Likelihood of Speaking Up by Health Professionals in Emergency Setting: A Descriptive Study

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Abstract

Introduction

Speaking up is critical for patient safety, but many health-care professionals are hesitant to do so. Understanding the factors influencing can help to improve speaking-up behavior and team communication. The aim of the study was to investigate the health professionals' likelihood of speaking up about safety concerns and associated barriers to speaking up for safety

Materials and methods

A descriptive cross-sectional study was conducted at Emergency Departments of three Teaching Hospitals in Colombo district, Sri Lanka with the sample of 155 of doctors and nurses. Data was collected through a self-administered questionnaire designed to assess attitudes, barriers, and facilitators for speaking up, and self-reported experience with speaking up. The likelihood of speaking up and the potential for patient harm were assessed.

Results

33.6%of participants have reported they would not withhold their voice during a patient safety concern while 56% would often bring up specific concerns on patient safety. 38.7% reports patient safety concerns on each shift or daily during their work. More than 50% are comfortable with working culture but are concerned with constant reminding of safety rules (64.4%) and discouraged due to unchanged attitudes after addressing patient safety concerns (62%).Workload (65.2%), hierarchy (62.6%), feared consequences of speaking up (56.1%), and powerlessness (50.3%) identified as major barriers in speaking up for safety.

Discussion

Contextual considerations have a significant impact on doctors' and nurses' willingness to speak up regarding patient safety. Speaking up leads to significant discomfort among doctors and nurses who aren't in managerial positions. Staff should be given clear instructions and training on when and how to raise safety concerns in Emergency Department.

Introduction

In order to improve patient safety, health care practitioners must enhance management and communication skills.[1] When the message of concern is heard and well understood, effective communication is established. Doctors and nurses on the front lines are ideally trained to spot initial signs of unhealthy conditions of service delivery and report them to management.[2, 3] They need to be trained to communicate effectively with colleagues or seniors in order to prevent harmful outcomes to patient.

Unintended harms can follow actions of health care workers (HCW) while trying to do their well-intended work. When health care workers recognize or become aware of unsafe or deficient behavior by those within health care departments in a hospital setting, they are encouraged to "speaking up" for the value of patient safety and care quality.[4], 5Mistakes (missed diagnoses, poor judgment, etc.), lapses, rule breaking, and failing to obey standardized procedures are examples of such behavior. 'Speaking up' is one of the most important ways to prevent unintentional harm.

Emergency department is a place where unintended harms to patients can occur in a high probability. Emergency unit is a different clinical environment compared to inpatient wards. These units are busy with a high turnover of acutely ill patients.

Speaking up is likely to have an immediate impact on preventing human mistakes or improving technological and device flaws. According to orga-

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nizational studies, people prefer the 'safe' option of silence, withholding input that could be useful to others or thoughts that they wish they could share.[6, 7] It has been shown that in health-care settings, those who are aware of an issue either speak up, are silenced or do not speak up at all. [8, 9]

Organizational culture, personality characteristics, and their experiences have all been established as important elements of the willingness to speak up.[5, 6] Amidst such constant variables, situation-specific considerations such as the therapeutic context or the existence of the safety challenge seem to affect the impromptu decision to voice concerns. [7]The willingness to speak up tends to vary a lot depending on the situation and the social interactions of the concerned health care practitioners.

To design positive improvement activities such as training programs, a greater understanding of these effects on speaking up habits is required. However, there is a scarcity ofstudies into the social variables that influence whether or not people can speak up about law breaches and mistakes in healthcare. [2]
This study was planned to assess health professionals' likelihood of speaking up about safety concerns and associated barriers to speaking up for safety.
Several factors influence workers' voicing behavior.According to previous organizational research, fear, the need to stop conveying negative news or unwanted thoughts, and normative and social forces in communities can all contribute to silence.[6,7]Furthermore, undue authority gradients, unnecessary professional courtesy, and/or shortcomings in resource or task management may all contribute to a fear of speaking up or an inability to signal or fix errors. [10]

