

PRESSURE ULCER



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Pressure Ulcer remains a major health problem affecting approximately 3 millions adults. Pressure ulcer had one of the highest occurrence rates along with failure to rescue.

Problem Statement: A study to assess the effect of pressure relieving device on development and progress of pressure sore among clients admitted in selected hospital in Mumbai.

Specific Objectives: To identify the cases who are at risk for developing pressure sore in selected hospital in Mumbai.

To monitor the Skin changes and the Braden scale of selected patients in control and experimental group.

To compare the Braden scores on admission and discharge in both, the experimental and control group.

To assess the grade of pressure sore on admission and discharge in the control and experimental group.

To assess the effect of pressure relieving device on the development and progress of pressure sore.

Research Design: Phase I: Survey. **Phase II:** Quasi Experimental: Non equivalent control group design.

Sample and Sampling size: Population: Clients admitted in the selected hospital of Mumbai. Sample: Clients with a Braden score up to 18, admitted in the wards of the selected hospital of Mumbai. Sample size: Total: 40 Control group: 20 Experimental group: 20

Sampling technique: (a) Non probability convenient sampling (b) Inclusion criteria: (i) Clients admitted in wards of selected Hospital of Mumbai. (ii) Clients and their significant others are willing to participate in the study. (iii) Clients who are at risk (Braden score up to 18) and or have developed pressure ulcers.

Data Analysis. Gender of the samples N=20

Gender	Control Group		Experimental Group	
	Freq	Perc	Freq	Perc
Male	13	65%	11	55%
Female	7	35%	9	45%

Distribution of Braden Scores

Braden Score	Control Group				Experimental Group			
	On admission		On discharge		On admission		On discharge	
	Freq	Perce	Freq	Perce	Freq	Perce	Freq	Perce
8 to 11	5	25%	4	20%	10	50%	5	25%
12 to 14	11	55%	11	55%	8	40%	9	45%
15 to 18	4	20%	5	25%	2	10%	6	30%

Grade of pressure sores

Grade of bed sore	Control group (N=10)				Experimental group			
	Admission		Discharge		Admission		Discharge	
	Freq	Perce	Freq	Perce	Freq	Perce	Freq	Perce
Grade I	5	100%	0	0	2	20%	6	60%
Grade II	0	0	3	60%	6	60%	4	40%
Grade III	0	0	2	40%	2	20%	0	0

The above table shows the gender of the samples in the control and experimental group. It shows that there are 65% males in the control group and 55% males in the experimental group. i.e. the males form a majority in the selected sample.

Control Group: The above table shows the Braden scores of the selected samples on admission and discharge. Data suggests that in the control group, 25% of the sample, on admission, had a Braden score of 8-11, but on discharge it reduced to 20%. 55% of the sample had a Braden score of 12-14 on admission and on discharge the score remained the same. 20% of the sample had a Braden score of 15-18 and it increased to 25% on discharge. Thus, the table indicates very slight improvement in Braden score in the control group.

Experimental Group: In the experimental group, 50% of the sample had a Braden score of 8-11 on admission. However, on discharge only 25% had similar low scores. 40% scored in between 12-14 on admission and on discharge, 45% had similar scores. Only 10% had a score of 15-18 on admission which increased to 30% at the time of discharge. Thus, this data indicates that the samples in the experimental group showed better improvement in Braden scores as compared to the sample in the control group.

This data shows the grades of bed sores in the selected samples in the control and experimental group.

In the control group 100% of the samples had grade I pressure ulcers.

On discharge 60% developed grade II and 40% progressed to grade III ulcers

In the experimental group, 20% had grade I ulcers 60% grade II and 20% had grade III ulcers at the time of admission.

However, on discharge, 60% had had grade I ulcers, 40% had grade II ulcers and **none** had grade III ulcers.

Thus, this data indicates that the progress of pressure sores could be arrested and reversed by the use of the Auto logic mattress.

Scope of the study

To reduce the incidence of pressure sores in selected hospital of Mumbai.

To formulate policy for prevention of pressure ulcers in selected hospital of Mumbai.

Conclusion: Pressure relieving devices are more effective in reducing pressure sores among the bed ridden patients. It was observed by using Braden Scale. Hence pressure relieving device air mattress can be recommended to the bed ridden patients in the selected hospitals.
