabetes and its arterial injuries.[26]

Based on the findings of this study evaluating the length of hospitalization among patients with pressure ulcers, the majority of the cases (106 patients) had less than 10 days of hospital stay.

A prolonged hospitalization increases the risk of pressure ulcers.[8,27,28] The results of the present study revealed that bedsore in the head and scapular areas were significantly lower and higher, respectively. The prevalence of bedsores in certain areas mainly depends on the constant pressure on that area.[9] In our study, most patients had grade 2 or grade 3 ulcers. Gedamu et al. proposed that 62% and 26.8% of the patients in their study had respectively grade 1 and grade 2 ulcers (1).

In the present research, half of the patients had a history of hypertension, which was inversely and significantly associated with Braden score, meaning that patients with a history of hypertension had a lower score. The findings of other studies have demonstrated that individuals with high blood pressure had a higher prevalence of bedsores.[29]

Another finding of our research was that 50% of the patients were high-risk based on the frequency of pressure ulcers and the Braden Scale score. In other studies, this score was associated with the occurrence of ulcers.[1,30]

### Conclusion

According to our study's findings, patients over 60 had more pressure ulcers, and most of them had diabetes. There was a strong and positive correlation between pressure ulcers and a history of diabetes. Additionally, it was shown that patients with a prior history of diabetes had ulcers that were five times more severe than those in other cases, and that these ulcers got worse the longer they were hospitalized.

According to the study's findings, people with a history of hypertension had less severe bedsores. The subjects with high BMI had a lower, while a significant degree of pressure ulcer than cases with low BMI. Furthermore, based on the findings of the Braden Scale, 50% of our patients were high-risk. According to these results, pressure ulcers are still a major threat for elderly patients and individuals with a smoking history, higher BMI, and longer hospital stay. Therefore, special attention needs to be paid to the reduction of financial costs and maintenance problems of such patients.

### References

1. Amano A, Gedamu H, Hailu M. Pressure ulcer prevalence and related determinants among hospitalized patients at Felegehiwot referral