According to research from the healthcare and other sectors indicate that, disparities in hierarchical rank make it impossible to speak up. Power imbalances in response teams, such as between nurses and doctors in the hospital setting, are a major barrier to speaking up.[8] The partnership and expected reaction of the superior were factors in a survey of respondents' decisions to question a senior doctor in the hospital setting [3]. The threat of patient injury has been described as a major motivator for speaking out about labor and childbirth safety issues, while the risk of damaging personal relationships and the novelty of a troubling situation are significant obstacles.[9, 10] Previous examples of speaking up that did not result in the intended result also result in a diminished perception of speaking up's efficacy, as well as feelings of futility and resignation. The belief that expressing complaints would have little effect is a significant deterrent to potential speaking upbehavior .[6] Finally, the involvement of patients or family members in the situation has been stated to prevent health care staff from standing up to their peers in order to protect the patient- provider relationship.[2,11]

Morrison developed the employee voice model by combining emerging theory and analysis .[11] The ability to have the organization or work unit function more efficiently or to make a meaningful impact for the group is assumed to be the motivation for speech in this model. The voice represents a conscious decision process in which the person weighs the benefits and drawbacks of expressing his or her concerns, as well as the potential effectiveness and protection of doing so. The individual's assessment of whether speech is likely to be accurate is the perceived effectiveness of sound.
The perceived safety of voice is the individual's judgment about the risk of potential negative outcomes. The individual is faced with a balancing act of trying to be pro-social and constructive while at the same time being mindful of personal costs. Contextual factors (e.g., organizational culture) and individual factors (e.g., job attitude, personality) affect these perceptions. The employee's voice has important benefits for organizations and work groups as well as for the one who speaks up. The message type, tactic, and target are also important factors in voicing.

While there have been a growing number of studies on factors that enhance or inhibit speaking up by health care professionals recently, a conceptualized theoretical model for understanding speaking-up behavior and its related factors is not yet available. In light of this, the current study aims at assess likelihood of a health care professional speaking up when they found a deficient ora risky behavior in patient care (e.g. between nurses vs medical doctors), speaking up likelihood differences between doctors undergoing postgraduate training and other doctors and lastly on the barriers of speaking up.

Methodology
The primary objective was to assess the health professionals' likelihood of speaking up about safety concerns and associated barriers to speaking up for safety.

Secondary objectives were to evaluate the likelihood of a health care professionals' attitudes on speaking up when they found a deficient or a risky behavior in patient care, to understand whether speaking up likelihood is significantly different between different groups of health care

professionals(e.g., doctors undergoing postgraduate (PG)training and other doctors relate to years of practice in Emergency field etc., between doctors and nurses) .Identifying the key barriers to speak up among health professionals was another secondary objective.

The study was conducted as a descriptive cross-sectional study in Emergency Departments(including Emergency Treatment units(ETU), Preliminary Care Units (PCU), Accident service units) of three teaching hospitals in Colombo - National Hospital of Sri Lanka, Lady Ridgeway Children's Hospital and Colombo North Teaching Hospital.The duration for the study was 1 month from September- October 2021 The target population was the professionals who are working at the respective Emergency.

Departmentsincluding medical staff (Consultants, senior registrars, registrars, medical officers and nursing staff. Above health care professionals who were volunteering were included while staff with less than 1-month experience at Emergency Department were excluded.

Non-probability convenient sampling method was employed.Study enrolled volunteers throughout the study period who planned to include the present study group since the research group is small, very specific, and easy to obtain.
Data was collected using self-administered questionnaires which were designed to assess attitudes, barriers, and facilitators for speaking up, self-reported experience with speaking up, likelihood of speaking up and the potential for patient harm. Data was collected by primary investigator along with medical officers appointed by primary investigator using a questionnaire.

Data was analyzed through Statistical Package for Social Sciences (SPSS).Descriptive statistics were used to report survey responses, further was examined the variance and correlations among respondents' likelihood of speaking up ratings of the questions. T-tests was used to examine differences in mean ratings between groups of staff (nurses' vs doctors; different categories of doctors -with or without foreign training). Multiple regression analysis was used to model the likelihood of speaking up as outcome of attributes, responder's evaluations of the situation and personal characteristics. The unit of analysis is the judgment provided to each survey question in response to a category, and not the individual respondent. All tests were one-sided and a p-value ≤0.05 was considered significant.

