"A Descriptive Cross-sectional study of care provided to the vulnerable patients in trust based hospital, Surat"

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Abstract:

Vulnerable patient who is unable to protect and take care of him or herself, against significant harm or exploitation. They are defined as groups who are at increased risk of receiving a disparity in medical care on the basis of financial circumstances or social characteristics such as age, race, gender, ethnicity, sexual orientation, spirituality, disability, or socioeconomic or insurance status. Hospitalists may play a significant role in influencing the health status, health care access, and health care delivery to vulnerable populations due to their higher rates of hospital utilization and lower access to outpatient care. The aim of the study is to find out care provided to vulnerable patients in trust based hospital.

The study is descriptive cross sectional in nature and census. The sample size was 152 vulnerable patients who are admitted to the hospital during last two months. The data collection through the observational checklist which is approved by the ethics committee.

The result was found that, out of 152 vulnerable patients, 141 patients who were in ICU and 111 patients were in the ward and most of the above age 55 has come to the hospital. There is gap that arises between the cares provided to the vulnerable patients like bed lock, Easy to access walker etc. The hospital provides good care but they required training for better performance.

Key Words: Vulnerable patient, Patients care, Trust based hospital

1. INTRODUCTION

In clinical ethics of healthcare, it is commonly assumed that vulnerable persons or groups deserve special attention, care or protection. Vulnerable patients are a person who is unable to take care of him or her to protect against significant harm or exploitation or required extra care. Hospitalists may play a significant role in influencing the health status, health care access, and health care delivery to vulnerable populations due to their higher rates of hospital utilization and lower access to outpatient care. The aim of the study is to find out care provided to vulnerable patients in trust based hospital.

Vulnerable Patients are:

- ✓ Infants
- ✓ Children
- ✓ Disabled individuals
- ✓ Elderly and frail
- ✓ Child Abuse/ Neglect
- ✓ Domestic Violence
- ✓ Sexual Assault/Abuse
- ✓ ALL SCBU /NICU, Comatose patients and
- ✓ Patients on mechanical ventilation
- ✓ Elder Abuse – Dehydration, fearful at contact, bedsores
- ✓ Substance Abuse
- ✓ Elderly – 70 years of age/older
- ✓ Mental Retardation
- ✓ Patient in crisis

Invulnerable populations, are also including the socioeconomically disadvantaged, curious, in prison or labeled with a stigmatizing complex medical disease.[3]

Treatment Process for Vulnerable Patients

1. Identify the Vulnerable Patients
2. Match Patient Need
3. Train employees and keep them in loop
4. Track Outcome

1.1 Objective:

"Aim of the study to find out care provided to vulnerable patients."

2. Research Methodology

The study aims to find out care provided to vulnerable patients in trust-based hospital in Surat between 2 months (8th July 2019 to 7th September 2019). In the study, the data is collected of all vulnerable patients who are admitted during this time of period, through observational checklist, which is approved from Ethic Committee.

The study is descriptive cross-sectional in nature where the vulnerable patients who are willing to participate will be included in the study. The sample size was 152 which were considered the population from trust based hospital during the 2 months time period. In the research, researcher takes the census study. Also observe to the vulnerable patients and their medical records to know the care provided to the vulnerable patients.

2.1 Hypothesis:

H_o: There is no association between departments and care provided to the patients.

H_1: There is an association between departments and care provided to the patients.

2.2 Sampling Description:

The data was collected from the Patients who are coming to hospital during the 2 months time of period. During this time of period only 151 patients are found for the check-up.

The observational checklist was content validated by the experts and a pilot study was carried out to check the reliability. The cronbach's alpha value came to be 0.81 making the study fit to be carried out at the hospital.

The data collected were entered into MS excel and analysis was carried out using SPSS version 21.

