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Original Article

Patient safety culture: a survey of private sector tertiary care hospital of Lahore, Pakistan

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ABSTRACT

Patient safety is a critical component to improving healthcare quality. Due to the potential of growing recognition and importance of establishing a patient safety culture within healthcare organizations, assessing existing patient safety culture is a prerequisite **Objective**: To assess the patient safety culture at a private tertiary hospital in Lahore from the perspectives of doctors and nurses. **Methods**: Data from 120 nurses and doctors of the private hospital was collected by using the Hospital Survey of Patient Safety Culture (HSOPSC).The respondent's demographic characteristics and study variables influencing patient safety culture were presented through descriptive statistics, and a *Chi-square* test was applied to identify the variable influencing patient safety.**Results**: A positive score for different dimensions ranging from 32.1% to 86.5% was observed. The dimension of organizational learning-continuous improvement (86.5%) and teamwork within units (81.7%) had the highest scores as compared to teamwork across units (74.7%), feedback and communication about the error (73.7%), management support for patient safety (71.6%), supervisor/ manager expectations and actions promoting patient safety (69.8%), communication openness (65.4%), overall perceptions of patient safety (62%), frequency of events reported (53.7%), handoffs and transitions (49.9%), staffing (33.3%) and non-punitive response to errors (32.1%).**Conclusions**: The current study's findings highlighted a less positive attitude of doctors and nurses towards patient safety culture within their organizations. The outcomes of the present study could be used for designing and establishing interventions to improve patient safety practices in similar tertiary care settings across Pakistan.

INTRODUCTION

An adverse event may happen due to errors in healthcare settings and may induce negative consequences relatively at a large scale. A document "To err is human" published in 1990 has initiated a debate on the significant issue of patient safety [1,2]. After a successful discussion over 15 years, safe healthcare has become a policy goal of government and standard private hospitals around the globe [3,4,5]. The World Health Organization (WHO) stated that patient safety reduces the risk of redundant harms associated with healthcare to an acceptable level. Patient Safety Culture (PSC) is a public health concern in developed and developing countries worldwide [6]. As per WHO reports, one in ten patients is harmed in a healthcare setting, with approximately 43 million patient safety incidences annually. Consequently, results of inadequate provision of patient safety include loss of money, long duration of hospital stays of the patient, waste of budget and resources of a hospital; that ultimately affects the health sector as well as country's economy [6,7]. Therefore, it is imperative to apprehend the perception of medical practitioners about their PSC and explore different determinants influencing the success in providing patients with the safest and highest quality of healthcare by implementing safe practices. To promote PSC, healthcare practitioners must have appropriate awareness and training sessions about patient safety and its consequences to adverse events [8].

Several determinants can investigate patient safety culture within a medical setting. These determinants may include organizational factors that may consist of the individual nature of perception and management skills. Assessment of existing healthcare safety culture is the first stage and crucial for developing robust and positive safety culture [9]. For this, it is essential to explore the attitude and beliefs of the practitioners, staff, and administration of the healthcare

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organization concerning patient safety and to be able to strengthen intervention strategies that will subsequently promote patient safety culture.

Despite the increasing curiosity and interest in studying and monitoring PSC within healthcare organizations around the globe, there is an absolute lack of information on PSC from Pakistan. Moreover, little attention has been given to exploring and describing perceptions, expectations, and behaviour of medical practitioners related to PSC. In Pakistan, the lack of implementation of SOPs and other standard procedures resulted in significant variation in clinical practice, which subsequently decreased medical care's effectiveness and safety. So it is estimated that due to these factors, there might be a more significant burden of unsafe care and lack of PSC in Pakistan [10,11]. Given the crucial role of PSC and gaps related to its information in Pakistan, the current study was designed to explore PSC at private tertiary care settings using the hospital survey on patient safety culture (HSOPSC) tool.

