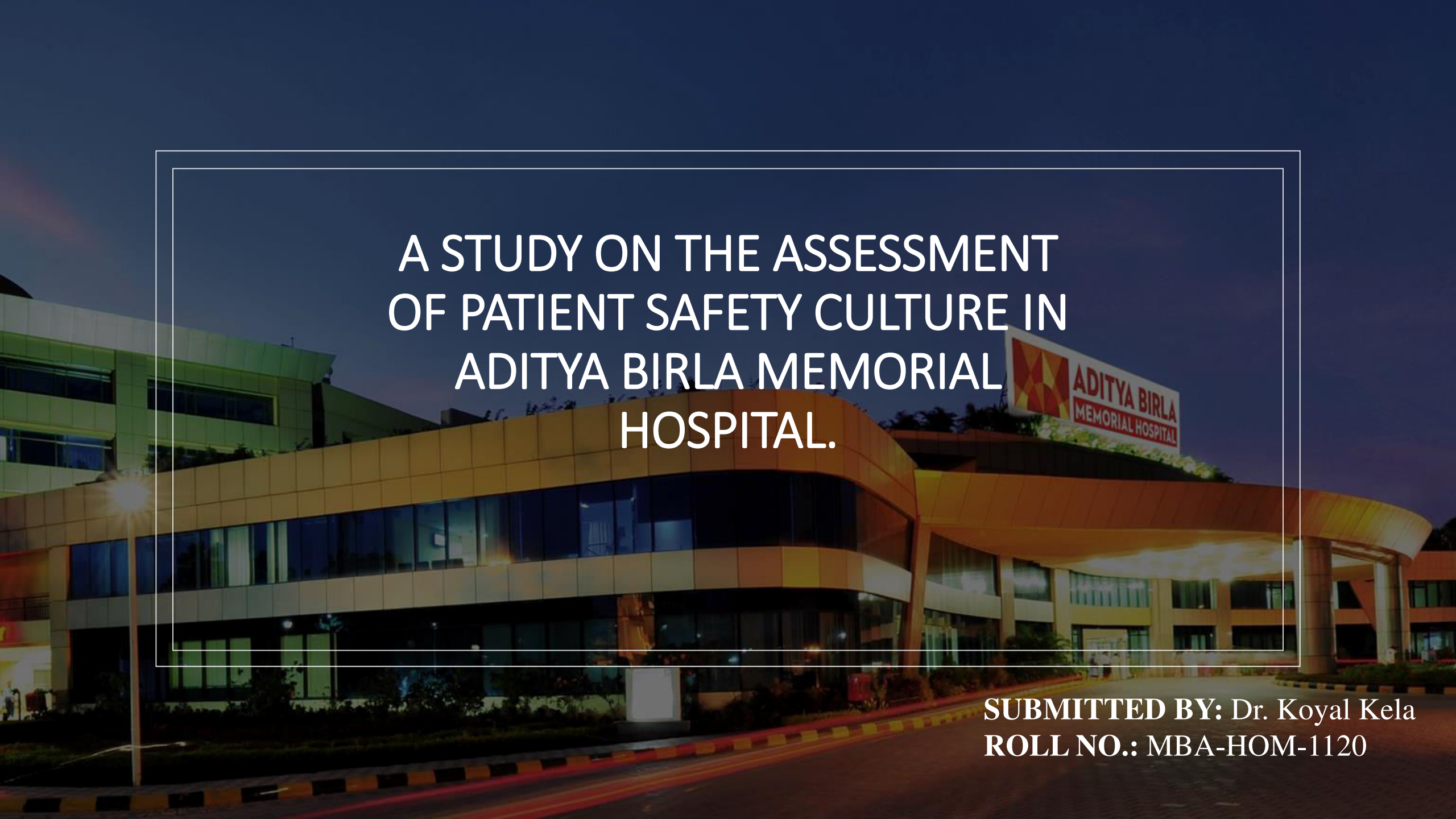


The background image shows the exterior of the Aditya Birla Memorial Hospital at night. The building is a large, modern structure with a curved facade and multiple floors of windows. The building is illuminated by warm lights, and the sky is dark. A sign on the right side of the building reads "ADITYA BIRLA MEMORIAL HOSPITAL".

A STUDY ON THE ASSESSMENT OF PATIENT SAFETY CULTURE IN ADITYA BIRLA MEMORIAL HOSPITAL.

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ROLL NO.: MBA-HOM-1120

INTRODUCTION

- In healthcare, the protection of patients (clients), as well as healthcare providers (HCPs) is referred to as patient safety.
- The reporting, investigation, and avoidance of medical errors which commonly have negative health outcomes are the focus of patient safety.
- Providing safe patient care serves to minimize mortality, morbidity, hospital stay length, and expense.
- Patient safety, defined as the prevention of harm caused by medical mistakes, is strongly connected to HCP attitudes, with those who have more positive attitudes achieving greater levels of patient safety.
- Safety culture in the organizations takes care of patient safety which includes not only medical errors (Judgemental, diagnostic, prescribing, administration, etc) but also overall safety aspects.
- It has a positive impact on the overall organizational climate and culture too.

SAFETY CULTURE

“The product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that can determine the commitment to, and the style and proficiency of an organization’s health & safety management system.”

Psychological aspects

“How people feel”

Can be described as the “safety climate” of the organization, which is concerned with individual and group values, attitudes, and perceptions.

Behavioral aspects

“What people do”

Safety-related actions and behaviors

Situational aspects

“What the organization has”

Policies, procedures, regulations, organizational structures and the management systems.

INTRODUCTION

- Implementing a safety culture assessment involves the commitment of staff time and resources.
- Safety culture assessments are new tools in the patient safety improvement arsenal.
- They provide a metric by which the implicit shared understandings about “the way we do things around here” can be made visible and available as input for change as well. Even in the same medical setting, physicians and nurses may experience distinct duties and obstacles in practice, and their attitudes toward patient safety fluctuate based on the specific events they encounter.
- According to several medical error studies, one out of every 10 patients is harmed while receiving hospital care.
- According to worldwide surveys, the rate of adverse events ranged from 3.2 to 16.2 per 100 hospital admissions.
- The rate of adverse events affecting patients varies by state- in the United States, it ranges from 3.2 percent to 5.4 percent, 11.7 percent in the United Kingdom, 9 percent in Denmark, and an estimated 13 percent of patients in India.
- Hence, it's crucial to know what different hospital staff members think about patient safety. Thus, surveys using validated questionnaires are frequently used to assess PSC.

RATIONALE:

- The importance of a patient safety culture in reducing disputes and improving patient safety has been demonstrated in several studies. The first stage in identifying and explaining a logical safety culture is to examine patient safety culture in hospitals. India currently lacks a regulated structure for medical error prevention and required reporting. ⁽²⁾
- In India, there are minimal studies concerning patient safety culture. As a result, the rationale of this research is to learn about the patient safety culture at ABMH and to focus on improving patient safety-related factors.

AIM: To assess the current patient safety culture in the organization and give recommendations to make improvements further from the perspective of patients, employees, and management.

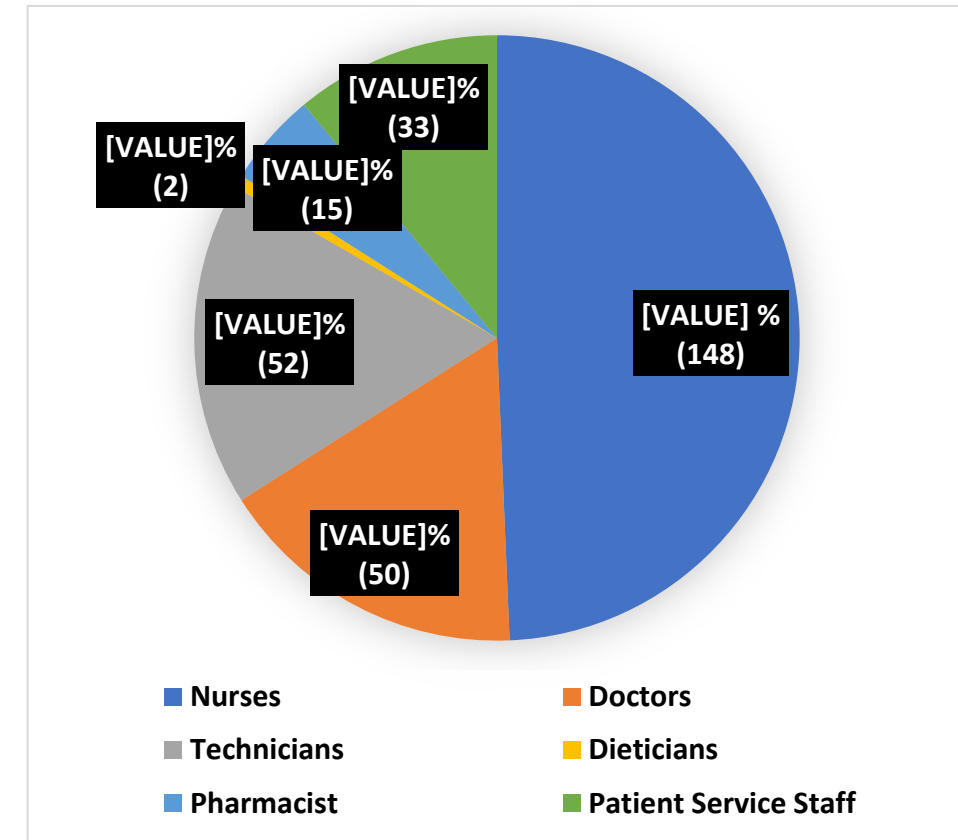
OBJECTIVES:

- To measure the patient safety culture among various categories of Hospital staff using the Hospital Survey on Patient Safety Culture Questionnaire.
- To compare the differences in patient safety culture among various hospital staff.
- To compare the differences in composite response rate among the staff of Intensive care units and other units/departments.