Ethical clearance was obtained prior to the study from the Ethical Review Committee of National hospital of Sri Lanka (NHSL) and permission for the study was granted by the heads of relevant institutions.
RESULTS

The total sample was 155 of which 65.8% were female. (Table 1)Considering the Category of healthcare professions, the majority of the respondents were nurses, accounting for 39.4% of the total sample and 21.3% were doctors with no Post Graduate (PG) training while 21.3% were under PG training respondents and 16.1% were represented doctor with PG qualifications. Considering the duration of experience in emergency department higher number 51.6% of respondents represented one to five years. Followed by 29.7% more than five years, 12.3% 6-12 months and 6.5% represented less than six months. As per the above table, 65.8% of the respondents worked more than 48 hours with patient care and

Table 01: Demographics

Factors	Frequency (%)
Gender	
Male	53 (34.2)
Female	102 (65.8)
Duration of experience in emergency department	
< 6 months	10 (6.5)
6-12 months	19 (12.3)
1-5 year	80 (51.6)
> 5 years	46 (29.7)
Category of healthcare professions	
Doctor with post graduate qualifications	25 (16.1)
Under post graduate training	33 (21.3)
No post graduate training	34 (21.9)
Nurse	63 (40.6)
Working hours per week in patient care	
<10 hours	4 (2.6)
10-24 hours	9 (5.9)
24-48 hours	39 (25.7)
>48 hours	100 (65.8)

25.7% represented 24-48 working hours

Out of the total studied sample, 33.5% and 40.9% always choose to bring up the specific concerns about patient safety and rarely remain silent when information that might have prevented a safety incident in the unit had respectively(Table 02). Further, 32.5% keep ideas for improving patient safety in unit to themselves. 40.5% sometimes address a colleague (doctors and/or nurses) if he/she did not follow important patient safety rules, intentionally or unintentionally.

It is evident that more than half of the sample often brings up specific concerns about patient safety. And the majority of 42.6% sometimes address an error which – if uncaptured – could be harmful for patients (Table 03). Similarly, 43.9% sometimes prevent any incident from occurring, as a consequence of bringing up specific concerns about patient safety.

Practical use of speaking up behaviors was assessed by providing a short clinical scenario. The respondent was asked to imagine a situation where he/she witnessesa senior colleague is not following accepted hygienic techniques while examining a patient. Their opinion about the scenario and their response with regard to speaking up behaviors were questioned.

Table 02: Withholding voice behavior

Variable	Never	Rarely	Sometimes	Often	Very often
Have you chosen not to bring up your specific concerns about patient safety?	52(33.5)	46(29.7)	42(27.1)	7(4.5)	8(5.2)
Have you kept ideas for improving patient safety in your unit to yourself?	41(26.6)	50(32.5)	44(28.6)	16(10.4)	3(1.9)
Have you remained silent when you had information that might have prevented a safety incident in your unit?	63(40.9)	55(35.7)	27(17.5)	8(5.2)	1(0.6)
Have you selected not to address a colleague (doctors and/or nurses) if he/she did not follow important patient safety rules, intentionally or unintentionally?	23(15.0)	44(28.8)	62(40.5)	20(13.1)	4(2.6)

Table 03: Speaking up behavior

Variable	Never	Rarely	Sometimes	Often	Very often
Have you bring up specific concerns about patient safety?	1(0.6)	6(3.9)	52(33.5)	77(49.7)	19(12.3)
Have you addressedan error which, if uncaptured could be harmful for patients?	1(0.6)	15(9.7)	66(42.6)	60(38.7)	13(8.4)
Have you addressed a colleague (doctors and/or nurses) when he/she did not follow important patient safety rules, intentionally or unintentionally?	3(1.9)	19(12.3)	70(45.2)	48(31.0)	15(9.7)
Have you prevented any incident from occurring, as a consequence of bringing up specific concerns about patient safety?	2(1.3)	29(18.7)	68(43.9)	50(32.3)	6(3.9)