METHODS:

Study design and setting:

The current cross-sectional study was conducted to assess the patient safety culture at a private tertiary care hospital in Lahore during November 2019- November 2020. The tertiary care hospital was selected since it caters to an enormous population, has complex processes, multiple departments, an extensive infrastructure, and more human resources. All these factors make the tertiary care hospital a complex facility and increase the likelihood of human errors and adverse events. The current study included a tertiary care hospital with a high patient turnover with more than 300-bed capacities and accredited with Punjab Healthcare Commission (PHCC) and had 15 years of functional experience. During this cross-sectional study, data were collected from 120 nurses and doctors. According to inclusion criteria, these participants were selected through a systematic random sampling method. As per the sampling technique, 30% of healthcare professionals, including nurses and doctors, were interviewed using the HSOPSC tool. Before starting the survey, healthcare practitioners were asked for informed consent.

Survey tool/ research instrument:

Patient safety culture was assessed through a validated tool named the Hospital Survey of Patient Safety Culture (HSOPSC) developed by the Agency for Healthcare Research and Quality (AHRQ). These safety culture dimensions were categorized into different units at the hospital level and outcome measures. This tool was comprised of 12 dimensions of patient safety culture, including communication openness, feedback, and communication about errors, staffing, frequency of event reporting, supervisor expectation and action promoting safety, handoffs and transitions, management support for patient safety, non-punitive response to error, organizational learning-continuous improvement, teamwork within and across units, and overall perception of patient safety. The instructions and queries were written in English, and targeted participants could speak and write in English.

Data collection/questionnaire:

After receiving proper informed consent, the adopted survey questionnaire was distributed to nurses and doctors through personal delivery in a tertiary care hospital. All dimensions of patient safety consisted of 3 or 4 questions. These questions were related to demographic characteristics, primary work and responsibilities of targeted participants, regular practices of the hospital, staff satisfaction, management cooperation, hospital working environment, monitoring and reporting of an adverse event, patient safety grade, and promotion of patient safety. The questions were assessed on a 5-point Likert scale with scoring ranging from 1 to 5 as 1 (strongly disagree), 2 (disagree), 3(neither/ neutral), 4(agree), 5(strongly agree).

Data Analysis:

Data were entered and analysed for each dimension by calculating a score that represents the average percentage of positive and negative responses. The questions with a positive formulation and answers like "agreed" and "strongly agreed" were considered positive, while answers like "disagree" and "strongly disagree" were deemed negative for patient safety culture. The dimension with a score of ≤50% was considered improved, while the dimension with a score of ≥ 75% was considered developed [12]. Descriptive statistics explored the association of demographic characteristics and other study variables influencing patient safety culture. The respondent's demographic characteristics were presented through descriptive statistics. Based on user guide instructions published by AHRQ, frequencies and positive responses rate were determined [12]. A chi-square test was applied (SPSS software version 21) at the $p \leq 0.05$ significant level to identify the variable influence on patient safety care.

RESULTS:

Socio-demographic characteristics of respondents

In the current study, 35 medical doctors (29.2%) and 85 registered nurses (70.8%) participated to assess PSC in a private tertiary care hospital in Lahore. Among these, most of respondents worked in Medicine Unit [n = 39 (32.5%)] followed by Emergency Unit [n = 23 (19.2%)], Surgery Unit [n = 10 (8.3%)], ICU [n = 9 (7.5%)], Nursing Management Unit [n = 9 (7.5%)], Paediatrics Unit [n = 5 (4.2%)], Dermatology Unit [n = 5 (4.2%)], Anaesthesiology Unit [n = 3 (2.5%)], Obstetrics Unit [n = 2 (1.6%)], Radiology Unit [n = 2 (1.6%)], Psychiatrics, Cardiology, Ophthalmology Unit [each n = 1 (0.8%)] and Orthopaedics Units [n = 0 (0%)], while 8.3% (n = 10) of

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participants did not response. Among these, most of the respondents [n = 59 (49.2%)] had less than one year of professional experience followed by 1 to 5 years [n = 39 (32.5%)], 6 to 10 years [n = 14 (11.6%)], 11 to 15 years [n = 4 (3.3%)], 16 to 20 years [n = 2 (1.6%)] while few respondents [n = 2 (1.6%)] had 21 years or more professional experience (Table 1).

