



## Incidence of pressure sore and its effect on duration of hospitalization

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### Abstract:

**Introduction:-** Maintaining skin integrity is important clients at higher risk of developing pressure sores because of immobility, inadequate nutrition and older age. Studies done revealed that the incidence of pressure ulcer increases with length of stay. Hence a survey was conducted to know the prevalence of pressure ulcer and its impact on duration of hospitalization among hospitalized clients in public hospital. **Material and Methods-** A descriptive research survey approach was used to conduct study. Samples selected by non probability convenient sampling techniques and sample size was 200. According to the objectives a interview scheduled prepared and used. t. Tool consisted of data related to demographic characteristics and data of hospitalization the obtained data were analyzed by using descriptive and inferential statistics like frequency, percentage mean, SD and ' Chi Square 'test. **Result:-** Descriptive survey found that incidence of bed sore is more in male than female in the age group 41 to 60 years of age who were consuming mixed type of diet and had less body weight. And it is revealed that duration of hospitalization is more than 6 weeks and not able to carry out the daily activities and majority of samples were in stage II.

**Key words :** :- Incidence, Pressure sore, hospitalization

### Introduction:

Pressure sores are common conditions among patents hospitalized in acute and chronic care facilities. Pressure ulcer occurs almost exclusively in people with limited mobility. The reported incidence of pressure ulcer in acute care facilities ranges from 2.7% to 29.5%. 25-85% of these patients develop bed sore at some time. The prevalence in acute care setting ranges from 3.5%-29.5% [1]. Pressure sore termed as Pressure ulcer or bed sore.

### Objectives:-

1. To find out the incidence of pressure sore in hospitalized patients.
2. To assess the characteristics of pressure sore in patients.
3. To identify association between incidence of with their selected demographic variables.

### Statement of the problem:-

A study to assess the incidence of pressure sore and its effect on duration of hospitalization in patients admitted in selected hospitals of metropolitan city.

### Materials and Methods-

The present study was carried out in public hospital of state Government. Samples were selected hospitalized patients from public hospital. This study was carried out by using descriptive survey approach from Jan 2011 to Jan 2012. The Samples were selected by using non probability convenient sampling techniques and sample size was 400. According to the objectives a interview schedule was prepared .tool consisted demographic data related to disease condition and hospitalization and observation checklist to assess aspects of pressure sore. (wound)

The tool was finalized after the validity and reliability. The validity was established by giving tool to experts from nursing and surgical departments to see the adequacy of the tool, the inter-rator method was used and found reliable to use.

The data collection procedure was as follows. Instructions were given to samples, informed consent was obtained all ethical principles followed, interviewed each sample and collected demographic and data related hospitalization, observation done of

pressure sore wound and marked on observation checklist.

The obtained data were analyzed by using descriptive and inferential statistics like frequency percentage, mean, SD and 'Chi Square' test.

**Result:-**

In present study total number of sample size was 400.

Mean Median, Mode, standard deviation and pressure sore wound characteristics of patients regarding pressure sore.

**Table 1:- Description of samples according to the demographic variables. N=400**

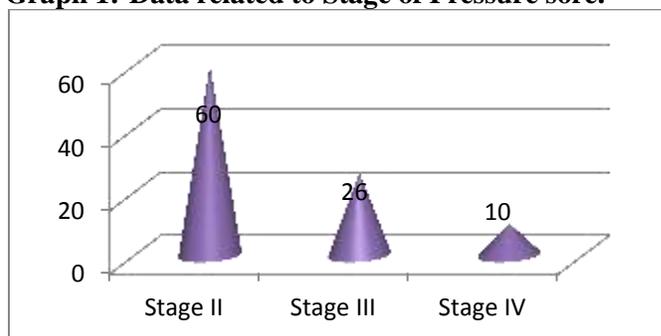
Sr. No.	Demographic variables	Frequency	Percentage
1	<b>Gender</b>		
	Male-	260	65
	Female-	140	35.5
2	<b>Age</b>		
	21-30	04	1.0
	31-40	126	31.5
	41-50	174	43.5
	51-60	94	23.5
	61 and above	02	0.5
3	<b>Diet</b>		
	Vegetarian	100	25
	Non Vegetarian	300	75
4	<b>Family Income</b>		
	Bellow 5000/-	18	4.5
	Rs.5000-10000/-	134	33.5
	Rs.10001-15000/-	144	36
	15000/- and above	104	26