Table 04: Situation handling based on a clinical scenario

How realistic is this situation?				
Not at all	At all	Neutral	Realistic	Very realistic
3(1.9)	44(28.5)	25(16.2)	69(44.8)	13(8.4)
If nobody acts, how dangerous do you think this situation is for the patient?				
Not dangerous at all	Not dangerous	Neutral	Dangerous	Very dangerous
0(0.0)	3(1.9)	5(3.2)	69(44.5)	78(50.3)
How likely is it that you try to alert the doctor/ nurse when you identified the safety concern?				
Very unlikely	Unlikely	Neutral	Likely	Very likely
2(1.3)	12(7.7)	24(15.5)	80(51.6)	37(23.9)
Would you feel uncomfortable to instruct the doctor to address the safety concern (to disinfect their hands/ wear gloves?)				
Not at all uncomfortable	Uncomfortable	Neutral	Comfortable	Very comfortable
12(7.8)	27(17.7)	26(17.0)	66(43.1)	22(14.4)

Table 05: Types of patient safety concerns

Variable	**Yes/No**	**Daily/ Each shift**	**<twice a week**	**Not very often**	**Rarely**
Concerns regarding initiating treatment	11(7.2)	63(41.2)	36(23.5)	25(16.3)	18(11.8)
Concerns regarding ongoing treatment	20(13.2)	45(29.6)	31(20.4)	38(25.0)	18(11.8)
Infection hazard: Hand washing / PPE	14(9.2)	67(44.1)	31(20.4)	23(15.1)	17(11.2)
Patient disposition	16(10.5)	69(45.4)	33(21.7)	19(12.5)	15(9.9)
Requirements of referral to a specialty unit	14(9.3)	59(39.1)	42(27.8)	22(14.6)	14(9.3)
Other	9(20.0)	15(33.3)	7(15.6)	8(17.8)	6(13.3)

Considering the given case scenario, 44.8% feels the situation is realistic and 50.3% thinks it will be dangerous for patients if anyone does not act(Table 04). Further, 51.6% of more than half will likely try to alert the doctor to the missed hand disinfection / gloves and 43.1% are comfortable to instruct the doctor to disinfect their hands/ wear gloves.

Considering the types of patent safety concerns, the majority are experiencing following safety concerns daily/ each shift. 41 % of concerns regarding initiating treatment, 29.6% of concern regarding ongoing treatment, and 44.1% of infection hazard: Hand washing / PPE, 45.4% of patient disposition, 39.1% of requirements of referral to a specialty unit(Table 05).

Higher likelihood of speaking up is observed among healthcare workers who rely on colleagues and shift supervisors. More than half indicated a likelihood of speaking up is facilitated by culture in their respective unit/clinical area.

However, 64.4 % expressed the frustration about having to remind staff of the same safety rules again and again is frustrating. 62 % reported they become discourage when no change occurs even after expressing concerns.(Table 6).

As far as barriers are concerned (Figure 1), hierarchical barriers and workload related barriers are higher among professional doctors with PG qualification which is similarly represented among professions under PG training and non-PG qualifiers. Powerlessness and workload observed highly concerned barrier among professional nurses

Similar to Table08, no significant association is observed between health care professions and Likelihood of speaking under the criteria of perceived concerns and withholding voice(Table 09).

There is no association observed under the criteria of perceived concerns, withholding voice and speaking up in relation to likelihood of speaking up among doctors and nurses.(Table 09)