- hospital, Bahir Dar, Ethiopia. Progress in nursing. 2014, eight pages
2. Zeighami R, Javadi A, Abbas Ali Madadi Z, and Azimiyan J. The impact of topical olive oil in preventing bedsores in patients in critical care units. *Int J Res Med Sci.* 3(9):2342-2347 (2015).
  3. Abebe AE, Bered DT, and Salih MH. An Ethiopian single center study examined the prevalence and risk factors of pressure ulcers in adult hospital patients. *Notes on BMC research.* 2018, 11(1):847.
  4. Soozani A, Pourheidari M, Hamidzadeh A, Raei M, Montazeri A, Nasiri E. the impact of education on nurses' performance and understanding in pressure sore prevention and management. *Mode Care Journal,* 2012, 9(1), 16–23.
  5. Graves N, Birrell F, Whitby M. Effect of pressure ulcers on length of hospital stay. *Infection Control & Hospital Epidemiology.* 2005;26(3):293-297.
  6. Beeckman D, Schoonhoven L, Verhaeghe S, Vanderwee K. Pressure ulcer prevention, the state of the art: the contribution of Tom Defloor. *Pergamon.* 2011; 48(7):787-790.
  7. Gorecki C, Closs SJ, Nixon J, Briggs M. Patientreported pressure ulcer pain: a mixed-methods systematic review. *J. Pain Symptom Manage.* 2011;42(3):443-459.
  8. Ghavidel AA, Bashavard S, Bakhshandeh Abkenar H, Mehdi Payghambari M. Incidence rate of pressure sores after cardiac surgery during hospitalization and its relevant factors. *Razi J Med Sci.* 2012;19(102):19-29.
  9. Jamand T, Akaberian S, Khoramroodi R, Pooladi S, Hajivandi A, Bagherzadeh R, Gharibi T, Yazdankhah MR, Zahmatkeshan N, Kamali F. Assessment of risk factors associated with bedsores in patients admitted to Fatemeh Zahra & Salman Farsi Hospitals in Boushehr by using the braden indices. *Iran South Med J* 2012, 15(3): 233-240.
  10. Cox J. Predictors of pressure ulcer development in adult critical care patients. Rutgers The State University of New Jersey-Newark; 2010.133p.
  11. Mervis JS, Phillips TJ. Pressure ulcers: Pathophysiology, epidemiology, risk factors, and presentation. *J. Am AcadDermatol.* 2019;81(4):881-890.
  12. Rafiei H. Incidence of pressure ulcer in patients who were admitted to open heart cardiac surgery intensive care unit. *Int J Epidemiol Res.* 2016; 3(1): 12-18.
  13. Saghaleini SH, Dehghan K, Shadvar K, Mahmoodpoor A, Sanaie S, Ostadi Z. Bedsores: epidemiology; risk factors; classification; dvar K, Mahmoodpoor A, Sanaie S, Ostadi Z. Bedsores: Epidemiology; Risk Factors; Classification; Assessment Scales and Management. *Arch Anesth&Crit Care.* 2016;2(3):226-230.
  14. Karimian M, Sarokhani D, Sarokhani M, Sayehmiri K, Mortazavi Tabatabai SA. Prevalence of bedsores in Iran: a systematic review and meta-analysis. *J Mazandaran Univ Med Sci.* 2016;26(136):202-210.
  15. Tubaishat A, Anthony D, Saleh M. Pressure ulcers in Jordan: a point prevalence study. *J Tissue Viability.* 2011;20(1):14-19.
  16. Ness SJ, Hickling DF, Bell JJ, Collins PF. The pressures of obesity: the relationship between obesity, malnutrition and pressure injuries in hospital inpatients. *Clinical Nutrition.* 2018;37(5):1569-1574.
  17. Drake DJ, Swanson M, Baker G, Pokorny M, Rose MA, Clark-Reed L, et al. The association of BMI and Braden total score on the occurrence of pressure ulcers. *J Wound Ostomy Continence Nurs.* 2010;37(4):367-371.
  18. Swanson MS, Rose MA, Baker G, Drake DJ, Engelke M, Pokorny M, et al. Braden subscales and their relationship to the prevalence of pressure ulcers in hospitalized obese patients. *Bariatr Nurs Surg Patient Care.* 2011;6(1):21-23.
  19. Pokorny ME, Rose MA, Watkins F, Swanson M, Kirkpatrick MK, Wu Q. The relationship between pressure ulcer prevalence, body mass index, and braden scales and subscales: a further analysis. *Adv Skin Wound Care.* 2014;27(1):26-30.
  20. Nassaji M, Askari Z, Ghorbani R. Cigarette smoking and risk of pressure ulcer in adult intensive care unit patients. *Int J NursPract.* 2014;20(4):418-423.
  21. Suriadi, Sanada H, Sugama J, Kitagawa A, Thigpen B, Kinoshita S, et al. Risk factors in the development of pressure ulcers in an intensive care unit in Pontianak, Indonesia. *Int Wound J.* 2007;4(3):208-215.
  22. Krause JS, Vines CL, Farley TL, Sniezek J, Coker J. An exploratory study of pressure ulcers after spinal cord injury: relationship to protective behaviors and risk factors. *Archives of Physical Medicine.* 2001;82(1):107-113.
  23. Jiricka M, Ryan P, Carvalho M, Bukvich J. Pressure ulcer risk factors in an ICU population. *American Journal of Critical Care.* 1995;4(5):361-367.
  24. Miriam Noble B, Voegeli D, Clough GF. A comparison of cutaneous vascular responses to transient pressure loading in smokers and nonsmokers. *J Rehabil Res Dev Clin Suppl.* 2003;40(3):283-288.
  25. Rabadi MH, Vincent AS. Do vascular risk factors contribute to the prevalence of pressure ulcer in veterans with spinal cord injury? *J Spinal Cord Med* 2011;34(1):46-51.

26. Casimiro C, García-de-Lorenzo A, Usán L. Prevalence of decubitus ulcer and associated risk factors in an institutionalized Spanish elderly population. *Nutrition*. 2002;18(5):408-414.
27. Bolourchifard F, Abdolrahimi M, Yaghmaei F, Akbarzadeh BA. Factors associated with pressure sore in patients admitted to the orthopedic ward. 2015; 4(2):27-33.
28. Sari AA, Doshmanghir L, Neghahban Z, Ghiasipour M, Beheshtizavareh Z. Rate of pressure ulcers in intensive units and general wards of Iranian hospitals and methods for their detection. *Iran J Public Health*. 2014; 43(6): 787-792.
29. Frankel H, Sperry J, Kaplan L. Risk factors for pressure ulcer development in a best practice surgical intensive care unit. *Am Surg*. 2007;73(12):1215-1217.
30. Catherine VanGilder M, Amlung S, Harrison P, Meyer S. Results of the 2008–2009 International Pressure Ulcer Prevalence™ Survey and a 3-year, acute care, unit-specific analysis. *Ostomy Wound Manag*. 2009; 55:39-45.