Among all, most of respondents were working from few months [n = 62 (51.6%)] followed by 1 to 5 years [n = 38 (31.6%)], 6 to 10 years [n = 15 (12.5%)], 11 to 15 years [n = 3 (2.5%)], 16 to 20 years [n = 0 (0%)] with least numbers of respondents in 21 years or above category [n = 2 (1.6%)]. Most of the respondents [n = 65 (54.2%)] worked 40 to 59 hours per week followed by 100 hours per week [n = 15 (12.5%)], 20 to 39 hours per week [n = 13 (10.8%)], 60 to 79 hours per week [n = 10 (8.3%)], less than 20 hours per week [n = 9 (7.5%)] and 80 to 99 hours per week [n = 8 (6.6%)]. Most of doctors and registered nurses had direct interaction with patients [n = 109 (90.8%)] compared to those have indirect contact with patients [n = 11 (9.2%)]. Considering the specialty of all respondents, 43.3% of respondents (n = 52) were working for less than one year, 32.5% of respondents (n = 39) were working from 1 to 5 years, 14.2% of respondents (n = 17) were working from less 6 to 10 years, 5% of respondents (n = 6) were working from 21 or above years, 3.3% of respondents (n = 4) were working from 11 to 15 years and 1.6% of respondents (n = 2) were working from 16 to 20 years (Table 1). Among these socio-demographic determinates, work in various units and professional experience showed a significant association ($p < 0.001$) with PSC. Furthermore, designation and current speciality also showed a significant association ($p < 0.05$) and ($p < 0.01$), respectively.

Composite-items of patient safety culture

Out of 120 participants, 69.1% of respondents reported a positive support rate at the workplace. Among participants, 44.1% of respondents indicated staff availability to lead with workload within the healthcare unit. Most of the respondents (78.8%) worked to complete different tasks. Only 70.8% of respondents indicated that people treated each other with respect within the unit. A total of 58 respondents (56.6%) reported that all staff worked longer to improve patient safety practices with active engagements (70.8%). Only 39.2% of respondents indicated that staff was better for patient care. Few respondents (50%) considered that their mistakes could hold against them. However, some respondents (68.3%) believed that their mistakes have led to positive changes. A total of 58 respondents (48.3%) indicated the occurrence of any serious adverse event may depend upon luck. Most of the respondents (62.5%) reported that staff offered help during burden within in unit. Most of the respondents (75%) indicated that improvement in patient safety was evaluated by its effective change. Similarly, a total of 77 respondents (64.2%) reported that patient safety was their preference and never sacrificed to get completion of work quickly (Table 2).

Some of the staff (59.2%) were worried that mistakes would be kept in their personnel file. Few respondents (32.5%) showed severe concern about patient safety within the unit. Most of the respondents (65%) were satisfied that their hospitals have sound systems and procedures to prevent errors or adverse events. Most of the respondents (70.8%) indicated that their manager or supervisor always appreciated our contribution to improving patient safety culture. Few respondents (71.6%) indicated that their supervisors or managers imposed on working faster even utilizing shortcuts. A total of 61 respondents (50.8%) reported that their supervisors or managers overlooked patient safety problems within the unit. Few respondents (44.2%) indicated that they always provided feedbacks about changes after any adverse event. A total of 62 (51.6%) respondents stated that they were free to speak on the happening of any adverse event and its negative effects on patient safety. Most of the respondents (60.8%) were aware of any adverse error within the unit (Table 2).

