

# A Descriptive Study to Assess the Knowledge Regarding Pressure Sore among Care Takers of Bed Ridden Patients in Selected Hospitals of Sasaram

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**Abstract:** Pressure ulcer is commonly termed as bedsores, Decubitus ulcer or pressure sore and sometimes as pressure necrosis or ischemic ulcer. The term pressure ulcer is popularized by the Agency for Healthcare Research and Quality. In the initial stage of a pressure ulcer has the following features. The skin is not broken. The skin looks red on people with lighter skin colour, and the skin doesn't briefly lighten when touched. "A descriptive study to assess the knowledge regarding pressure sore among care takers of bed ridden patients in selected hospitals of sasaram". The aim of the study is to assess the level of knowledge regarding pressure sores among care takers of bed ridden patients. And to find the association between the level of knowledge of care takers regarding pressure sore with their Socio - demographic variables. **Material and Methods:** Non experimental Descriptive research design is used to assess the knowledge regarding pressure sore among care takers of bed ridden patients. Convenient sampling technique was used for the sample collection of 60 care takers of bedridden patients admitted in selected hospitals of Sasaram. **Results:** Among sixty care takers of the bed ridden patients 15 (25%) had good knowledge, 34 (57%) had average knowledge and 11 (18.3%) had poor knowledge. Pertaining to association between the socio demographic variables and level of knowledge, statistically significant association was found between Gender of care takers with the knowledge score in this study. As per knowledge among sixty care takers 25% had good knowledge and 57% had average knowledge and 18.3 % had poor knowledge. This shows that these variables had influenced level of knowledge on the study subject. There was a statistical significant association between the level of knowledge and socio - demographic variables of care takers with gender. That is 0.0262 S ( $P < 0.05$ ).

**Keywords:** Pressure sore, knowledge and care takers

## 1. Introduction

Pressure ulcer is commonly termed as bedsores, Decubitus ulcer or pressure sore and sometimes as pressure necrosis or ischemic ulcer. The term pressure ulcer is popularized by the Agency for Healthcare Research and Quality. It has been set as "an area of unrelieved pressure usually over a bony prominence leading to ischemia, cell destruction and tissue necrosis" It is identified as one of the most costly and physically debilitating complications in the 21st century and the third most expensive disorder after cancer and cardiovascular diseases. In Indian context, the prevalence of pressure ulcers in hospitalized patients has been reported to be 4.94%. Prevention is an important goal<sup>1</sup>.

The **National Pressure Ulcer Advisory Panel**, a professional organization that promotes the prevention and treatment of pressure ulcers, defines each stage as follows. In the initial stage of a pressure ulcer has the following features. The skin is not broken. The skin looks red on people with lighter skin colour, and the skin doesn't briefly lighten when touched. The ulcers appear as a defined area of persistent redness in lightly pigmented skin, whereas in darker skin tones, the ulcer may appear with persistent red, blue, or purple hues. In stage 2 the outer layer of skin and part of the underlying layer of skin (dermis) is damaged<sup>2</sup>.

People most at risk of bedsores have medical conditions that limit their ability to change positions or cause them to spend most of their time in a bed. Most sores heal with treatment, but some never heal completely. People who need to stay in

bed or in a wheelchair for a long time are at greater risk of developing pressure sores. This can include people who are paralyzed and those who aren't able to get up on their own. Sores can happen if they have to stay in bed or a wheelchair while they heal. Some chronic (long - lasting) that include diabetes and hardening of the arteries. In bed, body parts can be padded with pillows or foam to keep bony prominences (areas where bones are close to the skin surface) free of pressure. Place a pillow between the knees while sleeping on side to prevent skin - to - skin contact and increase air circulation between your legs<sup>3</sup>.

### Statement of the Problem

"A descriptive study to assess the knowledge regarding pressure sore among care takers of bed ridden patients in selected hospitals of sasaram".

### Objectives of the Study

- 1) To assess the level of knowledge regarding pressure sores among care takers of bed ridden patients.
- 2) To find the association between the level of knowledge of care takers regarding pressure sore with their Socio - demographic variables.