METHODOLOGY

- **Study design:** Descriptive cross-sectional study.
- **Sampling technique:** Purposive sampling technique was used.
- **Sample size:** The sample size was estimated to be 300 Healthcare providers.
- **Study tool:** AHRQ Hospital Survey Patient Safety Culture Questionnaire (Version 2.0). AHRQ Hospital survey patient safety culture Version 2.0 has 40 survey items:
 - ✓ Eight single-item measures
 - ✓ Thirty-two survey items grouped into 10 composite measures/dimensions that are groupings of two or more survey items that assess the same areas of patient safety culture.

HOSPITAL STAFF CATEGORIES



PATIENT SAFETY CULTURE COMPOSITE MEASURES		DEFINITION	NO. OF ITEMS
• Communication About Error	Staff are informed when errors occur, discuss ways to prevent errors, and are informed when changes are made.		3
• Communication Openness	Staff speak up if they see something unsafe and feel comfortable asking questions.		4
• Handoffs and Information Exchange	Important patient care information is transferred across hospital units and during shift changes.		3
• Hospital Management Support for Patient Safety	Hospital management shows that patient safety is a top priority and provides adequate resources for patient safety.		3
• Organizational Learning— Continuous Improvement	Work processes are regularly reviewed, changes are made to keep mistakes from happening again, and changes are evaluated.		3
• Reporting Patient Safety Events	Mistakes of the following types are reported: (1) mistakes caught and corrected before reaching the patient and (2) mistakes that could have harmed the patient but did not.		2
• Response to Error	Staff are treated fairly when they make mistakes and there is a focus on learning from mistakes and supporting staff involved in errors.		4
• Staffing and Work Pace	There are enough staff to handle the workload, staff work appropriate hours and do not feel rushed, and there is appropriate reliance on temporary/ float staff.		4
• Supervisor, Manager, or Clinical Leader Support for Patient Safety	Supervisors, managers, or clinical leaders consider staff suggestions for improving patient safety, do not encourage taking shortcuts, and take action to address patient safety concerns.		3

DATA COLLECTION & ANALYSIS :

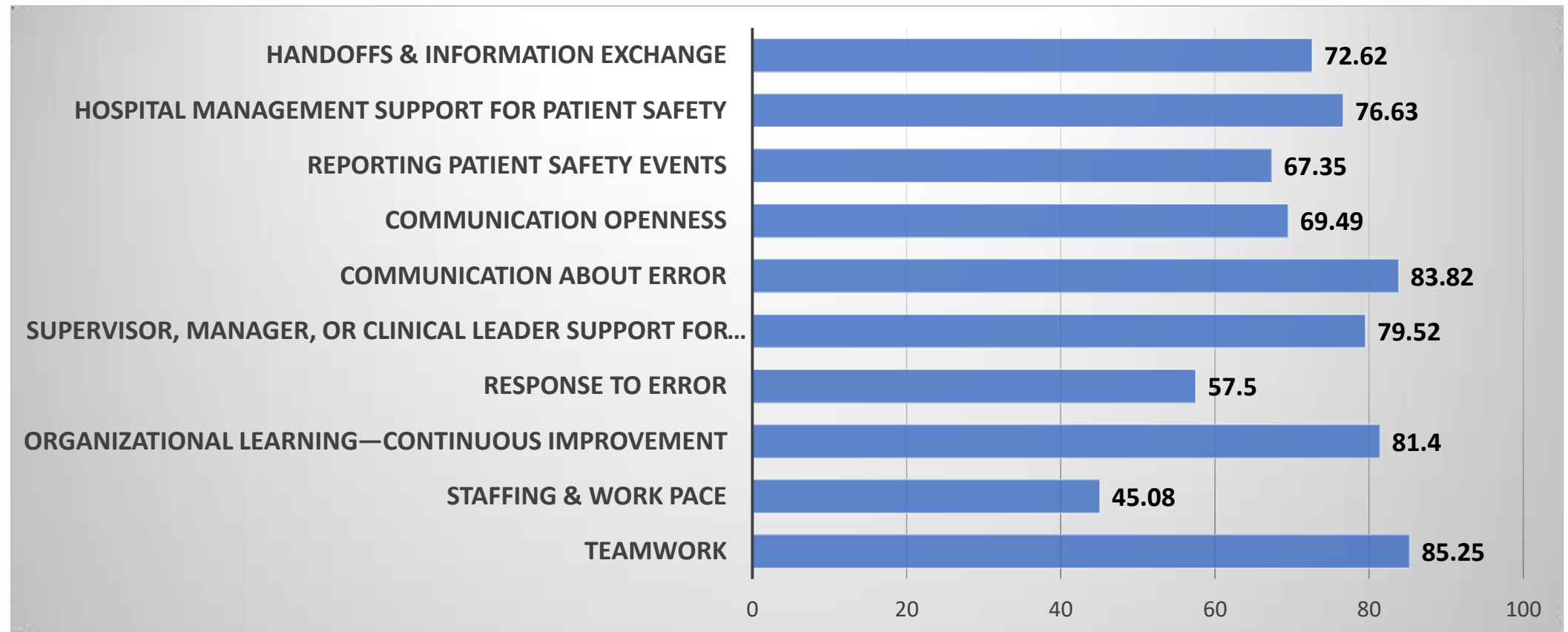
- Responses regarding various aspects of patient safety culture were graded on a five-point LIKERT scale (Strongly disagree, disagree, neither, agree, strongly agree /Never, rarely, sometimes, most of the time, always) and include a “Does not apply or Don’t know” response option.
- Composite scores were calculated for the 10 dimensions by obtaining the percentage of positive responses to items in each dimension. After calculating the composite scores, the safety culture dimensions then will be correlated to one another.
- Dimensions with a positive response rate of more than 75% will be used to identify areas of strength and potential. Dimensions with a positive response rate of less than 50% will be identified as areas of weakness.
- MS Excel (MS Office version 2007 developed by Microsoft, Redmond, WA) was used for data analysis. Every category variable was displayed as a frequency and percentage.

RESULTS :