Only 43.3% of respondents were free to ask about decisions and actions from authorities within the unit. Among all, 60% of respondents reported discussing and offering to overcome adverse events. Few respondents (28.3%) showed fear of asking any question related to any adverse event. The positive response to correcting an error that affects patient safety was low (<38%). Notably, a low number of respondents gave an overall positive grade on the unit's patient safety practice (5%). Most of the respondents (75.3%) were satisfied that hospital management provided a comfortable work climate to promote patient safety. Few respondents (37.5%) indicated that hospitals units do not have supportive coordination. Few respondents (43.3%) raised concerns that important information related to patient care was often lost during shift change. Most of the respondents (84.2%) showed good cooperation among all units of hospitals. Few respondents (34.2%) indicated that important information related to patient care might lose during shift changes within in unit. Also, the rate of unwillingness to work with staff from other units was very low (30%). Most of the respondents (75.8%) indicated that their hospital management has patient safety at top priority, with an interest of 49.2% after an adverse event (Table 2).

Considering the overall grade on patient safety, 39.2% of respondents graded at very good, followed by 30% at acceptable, 25.8% at excellent, 3.3% at failing, and 17% at poor grade. Most of the respondents (40%) indicated no adverse event reported. In comparison, 25.8% of respondents reported 1 to 2 adverse events, 23.3% respondents reported 3 to 5 adverse events, 5.8% respondents

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reported 6 to 10 adverse events, 2.5% of respondents reported 11 to 20 adverse events, and 2.5% of respondents reported 21 or more adverse events (Table 3). With an overall 62.5% of PSC, the highest positive response rate was observed for organizational learning-continuous improvement (86.5%). It was followed by teamwork within units (81.7%), teamwork across units (74.7%), feedback and communication about the error (73.7%), management support for patient safety (71.6%), supervisor/ manager expectations and actions promoting patient safety (65.8%), communication openness (65.4%), overall perceptions of patient safety (62%), frequency of events reported (53.7%), handoffs and transitions (49.9%), staffing (33.3%) and non-punitive response to errors (32.1%) (Figure 1).

Characteristics	Frequency(n)	Percentage(%)	χ^2
Designation(Mean ± SEM: 1.7 ± 0.04, 95% C.I: 1.62 –1.79)			
Medical Doctor	35	29.2	0.012*
Registered Nurse	85	70.8	
What is your primary work area or unit in this hospital (Mean± SEM: 6.2 ± 0.54, 95% C.I: 5.14– 7.28)			
Medicine	39	32.5	0.000***
Surgery	10	8.3	
Obstetrics	2	1.6	
Paediatrics	5	4.2	
Emergency	23	19.2	
ICU	9	7.5	
Psychiatry/mental health	1	0.8	
Radiology	2	1.6	
Anaesthesiology	3	2.5	
Nursing management	9	7.5	
Ophthalmology	1	0.8	
Dermatology	5	4.2	
Cardiology	1	0.8	
Orthopaedics	0	0	
No specific	10	8.3	
How long have you worked in this hospital? (Mean± SEM: 1.8 ± 0.09, 95% C.I: 1.61-2.00)			
Less than 1 year	59	49.2	0.000***
1 to 5 years	39	32.5	
6 to 10 years	14	11.6	
11 to 15 years	4	3.3	
16 to 20 years	2	1.6	
21 years or more	2	1.6	
How long have you worked in your current hospital work area/unit? (Mean ± SEM: 1.7 ± 0.08, 95% C.I: 1.54 –1.90)			
Less than 1 year	62	51.6	0.000***
1 to 5 years	38	31.6	
6 to 10 years	15	12.5	
11 to 15 years	3	2.5	
16 to 20 years	0	0	
21 years or more	2	1.6	
Typically, how many hours per week do you work in this hospital? (Mean ± SEM: 3.3 ± 0.12, 95% C.I: 3.09–3.57)			
Less than 20 hours per week	9	7.5	0.319NS
20 to 39 hours per week	13	10.8	
40 to 59 hours per week	65	54.2	
60 to 79 hours per week	10	8.3	
80 to 99 hours per week	8	6.6	
In your staff position, do you typically have direct interaction or contact with patients? (Mean± SEM: 1.1 ± 0.02, 95 % C.I: 1.03-1.14)			
Direct	109	90.8	0.063NS
Indirect	11	9.2	
How long have you worked in your current specialty or profession? (Mean± SEM: 2.0 ± 0.11, 95% C.I: 1.79 –2.25)			
Less than 1 year	52	43.3	0.001**
1 to 5 years	39	32.5	
6 to 10 years	17	14.2	