## 2. Material and Methods

### Research design

Non experimental Descriptive research design.

### Research setting

Narayan Medical College and Hospitals (NMCH), Jamuhar, Sasaram

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- NMCH has more than 650 bedded hospitals
- The hospital's also has its own transportation services to cater the needs of patients.
- The institute has an objective to provide affordable medical facilities to the needy and poor masses of in and around nearby districts of Bihar.
- There is approx 9 km distance from the railway station to the Narayan Medical College & Hospital District Hospitals Sasaram
- This hospitals covers the entire sasaram and nearby villages and it serves the rural population.
- Many facilities are in hospital's like ICU, Emergency, also a referral facilities are also in hospitals.
- It is 1.4 km away from the railway station of Sasaram to Sadar hospitals.

**Sample**

The sample for the study comprised of 60 care takers of bedridden patients admitted in selected hospital's of Sasaram.

**Sample technique**

Convenient sampling technique was used for selection of the study subjects.

**Inclusion criteria**

- Care takers who are willing to participate in the research study.
- Care takers who can read, write and understand Hindi and English

**Exclusion criteria**

Care takers who are not willing to participate in the study

**Development of the tool**

A semi structured questionnaire on knowledge regarding pressure sore among care takers of bed ridden patients was developed by the researcher after reviewing the literature.

**Description of the tool**

The semi structured questionnaire comprised of 2 sections.

**Section 1 Socio demographic profile of the care takers /study subjects.**

**Part A:** - Demographic data such as Age, Gender, Educational status, Experience, Religion .

**Section 2. Semi Structured questionnaires on knowledge regarding pressure sores among care takers**

**Part B:** - Structured questionnaire with 25 multiple choice questions related to knowledge regarding pressure sore among care takers of bed ridden patients. Further it has sub sections on - introduction, causes, appearance of sore, management and prevention of pressure sore.

**Scoring**

There are 25 multiple choice questions . Each questions has 3 options with 1 correct option. The score assigned for correct answer is 1 and for wrong answer is 0.

The maximum score is 25 and minimum score is 0.

S. No	Level of knowledge	Knowledge score	Percentage (%)
1.	Good	17 - 25	25%
2.	Average	9 - 16	56.7%
3.	Poor	0 - 8	18.3%

**3. Results and Discussion**

Table 1. shows the frequency and percentage of study subjects as per socio demographic variables according to Age, Gender, Relation with patient, experience of care takers and religion.

Figure1. depicts that Percentage distribution of study subjects as per their age. The majority of study subject 51.6% below the 25 years of Age.21.6% were between the age group of 26 - 35 years, 16.6% were between the age group of 36 - 45years and 10.2% were between the age group of 46 years and above.

Figure 2. depicts the percentage distribution of study subject as per their gender, majority of study subjects were male 39 (65%) followed by 21 (35%) female study subject i. e.39 (65%) and only 21 (35%) were female care takers.

Table 2. shows the knowledge of care takers regarding pressure sores, 15 (25%) have good knowledge, 34 (56.7%) have average and 11 (18.3%) have poor knowledge.

Table 3. depicts that the mean knowledge score of care takers was 13, median was 13, mean percentage was 21.55% and standard deviation were 4.14.

Table 4. represents the association between level of knowledge and socio - demographic variables of care takers regarding pressure sore which was analyzed using Chi - square test. The findings revealed that there was no significant association between Age in year, Relationship with patient, Experience of care takers and religion. However there was statistical significant association between the level of knowledge and socio demographic variables such as gender  $p < 0.05$ .