Table 1 : Background information of survey participants

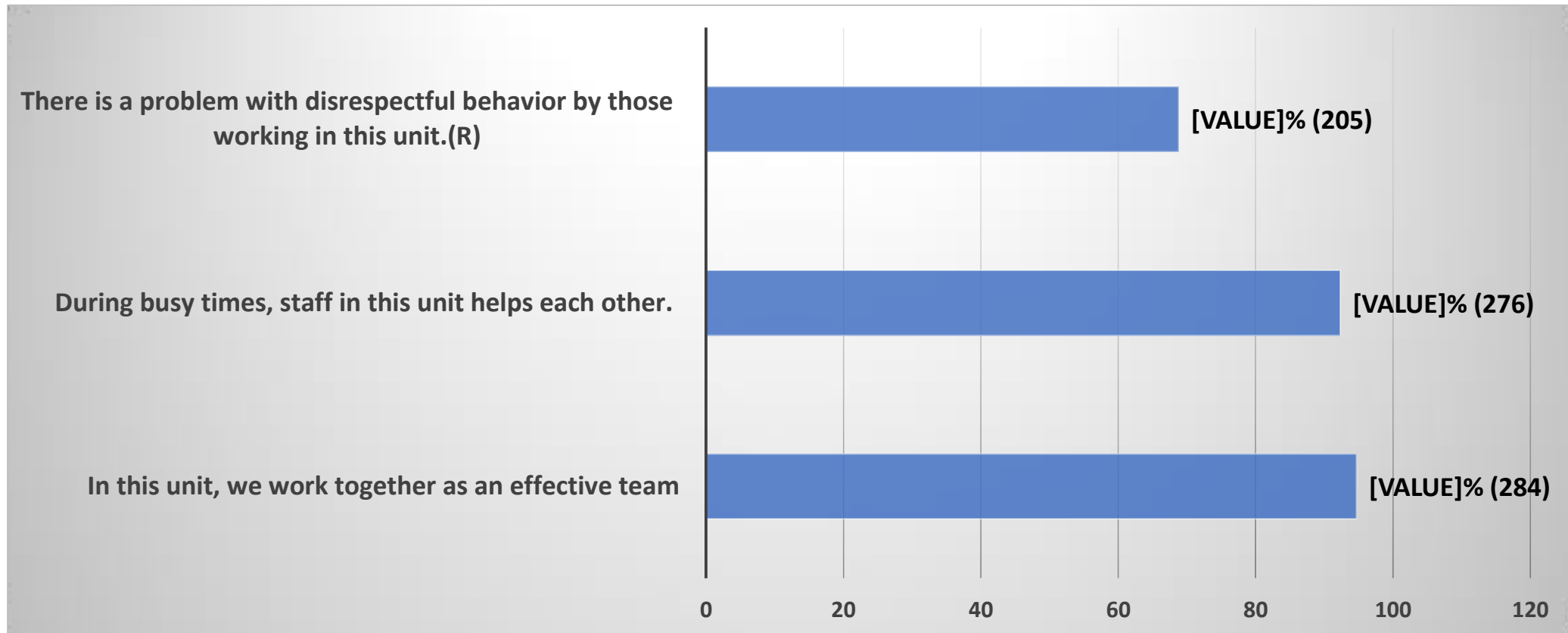
Sr. No	Variables	No (n=300)	Percentage (%)
1.	Current departmental work area/unit tenure		
	<1 year	146	48.67
	1 to 5 years	132	44.00
	6 to 10 years	17	5.67
	>11 years	5	1.67
2.	Tenure in current specialty/profession		
	<1 year	132	44.00
	1 to 5 years	134	44.67
	6 to 10 years	23	7.67
	>11 years	11	3.67
3.	Working hours per week		
	<30 hours	6	2.00
	30 – 40 hours	19	6.33
	>40 hours	275	91.67

DIMENSIONS OF PATIENT SAFETY CULTURE :



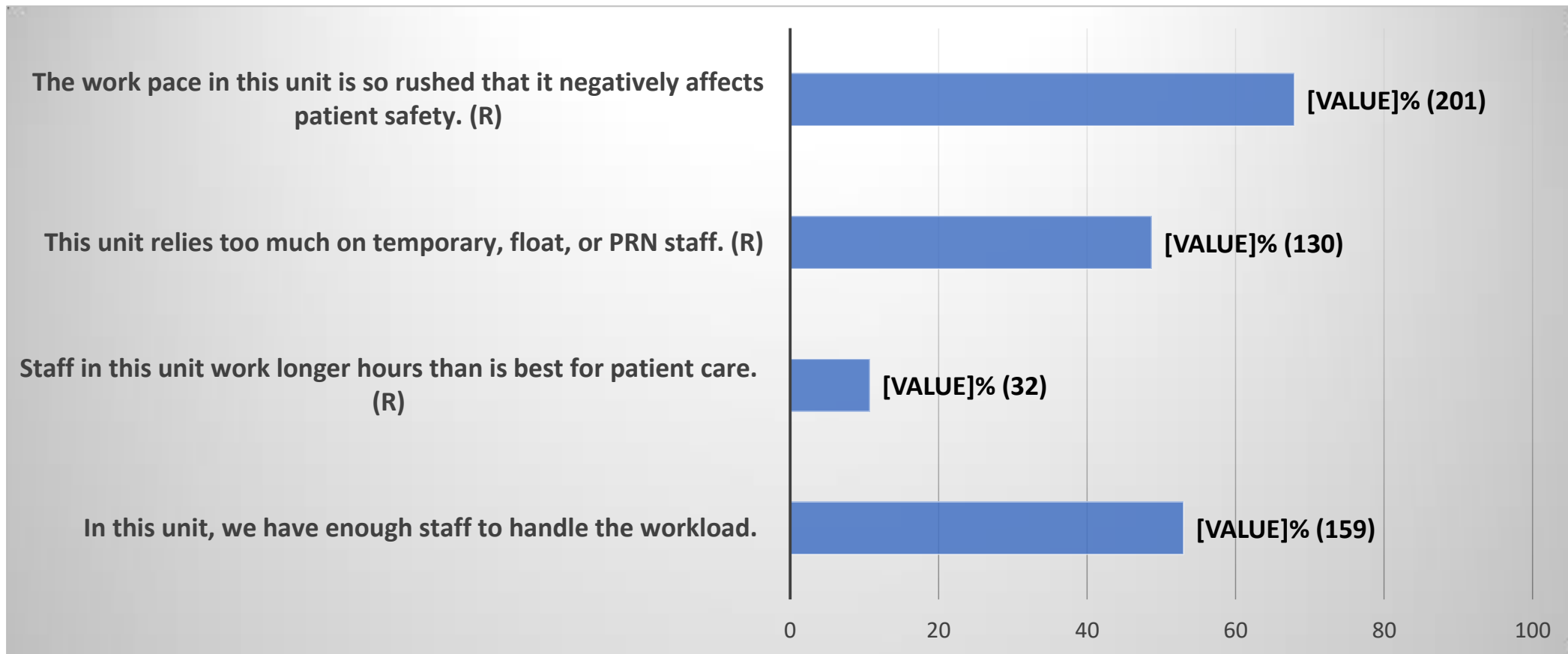
It was found that dimension teamwork scored the highest percentage positive response of 85.25%. Its highest score indicates unity and coordination among all units. Staffing & work pace scored the lowest percentage positive response of 45.08% . Its lowest percentage refers to inadequate manpower strength thereby affecting patient care.

TEAMWORK



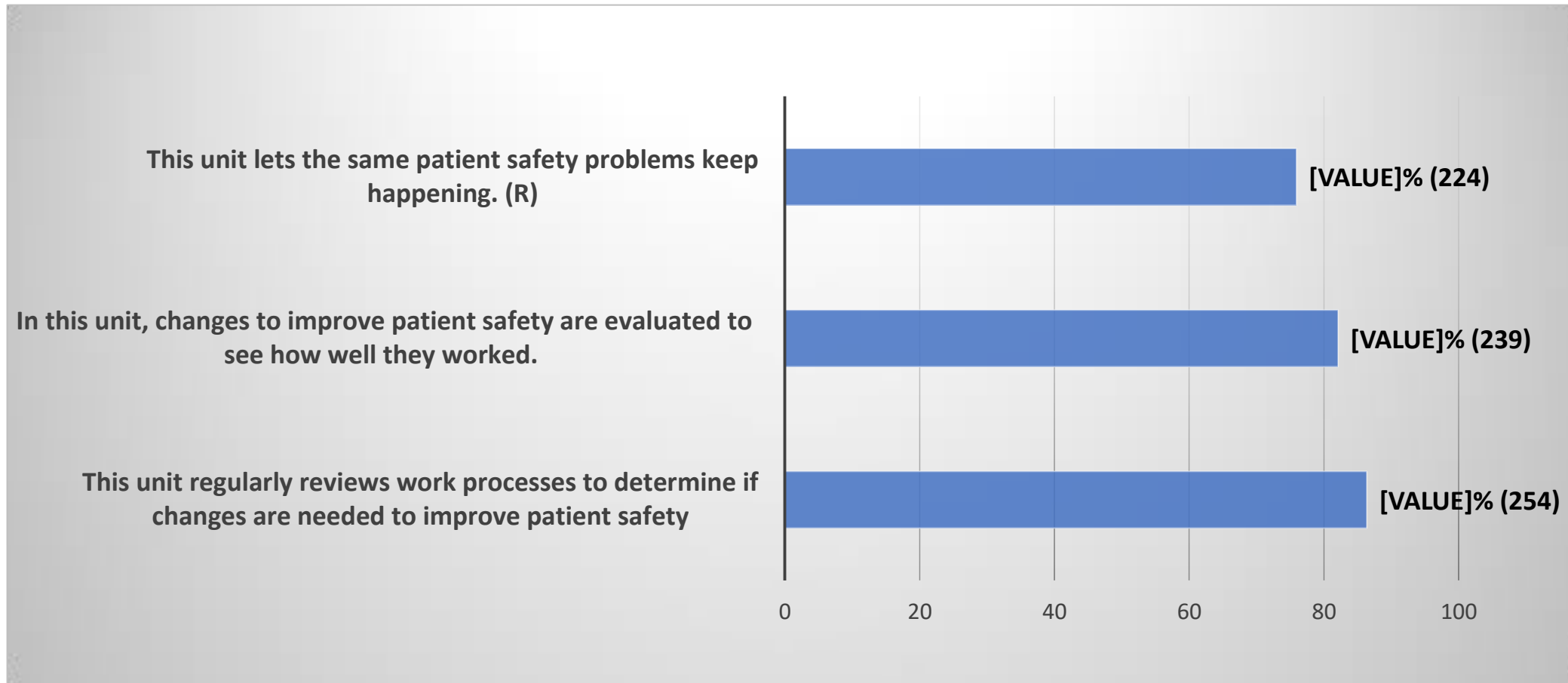
Approximately 31% of study population feels that they face disrespect by those working with them.