11 to 15 years	4	3.3
16 to 20 years	2	1.6
21 years or more	6	5

Table 1: Demographic characteristics of the respondents from private tertiary hospitals in Lahore Note: * = Significant (p< 0.05), ** = Highly significant, (p< 0.01), *** = Very highly significant (p< 0.001); n: number of respondents, $\chi 2$: chi-square value, SEM: standard error of the mean, 95% C.I: confidence Interval at 0.05 significant level

Items	Mean ± SEM	95% CI (mean)	Positive n (%)	Neutral n (%)	Negative n (%)	$\chi 2$
People support one another in this unit	3.7 ± 0.10	3.50-3.91	83(69.1)	19(15.8)	18(15)	0.000***
We have enough staff to handle the workload	3.0 ± 0.11	2.78-3.23	53(44.1)	20(16.6)	47(39.2)	0.360[ns]
When a lot of work needs to be done quickly, we work together as a team to get the workdone	3.9 ± 0.09	3.75-4.11	94(78.3)	14(11.6)	12(10)	0.000***
In this unit, people treat each other with respect	3.7 ± 0.09	3.51-3.88	85(70.8)	22(13.7)	13(10.8)	0.008**
Staff in this unit work longer hours than is best for patient care	3.5 ± 0.09	3.31-3.70	68(56.6)	28(23.3)	24(20)	0.085[ns]
We are actively doing things to improve patient safety	3.7 ± 0.08	3.55-3.89	85(70.8)	23(19.1)	12(10)	0.071 [ns]
We use more agency/temporary staff than is best for patient care	3.1 ± 0.08	2.94-3.28	47(39.2)	36(30)	37(30.8)	0.028*
Staff feel like their mistakes are held against them	3.2 ± 0.08	3.08-3.47	60(50)	30(25)	30(25)	0.006**
Mistakes have led to positive changes here	3.5 ± 0.08	3.35-3.69	82(68.3)	21(17.5)	17(14.2)	0.006**
It is just by chance that more serious mistakes don't happen around here	3.2 ± 0.10	3.02-3.44	58(48.3)	31(25.8)	31(25.8)	0.452[ns]
When one area in this unit gets really busy, others help out	3.3 ± 0.10	3.16-3.58	75(62.5)	12(10)	33(27.5)	0.000***
When an event is reported, it feelslike the person is being written up, not the problem	3.2 ± 0.09	3.07-3.47	66(55)	22(18.3)	42(35)	0.000***
After we make changes to improve patient safety, we evaluate their effectiveness	3.7 ± 0.08	3.60-3.94	90(75)	19(15.8)	11(9.1)	0.000***
We work in "crisis mode" trying to do too much, too quickly	3.8 ± 0.08	3.66-3.99	90(75)	20(16.6)	10(8.3)	0.000***
Patient safety is never sacrificed to get more work done	3.6 ± 0.10	3.41-3.81	77(64.2)	23(19.2)	20(16.7)	0.000***
Staff worry that mistakes they make are kept in their personnel file	3.5 ± 0.09	3.37-3.73	71(59.2)	31(25.8)	18(15)	0.003**
We have patient safety problems in this unit	2.8 ± 0.10	2.61-3.04	39(32.5)	18(15)	63(52.5)	0.086[ns]
Our procedures and systems are good at preventing errors from happening	3.4 ± 0.10	3.22-3.63	78(65)	12(10)	30(25)	0.030*
My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures	3.6 ± 0.09	3.49-3.87	85(70.8)	18(15)	17(14.2)	0.300[ns]
My supervisor/manager seriously considers staff suggestions for improving patient safety	3.6 ± 0.08	3.52-3.86	86(71.6)	20(16.7)	14(11.6)	0.003**
Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts	2.9 ± 0.10	2.77-3.17	42(35)	29(24.2)	49(40.8)	0.000***