**Key:**

- Df: Degree of freedom
- NS: is not significant
- S: is Significant

**Table 1:** Distribution of study subjects as per their socio - demographic variables in terms frequency and percentage, **N=60**

S. No	Demographic Variables	Frequency	%
1	<b>Age in years.</b>		
	a. Below 25 years	31	51.6
	b. 26 - 35 years	13	21.6
	c. 36 - 45 years	10	16.6
	d. 46 and above	6	10.2
2	<b>Gender</b>		
	a. Male	21	35
	b. Female	39	65
3	<b>Relation with patient</b>		
	a. Mother - father.	22	36.7
	b. Brother - sister.	22	36.7
	c. Other.	16	26.6
4	<b>Experience of care takers with</b>		

	<b>the patient</b>		
	a.1 year and less	46	76.7
	b.1 - 2year	13	21.7
	c. above 2 years	1	1.6
5	<b>Religion</b>		
	a. Hindu	58	96
	b. Muslim	2	4

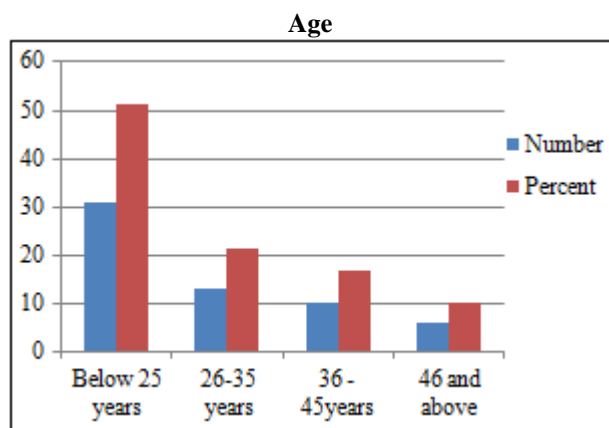


Figure 1: Percentage distribution of study subjects as per their age.

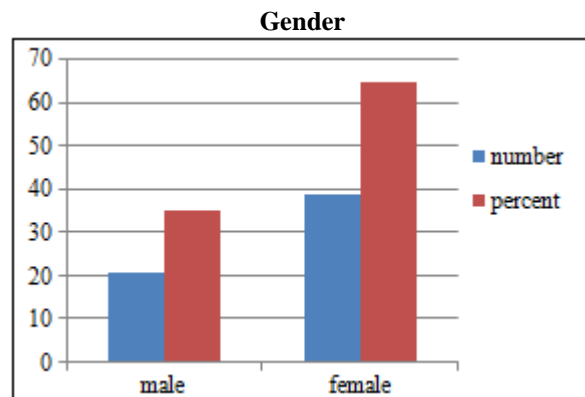


Figure 2: Percentage distribution of study subjects as per their gender.

Table 2: Frequency and percentage distribution of study subject as per their of knowledge score related to pressure sore

S. No	Level of Knowledge	Frequency	Percentage (%)
1.	Good	15	25%
2.	Average	34	56.7%
3.	Poor	11	18.3%

Table 3: Mean, median, mean % and Standard deviation of knowledge score of the study subject that were analyzed in terms of mean, median, mean percentage and standard deviation.

Level of Knowledge	Mean	Median	Mean %	Standard Deviation
Overall Knowledge	13	13	21.66	4.14

Table 4: Association between the knowledge score and socio demographic variables, N=60

Socio Demographic Data	Level o Knowledge						X <sup>2</sup>	df & p value
	Good (17 - 25)		Average (9 - 16)		Poor (0 - 8)			
	No.	%	No.	%	No.	%		
<b>1. Age in years.</b>								
1.1 Below 25 years	10	16.6	17	28.3	4	6.6	2.834	df - 6 p - 0.8293 NS
1.2 26 - 35 years	2	3.3	8	13.3	3	5		
1.3 36 - 40years	3	5	5	8.3	2	3.3		
1.4 46 and above	1	1.6	3	5	2	3.3		
<b>2. Gender</b>								
2.1 Male	1	1.6	15	25	5	8.3	7.064	df - 2 p - 0.0262 <b>S (P&lt;0.5)</b>
2.2 Female	14	23.3	19	31.6	6	10		
<b>3. Relation with patient</b>								
3.1 Mother - father	6	10	11	18	5	8.3	1.084	df - 4 p - 0.8968 NS
3.2 Brother - sister.	6	10	12	20	4	6.6		
3.3 Other.	5	8.3	11	18	2	3.3		
<b>4. Experience of care takers</b>								
4.1 1 year to 3 year	13	21.7	24	40	9	15	1.192	df - 4 p - 0.8794 NS
4.2 4 year to 6 year	3	5	8	13.3	2	3.3		
4.3 7 year and 10 above	00	00	1	1.6	0	00		
<b>5. Religion</b>								
5.1 Hindu	15	25	32	53.3	11	18.3	1.582	df - 2 p - 0.4533 NS
5.2 Muslim	00	00	02	3.3	0	00		