STAFFING & WORK PACE

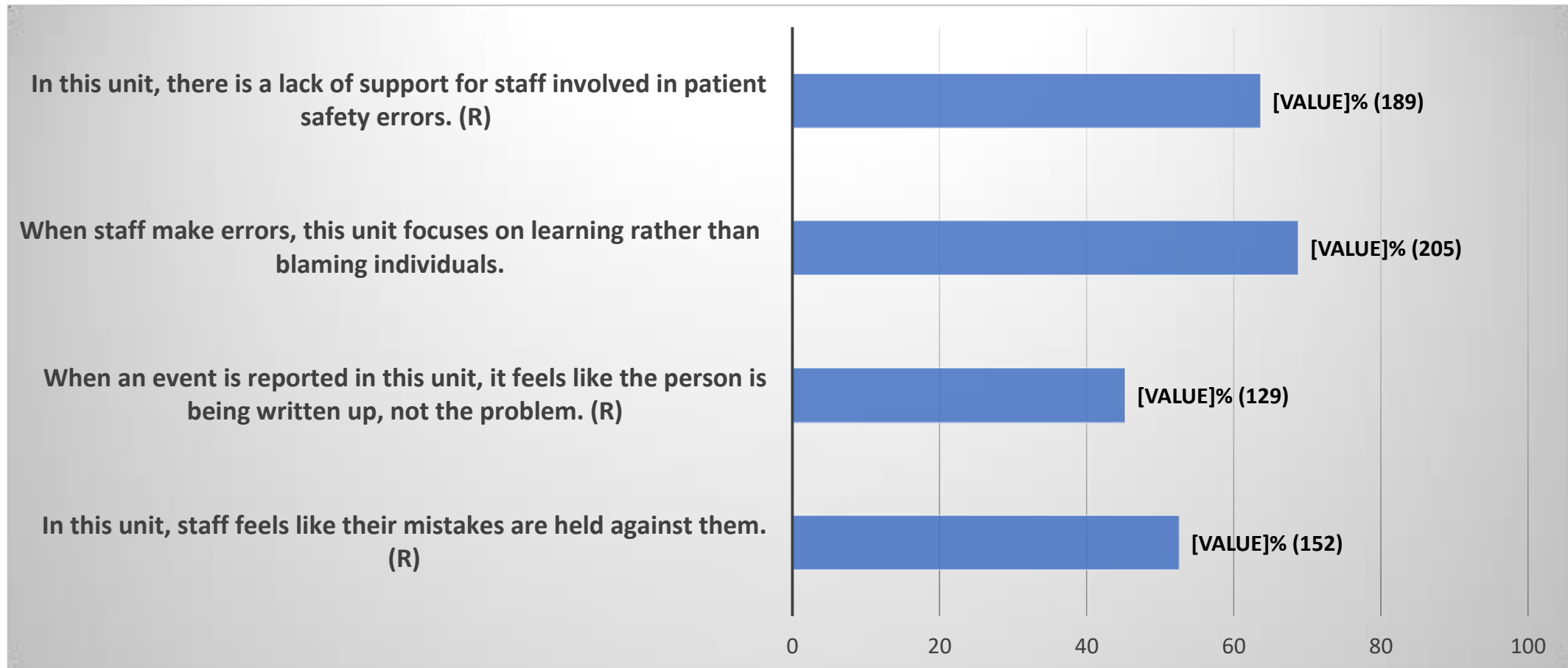


89% of the study participants agree that they work for longer hours than is best for patient care.