My supervisor/manager overlooks patient safety problems that happen over and over	3.1 ± 0.11	2.87-332	61(50.8)	18(15)	41(34.2)	0.059[ns]
We are given feedback about changes put into place based on event reports	3.2 ± 0.10	3.08-3.48	53(44.2)	42(35)	25(20.8)	0.031*
Staff will freely speak up if they see something that may negatively affect patient care	3.4 ± 0.12	3.21-3.68	62(51.6)	31(25.8)	27(22.5)	0.000***
We are informed about errors that happen in this unit	3.6 ± 0.11	3.41-3.88	73(60.8)	21(17.5)	26(21.6)	0.000***
Staff feels free to question the decisions or actions of those with more authority	3.2 ± 0.13	2.97-3.50	52(43.3)	33(27.5)	35(29.2)	0.070[ns]
In this unit, we discuss ways to prevent errors from happening again	3.5 ± 0.10	3.31-3.74	72(60)	29(24.2)	20(16.6)	0.009**
Staff are afraid to ask questions when something does not seem right	2.7 ± 0.11	2.52-2.94	34(28.3)	27(22.5)	59(49.2)	0.022*
When a mistake is made, but is caught and corrected before affecting the patient, how often is this reported?	3.0 ± 0.10	2.87-3.3	41(34.2)	47(39.2)	32(26.7)	0.000***
When a mistake is made, but has no potential to harm the patient, how often is this reported?	3.0 ± 0.11	2.81-3.26	37(30.8)	44(36.7)	39(32.5)	0.005**
When a mistake is made that could harm the patient, but does not, how often is this reported?	3.1 ± 0.12	2.88-3.3	45(37.5)	40(33.3)	35(19.2)	0.020*
Please give your work area/unit in this hospital an overall grade on patient safety.	2.1 ± 0.08	2.00-2.34	6(5)	36(30)	78(65)	0.000***
Hospital management provides a work climate that promotes patient safety	3.6 ± 0.08	3.46-3.81	91(75.3)	14(11.7)	15(12.5)	0.000***
Hospital units do not coordinate well with each other	2.7 ± 0.11	2.56-3.00	45(37.5)	7(5.8)	68(56.7)	0.026*
Things "fall between the cracks" when transferring patients from one unit to another	3.0 ± 0.11	2.79-3.22	52(43.3)	13(10.8)	55(45.8)	0.000***
There is good cooperation among hospital units that need to work together	3.7 ± 0.08	3.56-3.90	101(84.2)	6(5)	13(10.8)	0.000***
Important patient care information is often lost during shift changes	2.7 ± 0.11	2.49-2.95	41(34.2)	14(11.6)	65(54.2)	0.015*
It is often unpleasant to work with staff from other hospital units	2.8 ± 0.09	2.60-2.99	36(30)	25(20.8)	59(49.2)	0.010**
Problems often occur in the exchange of information across hospital units	3.2 ± 0.10	2.99-3.40	59(49.2)	16(13.3)	45(37.5)	0.125 [ns]
The actions of hospital management show that patient safety is a top priority	3.7 ± 0.10	3.54-3.95	91(75.8)	12(10)	17(14.2)	0.000***
Hospital management seems interested in patient safety only after an adverse event happens	3.1 ± 0.11	2.93-3.39	59(49.2)	13(10.8)	48(40)	0.005**
Hospital units work well together to provide the best care for patients	3.8 ± 0.09	3.68-4.04	97(80.8)	10(8.3)	13(10.8)	0.037*
Shift changes are problematic for patients in this hospital	3.1 ± 0.10	2.94-3.35	53(44.2)	26(21.7)	41(34.2)	0.004**