**Table 2:- Description of samples according to their data related to present condition. N=400**

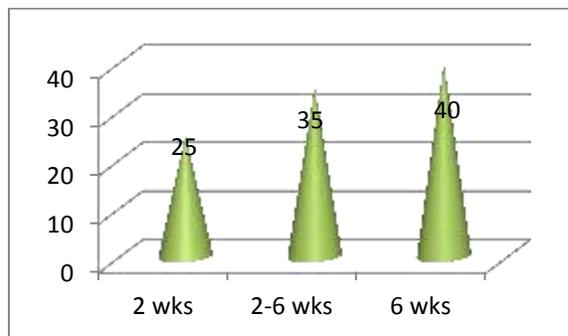
Sr.No.	Demographic variables	Frequency	Percentage
1	<b>Area Hospitalization</b>	<b>120</b>	<b>30</b>
	Neurology/	<b>136</b>	<b>34</b>
	Surgery	<b>144</b>	<b>36</b>
	Orthopedic, Medical		
2	<b>Administered Antibiotics</b>	<b>110</b>	<b>27.5</b>
	Yes	<b>290</b>	<b>72.5</b>
	No		
4	<b>Weight of patient 30-40 Kg</b>	<b>100</b>	<b>25</b>

	41-50 Kg	<b>200</b>	<b>50</b>
	51-60 Kg	<b>50</b>	<b>25</b>
5	<b>ADL</b>		
	Independent	<b>22</b>	<b>88</b>
	Dependent	<b>88</b>	<b>312</b>

**Graph 1:-Data related to Stage of Pressure sore.**



**Graph 2:-Data related to hospitalization**



**Table 3:-Distribution of sample related to their characteristics of pressure sore.**

Sr. No.	Wound characteristics of experimental group	Frequency	Percentage
	<b>Size of the wound-</b>		
	Mild	50	12.5
	Moderate	100	25
	Severe	250	62.5
	<b>Base of the wound-</b>		
	Epithelial	100	25
	Granulation	100	25
	Necrotic	200	50

<b>Surrounding area of wound-</b>		
Intact	25	6.2
Swollen	50	12.5
Erythematous	125	31.25
Discolored dark	200	50
<b>Margins of wound-</b>		
Attached	100	25
Rolled	200	50
Necrotic	100	25
<b>Soakage of wound-</b>		
Absent	70	17.5
Present	330	82.5
<b>Amount of exudates-</b>		
Scanty	20	5
Moderate	70	17.5
Large	310	77.5
<b>Color-</b>		
Serous	20	5
Serous sanguineous	250	62.5
Sanguineous	130	32.5

### Discussion-

As an aid to the reader this chapter deals with the overview of the present study and summarizes the study finding comparing with previous studies.

The aim of the study was to find out incidence of pressure sore and its effect on health and duration of hospitalization in patients admitted in public hospital from Maharashtra with the view to develop health care strategies to take of patients.

The present study focused on identify incidence of bed sore, impact of bed sore on duration of hospitalization and to find out severity of bed sore among hospitalized patients in super specialty public hospital. The findings of the study are discussed under the following hospital:-

1. Findings related to characteristics of sample.
2. Findings related to hospitalizations.
3. Findings related to characteristics of bed sore.
4. Findings related to association of incidence of bed sore with selected demographic variables.

### Findings related to characteristics of sample:-

In present study sample of 400 hospitalized patients with pressure sore were taken.

1. Finding showed that majority of samples 65% were male. Similar findings were seen in study conducted by Eunice Park- Lee data from National nursing survey [2].
2. Majority of samples 50% belong to age group 41-50 followed by 51-60 age group. Similar findings were seen in study conducted by Eunice Park- Lee data from National nursing survey[2].
3. Regarding Religion Majority of samples belong to Muslim 60%.This may be because surrounding population of hospital is from Muslim religion.
4. In relation to type of diet consuming most of the patients 75% taking mixed diet. Same findings were seen in the study conducted by Bergstrom N,[3]
5. Concerning monthly income majority of samples 70% belongs middle income group. As surrounding population of hospital belongs to middle income group.

### Findings related to hospitalizations:-

1. Area of hospitalization most of samples were admitted in Medical, Neurology Neurosurgery, and Orthopedic ward, there is a incidence of high immobility of samples. Similar findings were seen in study conducted by Eunice Park- Lee data from National nursing survey[2].
2. Majority samples (73%) not receiving antibiotics when study was going on, but they received after admission according to disease condition.
3. Majority of samples weighing less 50%. Similar findings were seen in study conducted by Eunice Park- Lee data from National nursing survey [2].
4. Data related to activities of daily living maximum samples (88%) dependent on care givers for their daily care activities of daily living as their was high immobility.
5. Majority of samples were hospitalized for more than 6 weeks followed by 2- 4 weeks. Similar findings were seen in study conducted by Eunice Park- Lee data from National nursing survey [2].

### Findings related to characteristics of bed sore:-

Maximum samples (60%) were in second stage of pressure ulcer followed by Third stage. Same findings were seen in the study conducted by Bergstrom N, [3]

### Findings related to association of incidence of bed sore with selected demographic variables:

Analyzed by using Chi Square, it shown there is a association between incidence of bed sore is more in elderly with high immobility and who are hospitalized in Specific area.

**Conclusion:**

Present study revealed that there is increased in incidence of pressure sore and inturn duration of hospitalization in clients after hospitalization. Various demographic and clinical aspects were related to have pressure ulcers after hospitalization.

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