ORGANISATIONAL LEARNING – CONTINUOUS IMPROVEMENT

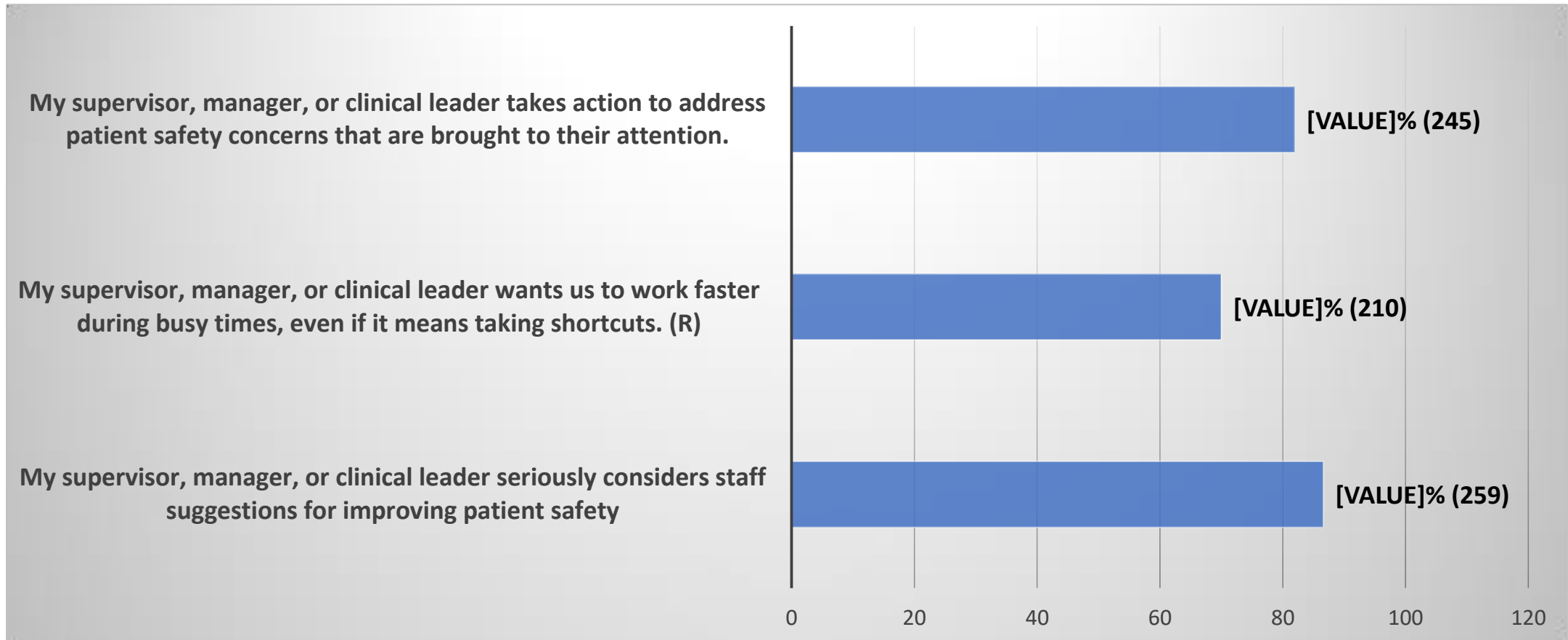


RESPONSE TO ERROR



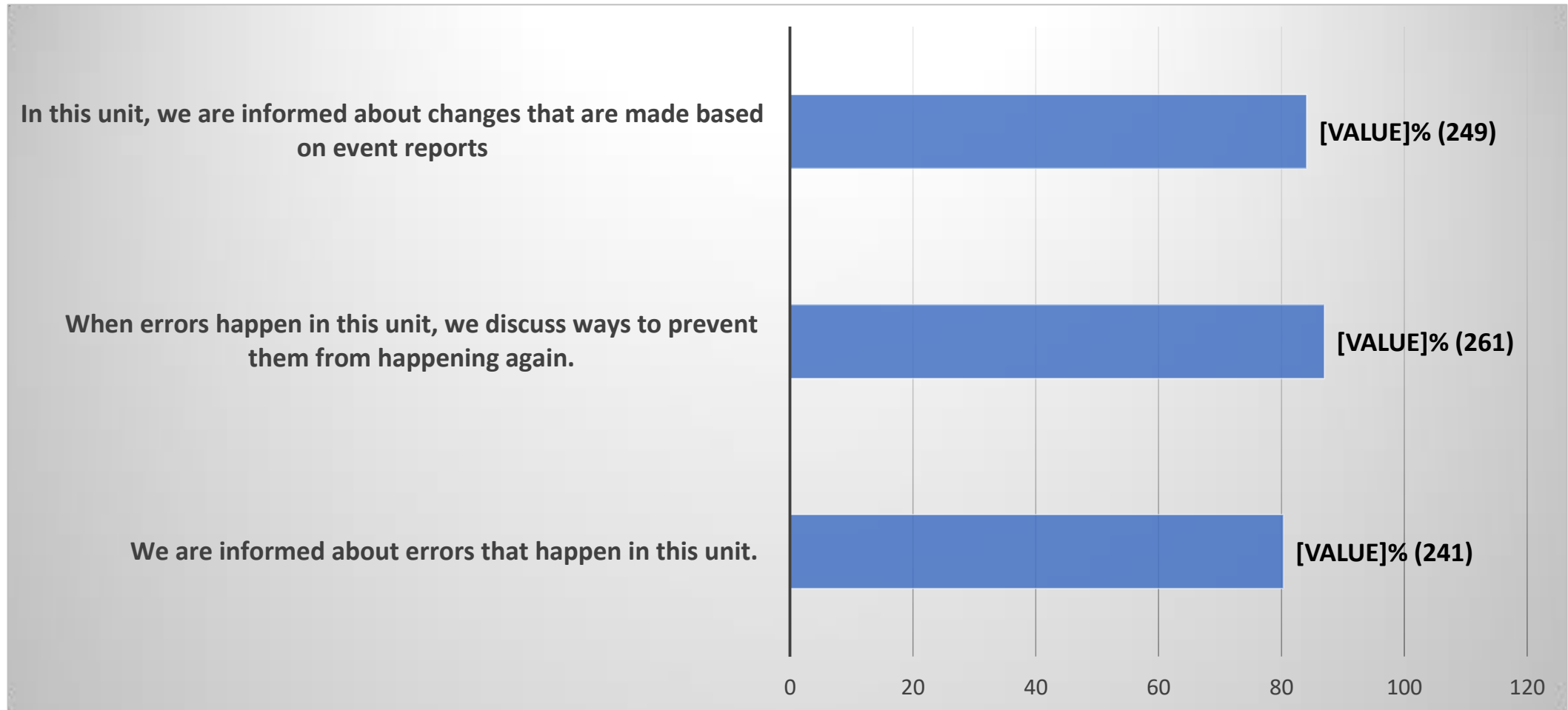
55% of the participants feel that when at fault instead of focusing on the problem the person is targeted.

SUPERVISOR/MANAGER SUPPORT FOR PATIENT SAFETY

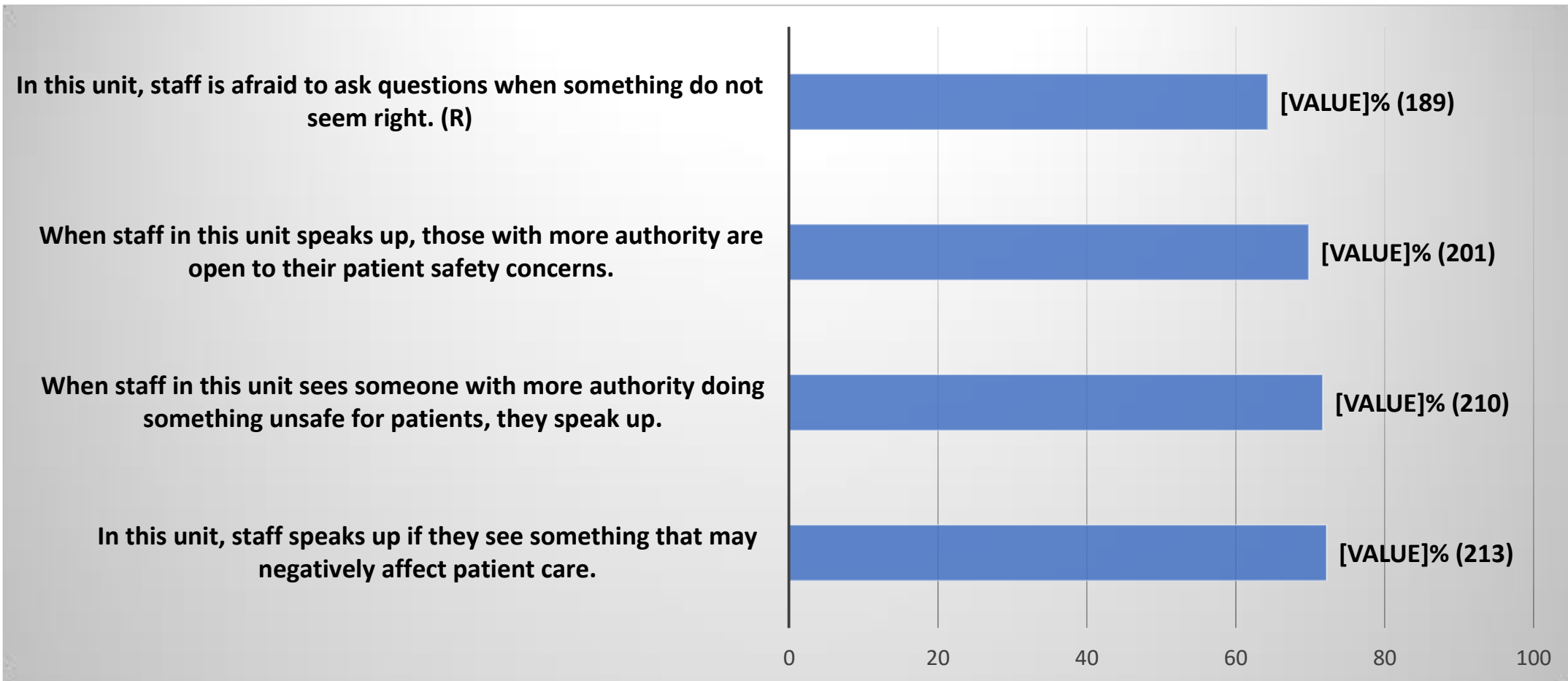


30% of the participants agree on the fact that their seniors ask them to opt for shortcuts during busy hours.