Table 2: Frequency percentage of positive, neutral and negative responses of respondents from private tertiary hospitals in Lahore Note: * = Significant (p< 0.05), ** = Highly significant, (p< 0.01), *** = Very highly significant (p< 0.001)Abbreviations: n: number of respondents, 2: chi-square value, SEM: standard error of mean, 95% C.I: confidence interval at 0.05 significant level

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Variables	Measures	Frequency (n)	Percentage (%)
Overall grade on patient safety	Excellent	31	25.8
	Very good	47	39.2
	Acceptable	36	30
	Poor	2	1.7
	Failing	4	3.3
Adverse event report	No event reports	48	40
	1 -2 evens reports	31	25.8
	3-5 events reports	28	23.3
	6-10 events reports	7	5.8
	11 -20 events reports	3	2.5
	21 or more events reports	3	2.5

Table 3: Outcome measure dimensions scores of private tertiary hospitals in Lahore

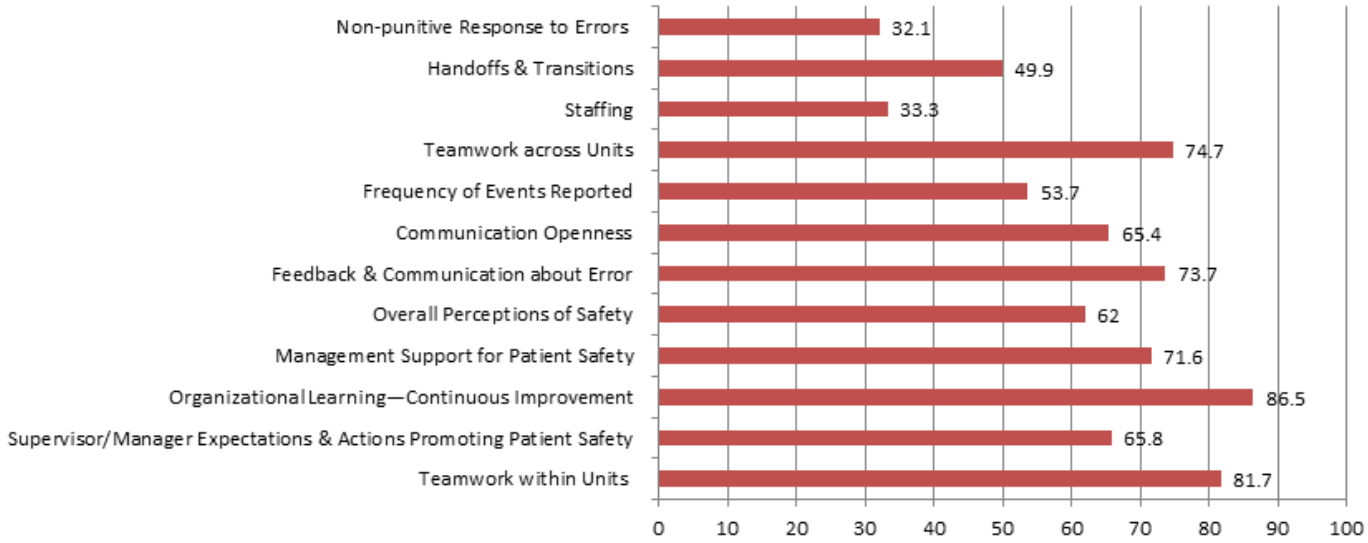

Figure 1: Overall positive score of all dimesnions of patient safety culture surveyed in private tertiary hospitals of Lahore

DISCUSSION:

The delivery of unsafe patient care or poor quality patient care is now considered the most vital barrier to improving patient safety culture within a healthcare organization [13]. The starting point is to evaluate the safety culture using an appropriate instrument. The Hospital Survey on Patient Safety Culture (HSOPSC) has become the most frequently used tool to assess PSC and provides an avenue for increasing gauge of changes in culture over time [14,15]. The current study is a primary investigation in Pakistan to highlight the significant glitches faced by healthcare practitioners in securing patient safety, improving patient care, and preventing adverse events during the delivery of healthcare services.