Table 06: Statements regarding organizational culture

Variable	Very unlikely	Unlikely	Neutral	Likely	Very likely
I can rely on my colleagues	1(0.7)	10(6.6)	10(6.5)	105(68.6)	27(17.6)
I can rely on the shift supervisor	1(0.7)	10(6.5)	18(11.8)	87(56.9)	37(24.2)
The culture in my unit/clinical area makes it easy to speak up about patient safety concerns.	2(1.3)	27(17.6)	22(14.4)	81(53.0)	21(13.7)
My colleagues react appropriately, when I speak up about my concerns about patient safety.	1(0.7)	24(15.7)	25(16.3)	81(53.0)	22(14.4)
My shift supervisors react appropriately, when I speak up about my patient safety concerns.	0(0.0)	21(13.7)	20(13.1)	84(54.9)	28(18.3)
In my unit/clinical area, I observe others speaking up about their patient safety concerns.	1(0.7)	18(11.9)	25(16.6)	80(53.0)	27(17.9)
I am encouraged by my colleagues to speak up about patient safety concerns	2(1.3)	17(11.2)	33(21.7)	76(50.0)	24(15.8)
I am encouraged by my shift supervisor to speak up about patient safety concerns	1(0.7)	16(10.5)	22(14.5)	86(56.6)	27(17.8)
Having to remind staff of the same safety rules again and again is frustrating	2(1.3)	33(21.7)	19(12.5)	73(48.0)	25(16.4)
Sometimes I become discouraged because nothing changes after expressing my patient safety concerns.	1(0.7)	32(20.9)	25(16.3)	68(44.4)	27(17.6)

Table 07: Association between category of Health care profession and Likelihood of speaking up

Likelihood of speaking up	Doctors with PG qualification (N=25)	Doctors under PG training (N=33)	P Value
Perceived concerns			
Never	6(24.0)	6(18.2)	0.588
Often	19(76.0)	27(81.8)	
Withholding voice			
Never	14(56.0)	24(72.7)	0.184

Table 8. Association between category of health care profession and likelihood of speaking up

Likelihood of speaking up	Doctors with PG qualification and Under PG training (N=58)	Doctors with no PG training (N=34)	P Value
Perceived concerns			
Never	12(20.7)	10(29.4)	0.344
Often	46(79.3)	24(70.6)	
Withholding voice			
Never	38(65.5)	18(52.9)	0.233
Often	20(34.5)	16(47.1)	
Speaking up			
Never	4(6.9)	2(5.9)	1.000**
Often	54(93.1)	32(94.1)	

Table 09: Association between category of Health care profession and Likelihood of speaking up

Likelihood of speaking up	Doctors (N=92)	Nurses (N=63)	P Value
Perceived concerns			
Never	22(23.9)	18(28.6)	0.515
Often	70(76.1)	45(71.4)	
Withholding voice			
Never	56(60.9)	38(60.3)	0.945
Often	36(39.1)	25(39.7)	
Speaking up			
Never	6(6.5)	2(3.2)	0.474**
Often	86(93.5)	61(96.8)	

** Fisher's Exact value

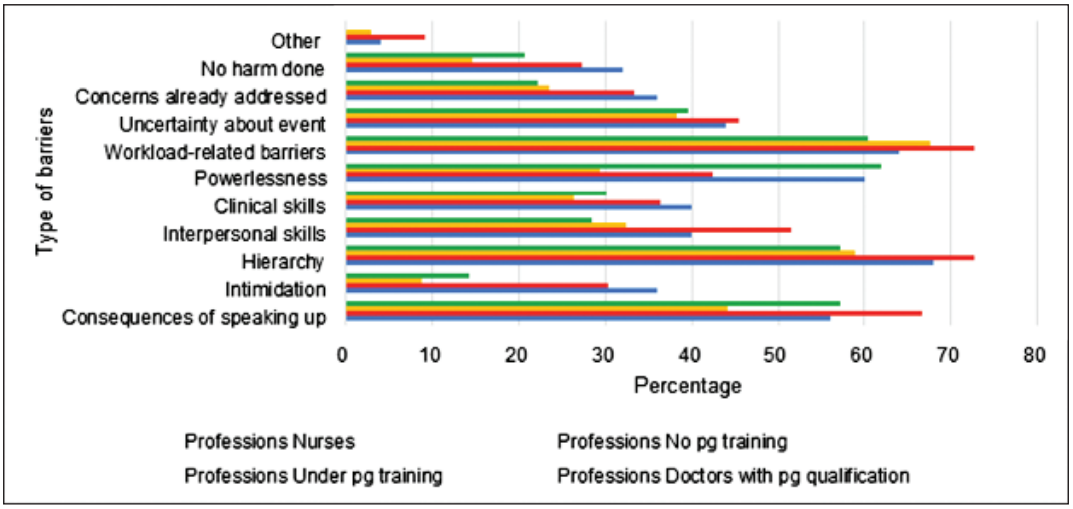

Figure 01: Type of barriers

Table 10. Barriers to speaking up

Barriers	Frequency (%)
Consequences of speaking up	87(56.1)
Intimidation	31(20.0)
Hierarchy	97(62.6)
Interpersonal skills	56(36.1)
Clinical skills	50(32.3)
Powerlessness	78(50.3)
Workload-related barriers	101(65.2)
Uncertainty about event	64(41.3)
Concerns already addressed	42(27.1)
No harm done	35(22.6)
Other	5(3.2)