COMMUNICATION ABOUT ERROR

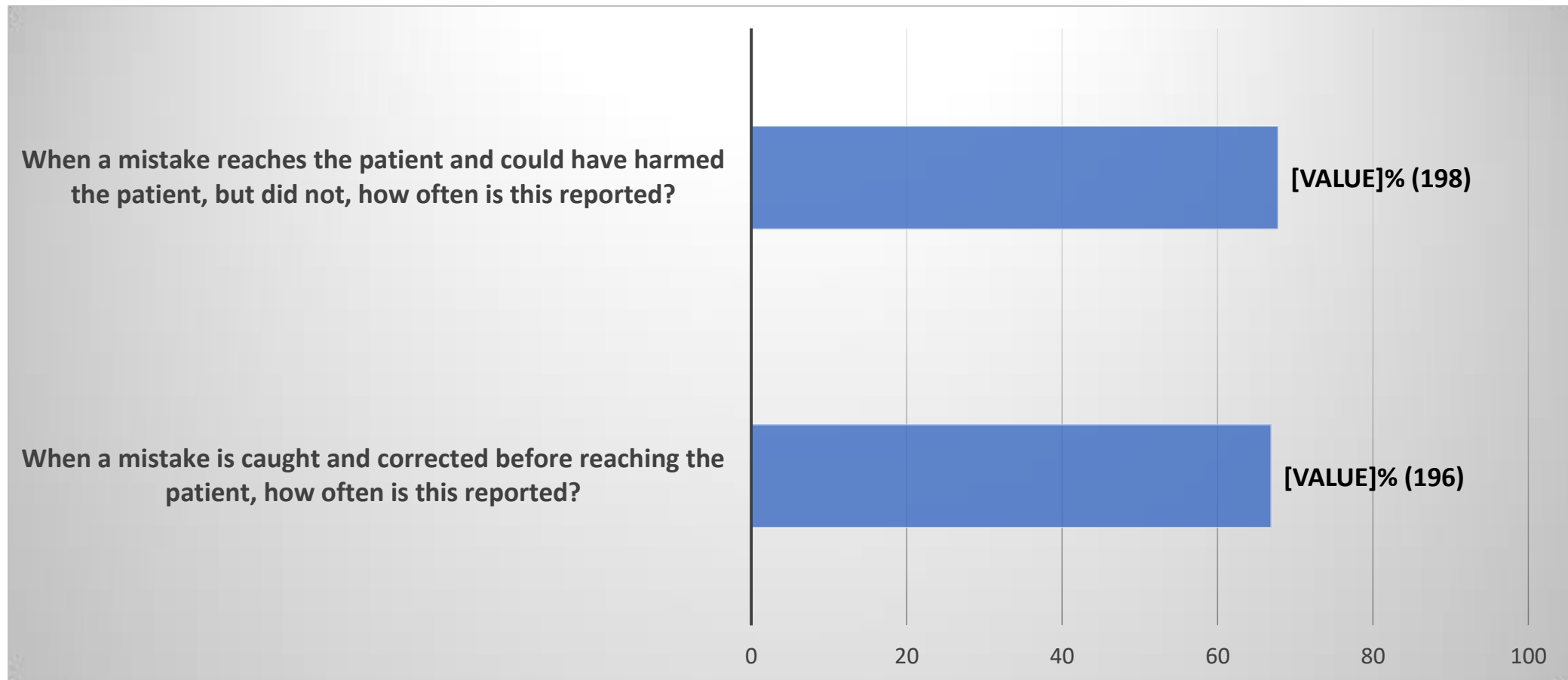


COMMUNICATION OPENNESS



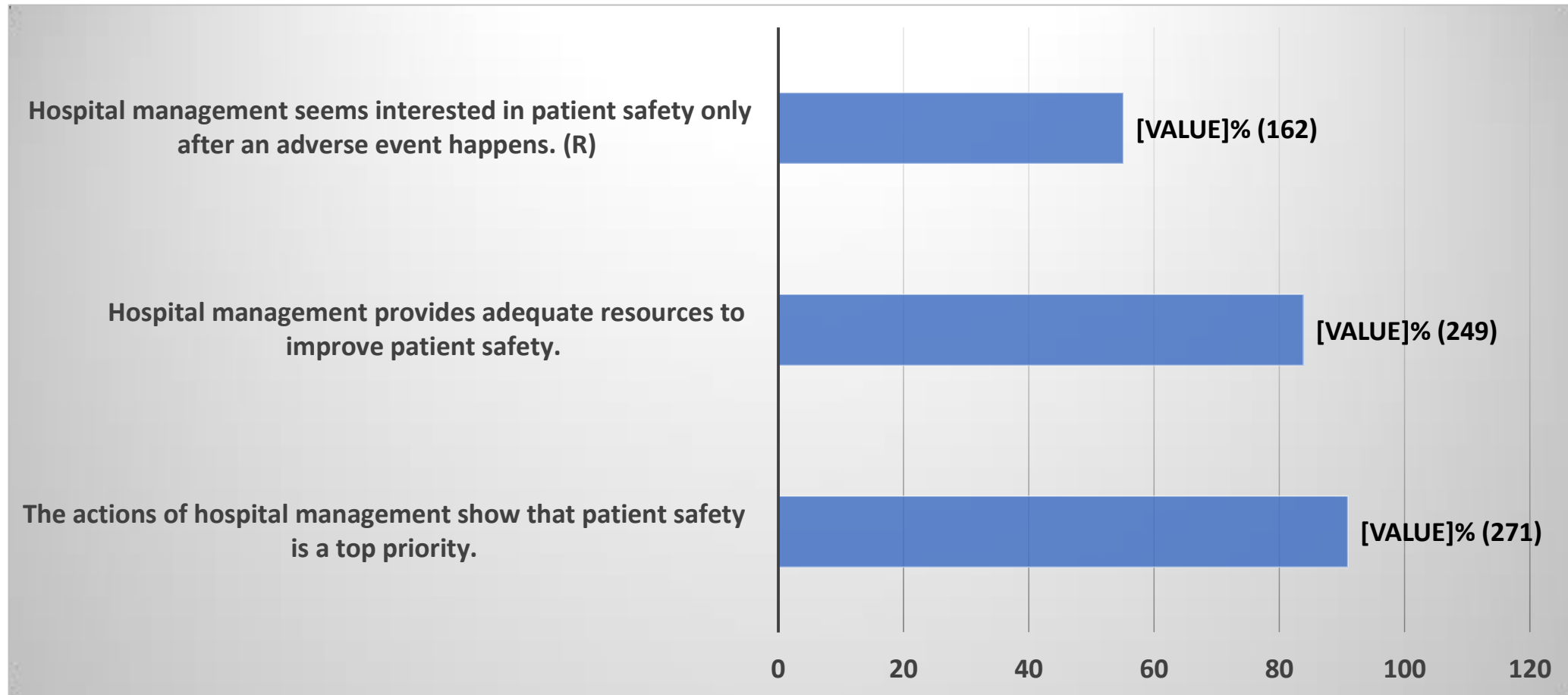
36% of the study population responded that they are afraid to ask questions when something does not seem right to them.

REPORTING PATIENT SAFETY EVENTS



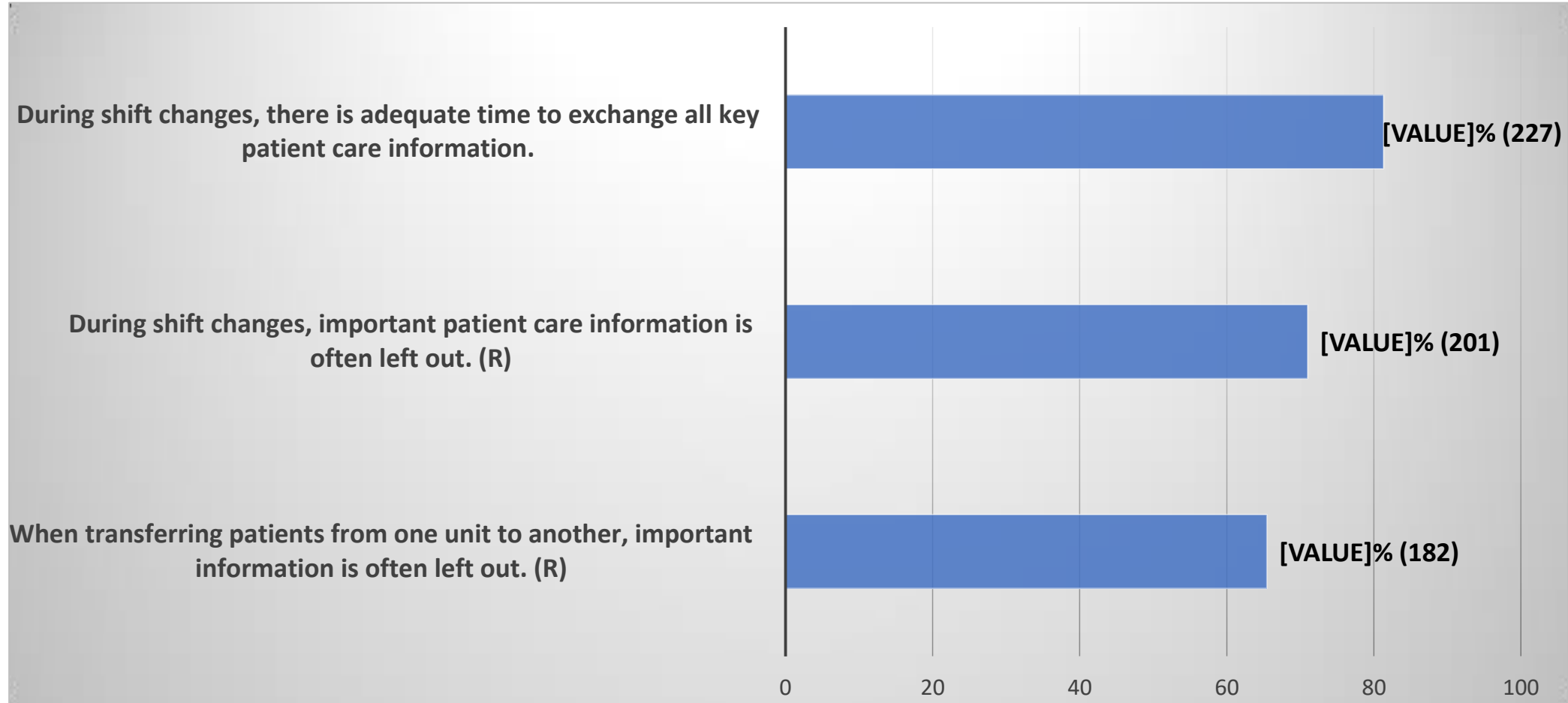
Around 34% of the respondents report patient safety events either rarely or sometimes.

HOSPITAL MANAGEMENT SUPPORT FOR PATIENT SAFETY



45% of the participants feel that Hospital management seems interested in patient safety only after an adverse event happens.