PSC was examined using its contributing factors in the current study, including all twelve dimensions and personal variables. Personal variables such as demographic characteristics and work experience may significantly impact patient safety perceptions. Considering the impact of assessing PSC to enhance patient safety in various levels of healthcare settings, several studies have focused on

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clinical staff across different hospitals in various geographical regions [16-22]. The current study results agree with findings of 60% patient safety culture score in the tertiary hospital in Saudi Arabia [16]. The dimensions of organizational learning-continuous improvement (86.5%) and teamwork within units (81.7%) were highest. Other dimensions such as feedback and communication about the error (73.7%), teamwork across units (74.7%), management support for patient safety (71.6%), supervisor/ manager expectations and actions promoting patient safety (69.8%), communication openness (65.4%), overall perceptions of patient safety (62%), frequency of events reported (53.7%) and, handoffs and transitions (49.9%) showed moderate status. The dimensions of staffing (33.3%) and non-punitive response to errors (32.1%) had the lowest score.

In the current study, feedback and communication about errors have a 73.7% positive score due to strict maintenance of hierarchy, staff not wanting to complicate relationships among themselves, or the non-responsiveness of higher authorities to report. The current study's findings agree with the results observed in previous studies [16-21]. The dimension of teamwork across units had a 74.7% positive score. This could be due to work division with competition among units to achieve their goals without a system-thinking attitude. Teamwork across units showed the hospital's strength in cooperation and coordination among healthcare professionals to achieve a positive and safe climate for patients [23].

The management support and supervisor or manager expectations and promotion of patient safety had moderate positive scores (71.6% and 69.8%, respectively) in this study. Similar findings were also observed during the assessment of PSC in tertiary hospitals in the Philippines and Saudi Arabia [24,25]. Clinical staff, including nurses and doctors, believed that supervisors, managers, and management are primarily responsible for influencing and promoting PSC within and across healthcare units. The current study revealed that communication openness had a 65.4% positive score, which needs improvement for a strong PSC in private tertiary hospitals across Lahore. The recent study's findings agree with observing the communication openness score (60.5%) reported in the USA [24]. On the contrary, communication openness showed a high positive score in Iranian and Dutch hospitals [25,26]. Such inconsistency between observations made in Asian, European, and Middle East hospitals might be associated with alterations in the culture of each country and thus lead to loss of occupation or professional attitude among staff at the workplace. Therefore, staff tends to avoid it because it is well reported that communication openness is often considered as a part of blame culture and found to be a problem in developing Asia and Middle East countries [27-29]. The current study revealed that the organizational learning-continuous improvement had a positive score (86.5%). The present study's findings agree with the observation made by previous studies in private tertiary hospitals [30,31]. While comparing outcomes of the current study, this variable is slightly improved from the previous survey conducted in Pakistan [22].

Staffing had a low positive score of 33.3%, and most of the respondents indicated that they did not have enough staff to handle the workload in present study. These outcomes showed that such a situation might have severe negative consequences for PSC and the delivery of quality care to patients. According to estimation, if the demand of clinical staff exceeds 80%, the negative outcomes with adverse events will be increased for medical professionals, hospital management, and patients within a hospital [32].

A 40% of respondents reported no adverse events in the hospital within the past 12 months, while 25.8% responded that there were 1-2 events. The relatively low occurrence of adverse events may be attributed to several factors, including error monitoring and reporting, protection from injuries, accidents with a good and safe hospital environment. On the other hand, a low incidence rate may also represent that the assessment of information may underestimate the actual rate of adverse events. Previous studies revealed that few adverse events were overlooked and led to under estimation [33].

CONCLUSION:

The survey revealed low patient safety culture scores in a private hospital in Lahore. Improvement is essential to focus on reporting adverse events, non-punitive policies concerning error reporting, and staff capacity enhancement. The outcomes of the current study could be used for designing and establishing interventions to improve patient safety practices in similar settings across Pakistan.

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