3. ANALYSIS & INTERPRITATION

No.	Observation	Yes	No
	Table 1. Findings of the related topics.		
1.	A detailed assessment of vulnerable Patients.	84%	16%
2.	Vulnerable patient Department wise Frequency.	73%	27%

3.	Detailed Fall risk assessment of the vulnerable patient.	78%	22%
4.	Bed rail up.	71%	29%
5.	Grab bar in the washroom.	11%	89%
6.	Dry surface (Floors).	100%	0%
7.	Bed lock.	86%	14%
8.	Anti-skid Mat outside the washroom.	100%	0%
9.	Call bell available near to the patient.	98%	2%
10.	Frequently monitoring by nursing staff (Twice in a Shift).	100%	0%
11.	Availability of relative- attendant with Vulnerable patients.	99%	1%
12.	Family is sensitized for the care of the vulnerable patient.	80%	20%
13.	Easy access to wheelchair & stretcher.	100%	0%
14.	Easy to access walker.	93%	7%
15.	Safety Belt wears during transportation on a wheelchair or stretcher.	100%	0%
16.	Availability of Comfortable environment to Vulnerable patients.	93%	7%
17.	Consent for Restraint from Family member.	88%	12%
18.	Restraint Monitoring (2 hourly).	88%	12%
19.	Pressure ulcer preventive care provided to the bedridden patient.	88%	12%
20.	Pressure ulcer assessment (Bedsore).	80%	20%

The above data show the patient's responses in percentage of each statement, there are 152 total vulnerable patients are included.

Table 2. Types of vulnerability observed in ICU Patient.		
Answers	**Percentage**	**Frequency**
Age <= 12	2%	01
Age >= 55	43%	17
Critical ill	23%	09
Unconscious	6%	02
Bed Ridden	11%	05
Pregnant Woman	4%	02
Terminally ill	4%	02
Immuno-compromised	7%	03
Total	100%	41

Table 3. Types of vulnerability observed inward.		
Answers	**Percentage**	**Frequency**

Age <= 12	17%	19
Age >= 55	73%	82
Bed Ridden	3%	03
Pregnant Woman	3%	03
Immunocompromised	2%	02
Deaf & Blind	1%	01
Mentally challenged	1%	01
Total	100%	111

The above Table 2 & Table 3 were the patients are divided into two categories

- ✓ ICU Vulnerable patient
- ✓ Ward Vulnerable Patients.

In this table, we saw the frequency and percentage types of vulnerable patients admitted to the ICU & Ward were the number of vulnerable patients more whose age is greater than 55.

Table 4. Category of Vulnerability in Ward.		
Answers	**Percentage**	**Frequency**
High Vulnerability	7%	7
Low vulnerability	93%	104
Total	100%	111

Table 5. Category of vulnerability in ICU.		
Answers	**Percentage**	**Frequency**
High Vulnerability	10%	4
Low vulnerability	90%	37
Total	100%	41

This Table 4 & Table 5 were the frequency and percentage of the category of vulnerability related to the ward and ICU. There are two types of vulnerability included

- ✓ High vulnerability (More than 1 category fall in vulnerable)
- ✓ Low vulnerability (Fall in 1 category)

Table 6. Call bell response time.		
Answers	**Percentage**	**Frequency**
1 Min	61%	68
2 Min	33%	37
3 Min	5%	6
Total	100%	111

This table shows the frequency and percentage for call bell response time to the vulnerable patients.

No.	Observation	Chi-square Value
	Table 7. Chi-Square Value.	
1.	Crosstab of Fall risk assessment done by the Nursing staff with the Department.	0.011
2.	Crosstab of Bed rail up with Department.	0.000
3.	Crosstab of a Grab bar in the washroom with Department.	0.433
4.	Crosstab of Bed lock with Department.	0.627
5.	Crosstab One relative & attendant with Departments with Vulnerable patients.	0.460
6.	Crosstab Easy to access walker with Departments.	0.464
7.	Crosstab comfortable environment with Departments.	0.165
8.	Crosstab consent restraintsare taken from a family with Departments.	0.285
9.	Crosstab Restrain monitoring with Departments.	0.285
10.	Crosstab Pressure ulcer assessment of restrain patients with Departments.	0.285
11.	Crosstab Pressure ulcer assessment of bed score patients with Departments.	0.171

The above table shows that all the results get less than 0.5 and except one value falls more than 0.5 so the null hypothesis are rejecting. There is a variation between the wards and bed lock of the vulnerable patients. Other than that all the values are under 0.5. So we accept the null hypothesis so we show that there is no relation between wards and care provided to the patients.