HANDOFFS & INFORMATION EXCHANGE



Roughly 35% of the respondents agree to the fact that important information is missed out during inter-departmental transfer of patients

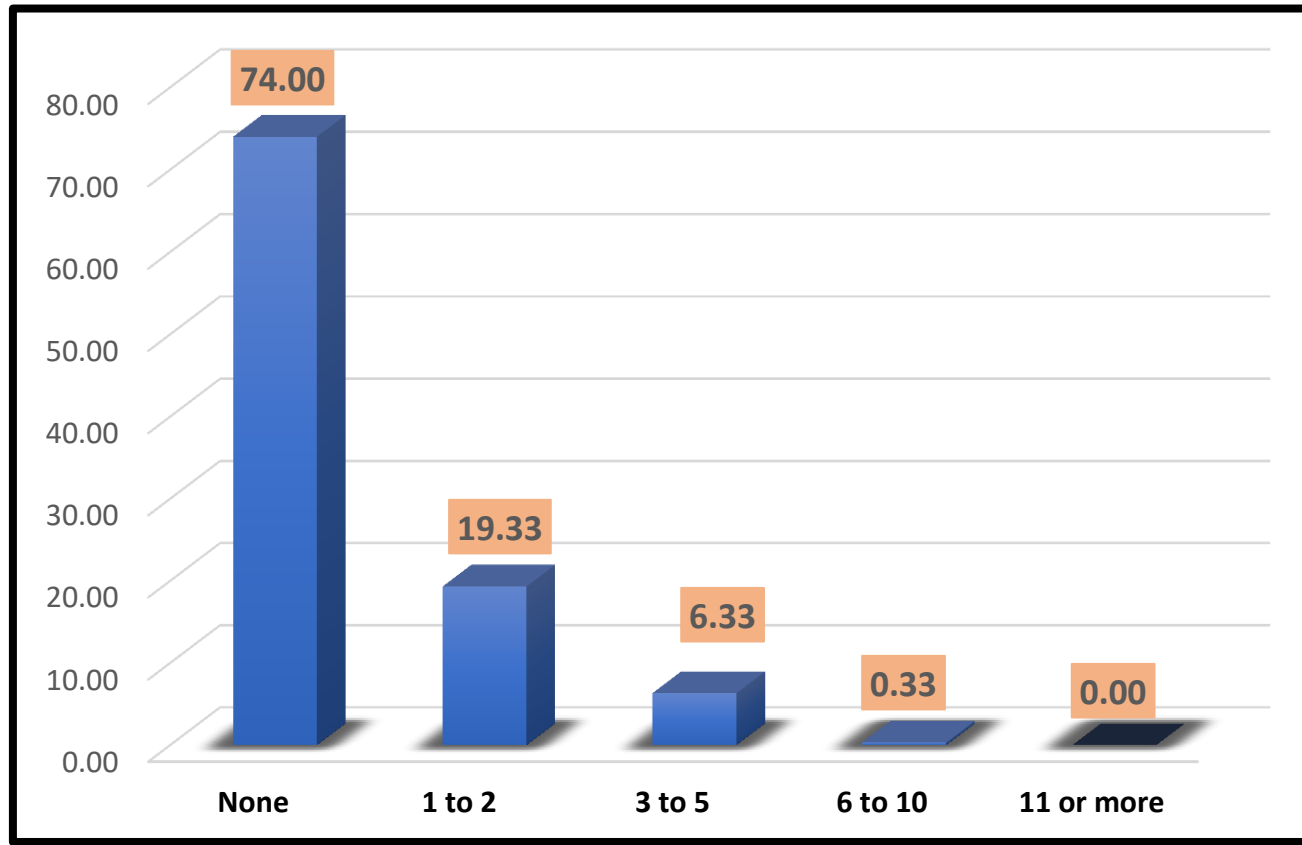
Table 2: Comparison of composite response rate among the staff of Intensive care units and other departments.

Sr.no	Items of Patient safety culture dimensions	Staff working in different Intensive care unit (n=54)	Staff working in other dept/units (n=144)
		Positive Response % (n)	Positive Response % (n)
1	Teamwork	85.18	85.41
2	Staffing and Work Pace	33.54	46
3	Organizational Learning—Continuous Improvement	85.06	83.52
4	Response to Error	55.43	57.56
5	Supervisor, Manager, or Clinical Leader Support for Patient Safety	74.69	80.09
6	Communication About Error	82.71	87.04
7	Communication Openness	66.37	71.51
8	Reporting Patient Safety Events	70.37	66.66
9	Hospital Management Support for Patient Safety	77.36	75.81
10	Handoffs and Information Exchange	74.84	71.67

Table 3: Average composite positive percentage of “patient safety culture” among different Health care providers

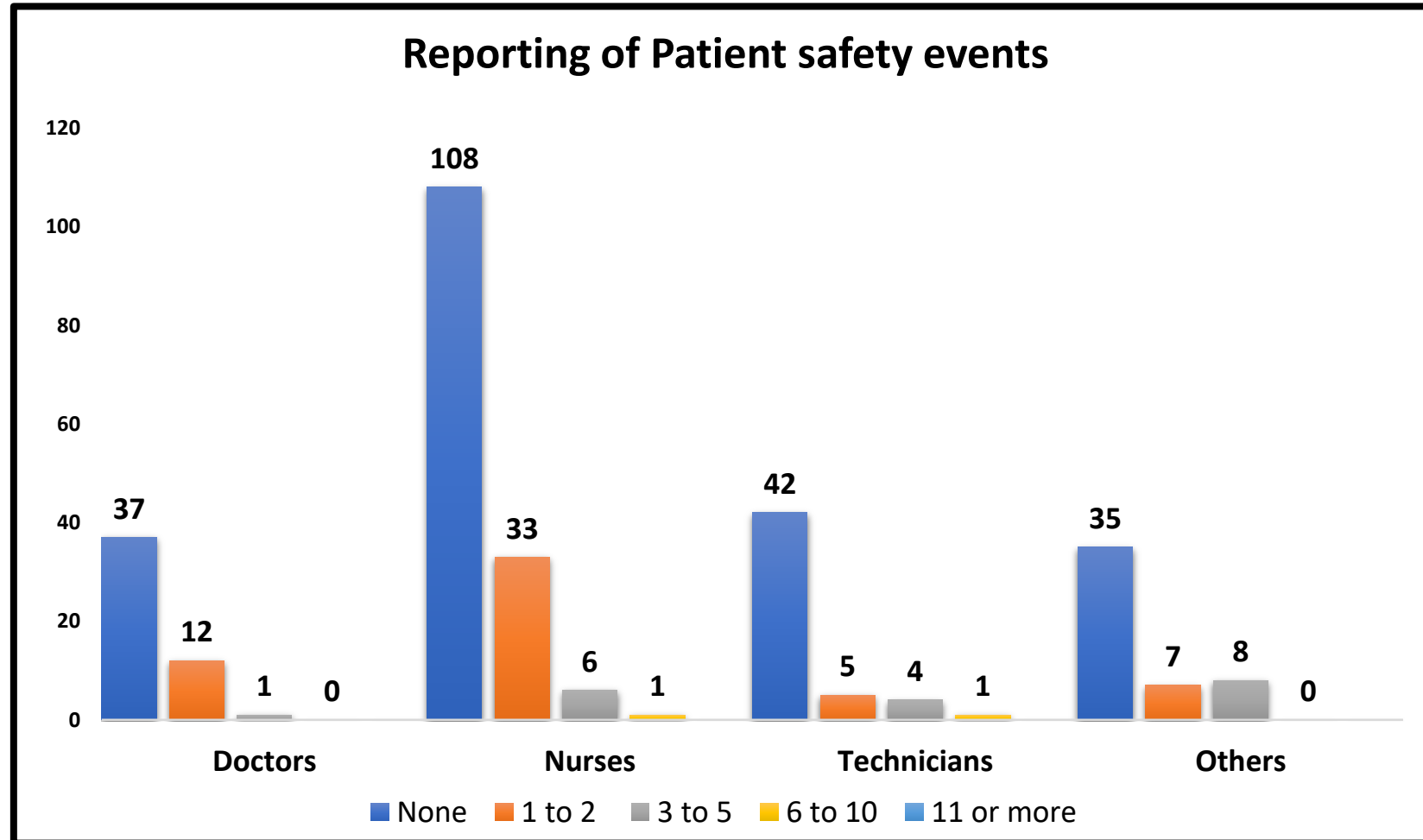
Sr.no	Patient safety culture dimensions	Average Composite Positive Response Percentage			
		Doctors (n=50)	Nurses (n=148)	Technicians (n=52)	Others (n=50)
1	Teamwork	76.66	88.50	86.54	82.94
2	Staffing and Work Pace	41.22	45.78	56.80	43.41
3	Organizational Learning—Continuous Improvement	82.99	82.46	82.26	76.12
4	Response to Error	49.42	59.67	58.85	58.08
5	Supervisor, Manager, or Clinical Leader Support for Patient Safety	75.33	80.12	84.62	76.67
6	Communication About Error	83.33	86.91	89.74	68.61
7	Communication Openness	69.60	71.17	66.80	66.89
8	Reporting Patient Safety Events	60.02	72.28	67.31	59.58
9	Hospital Management Support for Patient Safety	71.06	78.52	83.97	68.61
10	Handoffs and Information Exchange	65.12	75.53	76.47	64.94
Total		67.47	74.09	75.34	66.58