#### 4. Discussion

Pressure ulcers are lesion caused by unrelieved pressure that results in damage to the underlying tissue. generally, these are the results of soft tissue compression between a bony prominence and an external surface for a prolonged period of time. the consequence of pressure –induced skin injury

range from non bleachable erythematic of intact skin to deep ulcers extending to the bone.

The ulcer imposes a significant burden not only on the patient, but the entire health care system. Reducing the frequency of pressure ulcers is an important component of current goals for patient safety. Pressure ulcers occur over bony prominences. The most common areas for pressure ulcers include the sacrum, coccyx, heels, and ear.

**The first objective was to assess the level of knowledge regarding pressure sore among care takers of bed ridden patients.**

**Nurhusien N, Fisseha Z , Senafikish A, Yohannes M (2015)** An institution - based cross - sectional survey was conducted from March 15 - April 10, 2014 among 248 care takers in Gondar University hospitals North - west Ethiopia. A pretested and structured self - administered questionnaire was used for data collection. Nearly half (54.4 %) of the care taker had good knowledge; similarly 48.4 % of them had good practice on prevention of pressure ulcer. Educational status, work experience and having formal training were significantly associated with knowledge on prevention of pressure ulcer. The findings of the present study were similar as the majority of care takers were having average knowledge regarding pressure ulcers and only few have poor knowledge regarding it<sup>5</sup>.

**Salwa. A. Mohamed, et. al., (2014)**, conducted an quasi - experimental study on to effect of implementing educational program about pressure ulcer control on care taker knowledge and safety of immobilized patients, 40 care taker working in the critical care units at Mansoura University Hospitals, in addition to 40 patients were randomly assigned from these units previous. A structured questionnaire and observational checklist used to collect data. The study revealed that most of care taker (77.5%) had unsatisfactory knowledge regarding pressure ulcer pre test, While posttest, the more than half (57.5%) of the participants received the score (good) and 30% of the subjects received the score (pass), only 10% were poor score in the study. Similarly in this study, care takers knowledge regarding pressure sore was assessed. Majority 15 (25%) of the care takers had good knowledge level, 34 (56.7%) had average level of knowledge and 11 (18.3 %) had poor level of knowledge<sup>4</sup>.

**Second objective is to find the association between the socio demographic variables and the level of knowledge.**

The present study reveals that there is a significant association between the gender of care takers and level of knowledge. The Chi - square test establish one significant association between level of knowledge and gender and no significant association between the level of knowledge to the respondents' Age in year, Gender, Relationship with patient Experience of care takers and Religion.

**Pakhide V (2013):** The sample for the study comprised of 30 care taker in selected hospitals of Bhopal who met the inclusive criteria. Assessed pre - test knowledge level with structured questionnaire, all the respondents had poor practice of pressure ulcer risk assessment and its prevention. Administered structured teaching program and post assessment was done. Results shows that the obtained,  $t$  value is 22.06 showing the effectiveness of structured teaching program at 0.05 level and 0.01 levels of significance.<sup>6</sup>

## 5. Conclusion

The present study was aimed at assessing the level of knowledge regarding pressure sore among care takers of bed ridden patients. The relevant data was collected, statistically analyzed based on objectives of the study.

Among sixty care takers had 15 (25%) had good knowledge, 34 (57%) had average knowledge and 11 (18.3%) had poor knowledge. Pertaining to relationship between the socio demographic variables and level of knowledge, statistically significant association was found between genders of care takers in this study.

## Conflict of interest

We have no Conflicts of interest.

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