Findings

➢ From 152 sample of vulnerable patients out of which 41 patients are admitted in ICU while other 111 patients are admitted in ward.

➢ From the data analysis it has been found that there are 41 (27%) Vulnerable patients were admitted in ICU. Out of which 17(43%) vulnerable patients were ages above 55 and 4 (10%) vulnerable patients were in high vulnerability while 111(73%) vulnerable patients were admitted in ward. Out of which 82 (73%) vulnerable patients were ages above 55 and 7 (7%) vulnerable patients were in high vulnerability.

➢ There are 118 (78%) patient's fall risk assessment was done. And there are the null hypothesis Fail to rejected the reason is that there is shown no variation in fall risk assessment done by the hospital staff in ICU and WARD vulnerable patients file.

➢ There are 108 (71%) vulnerable patient's bed rail was up. And there is the null hypothesis fail to reject the reason is that there are not found variation in patient's bed rail up in ICU and WARDS.

➢ There are 16 (11%) vulnerable patient's washroom had grab bars. And there is the null hypothesis rejected the reason is that there is variation between Grab bar in wash room and wards. There were not more than cases Grabbar in departments washroom found during observation.

➢ It has been observed form the data that vulnerable patient's were fully satisfied with room's surface was dry, rooms had an anti-skid mat outside the washrooms, easy access to the wheelchair and Stretcher & tied with safety belt of wheel chair or stretcher during transfer.

➢ There are 152 (100 %) vulnerable patient's There are 111 call bells pressed to check the response of clinical staff. In 68 (61%) cases of nurses gave response to the call bell within a 1 min, 37 (33%) cases of nurses gave the response in 2 min, and 6 (5%) cases of nurses gave the response in 3 min.

➢ 93% of vulnerable patients were found that the environment is comfortable, easy to access the walker while 86% of vulnerable patients bed was locked, so the null hypothesis rejected.

➢ From the above analysis it has been conclude that the hospital is providing good care to vulnerable patients but some time inefficiency of nursing staff arises the gap between care provided to vulnerable patients.

➢ This gap will reduce through the training and motivation. By the training hospital can focus some topic like the safety of the patients and also include the concern and provide good treatment to the patients. The patient's condition understands by the staff is very important so they are providing the care according to their needs.

Bibliography.

1. WHO. Environmental health in emergencies [Internet]. WHO Manual for the public Health Management of Chemical Incidents. 2002 [cited 2019 Jul 17]. Available from: https://www.who.int/environmental_health_emergencies/vulnerable_groups/en/

2. Islands M. The human rights protection of vulnerable groups [Internet]. ICELANDIC HUMAN RIGHTS CENTRE. Available from: http://www.humanrights.is/en/human-

rights-education-project/human-rights-concepts-ideas-and-fora/the-human-rights-protection-of-vulnerable-groups

3.   Anaesthesiol waisel DCO. Vulnerable population in healthcare [Internet]. current opinion in anaesthesiology. 2013 [cited 2019 Jul 18]. p. 26(2). Available from: hrttps://insights.ovid.com/pubmed?pmid=23385323

4.   OUTCOMES HT&. 4 Keys to caring for vulnerable, high-risk patients. [Internet]. 2017 [cited 2019 Jul 17]. Available from: http://www.healthcarebusinesstech.com/high-risk-patients/

5.   National Accreditation Board for Hospitals and Healthcare Providers (NABH). 4th ed. NABH; 57/240.