NUMBER OF EVENTS REPORTED



Number of events	Frequency (n)	%
None	222	74.00
1 to 2	58	19.33
3 to 5	19	6.33
6 to 10	1	0.33
11 or more	0	0.00

NUMBER OF EVENTS REPORTED BY DIFFERENT HEALTHCARE PROVIDERS



PATIENT SAFETY RATING OF WORK AREA / UNIT



Number of events	Frequency (n)	%
Excellent	102	34.00
Very Good	106	35.33
Good	77	25.67
Fair	14	4.67
Poor	1	0.33

DISCUSSION:

- Healthcare businesses increasingly realize how critical it is to change company culture to increase patient safety.
- A key step in enhancing patient safety is establishing the "appropriate patient safety culture," which may be determined by many surveys, including the "safety attitude questionnaire (SAQ)" and the "HSOPS questionnaire," both of which have comparable levels of reliability and predictive validity.
- In all studies, the dimension that had the most favorable reaction was "teamwork within the unit." ^(3,7,10) The majority of studies, however, revealed a low positive response in the dimension of "teamwork across the unit." ^(2,10) The current study also showed a highly favorable response in "teamwork "(85.25 %).
- In the present study, Staffing and work pace (45.08 %) had the lowest percentage of positive responses. Staffing had the lowest proportion of favorable responses of any dimension in the study by Ennas C et al (34.6%). ⁽⁷⁾ Meena KS et al demonstrated that dimension staffing received the least positive response, 15.06 %. ⁽²⁾
- Response to errors had the second-lowest percentage of positive responses in the current survey, at 57.5 %. Ennas C et al study revealed that nonpunitive responses to errors resulted in a percentage positive reaction of 45.7 %, which is lower than the current study's findings. ⁽⁷⁾

DISCUSSION:

- It is necessary to improve and standardize event reporting because, in the current study, a huge percentage of survey respondents (74%) did not report any events in the previous year. This finding may be related to a decrease in the frequency of adverse outcomes or a reluctance on the part of staff to report any events they observed. 47 % of the subjects reported no events, according to research by Rao MV et al. ⁽¹⁰⁾
- The majority of the patient safety culture aspects, except "staffing & work pace," showed no variation in response rates between staff from intensive care units and other departments. The lowest positive response rate is due to insufficient staffing, which negatively impacts patient care. In contrast to this finding, a study by Goyal RC et al. revealed a significant difference in the dimensions of "Feedback and Communication About Error," "Teamwork Across Hospital Units," and "Hospital Handoffs & Transitions" when the response rates of ICU staff members and those from other departments were compared. ⁽⁸⁾
- Even though many studies have been done on HCPs and patient safety, very few of these studies have included responses based on distinct HCP cadres, and even fewer hospital surveys have grouped the responses according to hospital contexts like the emergency room, intensive care unit, and operating rooms.

LIMITATIONS:

Selection bias might have occurred as the staff was selected randomly from the departments.

Our research was anonymous to make participants as comfortable with responding honestly as possible. However, it is possible that some of our participants were not fully honest and that some employees did not wish to respond because they did not feel comfortable telling the truth.

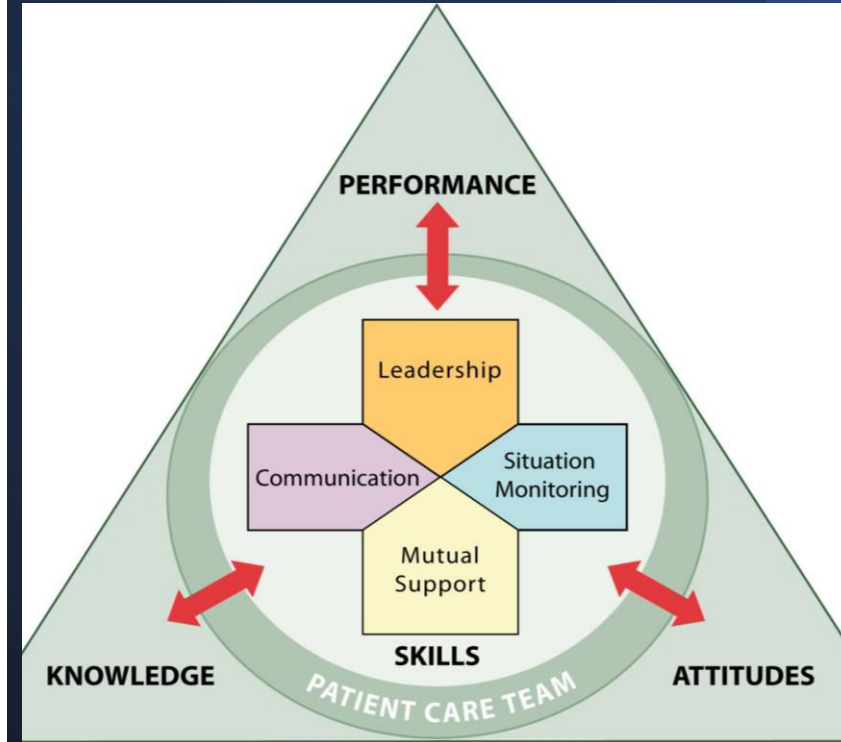
Another limitation is that answering to HSOPSC may be tiring, and respondents may lose interest and answer questions offhandedly. This results in reporting bias.

The use of a self-reported questionnaire introduced the social desirability biases.

CONCLUSION:

- Instilling patient safety cultures among all staff members involved in healthcare delivery is of utmost importance .
- To implement efficient interventions and achieve a high level of patient safety, the instrument "Hospital Survey on Patient Safety Culture (HSOPSC) Questionnaire" assists in analyzing this culture in a healthcare facility.
- The study's findings showed that although there is a strong sense of teamwork among the units, staffing in ICUs must be improved since healthcare personnel is overworked owing to a staffing shortfall.
- About 52% of the staff in our study had an affirmative response to the fact that their mistakes were held against them and that they were held accountable for adverse outcomes. Instead of a punitive response, systems must assure that all staff who reports the adverse events are supported and acknowledged for their contribution and are continually encouraged by the knowledge that their reporting has led to safer conditions.
- There should be a correct balance between individual responsibility and punishment for an unintended human error. Training sessions should be included to raise awareness among managers and staff about the value of creating a non-punitive atmosphere for reporting accidents or mistakes, as well as how to do so.

- In order to overcome the difficulties during the transfer of patients across the units/work areas, there is a need to emphasize the importance of standardized handoff protocols.
- Communication openness & reporting patient safety events also has a potential for improvement. The results of this study point to the need for initiatives throughout the hospital hierarchy to improve mistake reporting mechanisms within the hospital context through polite and effective interprofessional dialogue, where reporting errors is rewarded and encouraged.
- Enhancing patient safety is essential to improving safety in healthcare. To enhance the system, it is important to address some aspects that HCPs claimed to have adverse reactions to in this study.
- Holding regular interdisciplinary focused group meetings and staff training sessions, simulation exercises on patient safety culture, and strengthening awareness campaigns on the blame-free, online, and handwritten error reporting system are a few strategies that can improve outcomes in these weaker dimensions.



RECOMMENDATIONS (Based on RCA for staffing issue in nurses)

- The study in conclusion established that there is high spirit of teamwork within the units however there is a need to improve staffing in ICUs as healthcare providers are overworked due to shortage of staff. So, an observation study on Root Cause Analysis for why the nursing staff claim that they work longer hours than is best for patient care was done. Hence, Certain measures should be taken to improve the staffing and workload of nurses in ICUs :

- Floating nurses (who are efficiently trained in ICU) could be provided to the department for handling excess patient load and lowering the workload of the present staff of ICUs.
- Relatively free OPD staff can be used as pull out to ICUs and wards to handle workload like serving food, bedside assistance, sampling, recording vitals, etc.
- Attention should be given in order to provide an adequate number of nursing staff as there are mostly just 3 nursing staff present there. More double duties were observed in SICU (8 incidences of double duties during 15 days duration were observed in morning shift due to inadequate SICU number of staff/absenteeism.) as compared to other ICUs.



Thank You.