Considering the barriersrelated to the likelihood of speaking up, most prevalent barriers presented as workload-related barriers which indicated by 65.2% followed by hierarchy barrierswhich was mentioned by 62.6%(Table 10). Further, more than half mentioned consequences of speaking up and powerlessness as barriers.

Discussion

Health care workers are supposed to express their concerns before a significant event affects a patient, giving them the opportunity to make changes to the plan or intervention before it is too late. Several studies have been conducted to determine the association between health care providers' willingness to speak up and patient safety outcomes. [12,13] Even when they are aware of the dangers and immorality of not speaking up, most medical and nursing professionals, regardless of their position or specialization, have had some experience with hesitating to voice their concerns about patient safety threats. Even if there are some biases (e.g., people were likely doing what they were doing because they thought they were right, given their understanding and the pressure of the situation), current research suggests that if health care professionals voice their concerns, it may provide the opportunity to recover from errors and avoid negative consequences.

Although the necessity of healthcare workers speaking up to improve patient safety is becoming more widely recognized, little is known about how common safety concerns and expressing behaviors are among workers. Perceived concerns are widespread, and both speaking up and withholding voice behaviors are common and coexist in our research. In our analysis, the frequency of patient safety concerns was slightly greater than in a recent US survey of 1800 residents and in a prior study conducted in nine cancer departments in Switzerland. [13]

We looked at connections between safety-related communication behaviors, such as speaking up and withholding voice, and the speak up-related environment, a subset of safety climate. Our research is unique in that, it looked at the relationship between individual and hospital safety climates and diverse voicing behaviors, such as raising voice and being quiet. Individually, lower frequencies of withholding voice were substantially connected with the overall speak up-related safety atmosphere, but not with greater frequencies of speaking up, indicating that these two behaviors are actually independent of one another. Speaking up and withholding voice may have different inter- individual mechanisms for evaluating costs and advantages.

Despite the fact that our study found a higher level of speaking up behavior, similar studies conducted on the same topic found that subjects working in units with a high level of psychological safety may simply not perceive speaking up as a distinct and potentially invasive communication style, but rather as a normal form of 'team working,' and thus report lower levels of speaking up, despite frequently exchanging concerns.[14] Another factor to consider is that, according to cognitive psychology, the frequency of an occurrence is overstated when it has a significant emotional impact .[15]

Because of the non-supportive atmosphere, perceived concerns are likely to be followed by larger emotional repercussions in a working place with low psychological safety. These feelings may make you more likely to speak up or disclose what you're feeling. Furthermore, the negative relationship between psychological safety and speaking up could be due to how these notions were operationalized. The behavior items are graded on a frequency scale, with questions about how you communicate with coworkers in specific scenarios. Psychological safety may influence not just how often, but also how and to whom issues are addressed.

Furthermore, the specification of our outcome vari-

ables describes an individual's communication behavior in comparison to the collective's behavior. An accommodating psychological atmosphere may be more essential than an individual's degree of departure in rendering this collective behavior. To fully comprehend the importance of accommodating psychological atmosphere in the context of voicing and withholding concerns, more research exploratory needed. Such research could offer insight on whether psychological safety has an impact on speaking up behaviors, as well as the memorizing and reporting of them.

Moreover, results indicate that healthcare workers (HCW) of various hierarchical standing find it far more difficult to make decisions and experience significantly higher levels of discomfort when speaking up. The findings show that healthcare staff who lack decision-making ability or hold senior positions are less inclined to speak up because of the difficult emotions associated with the activity. Potential harm was a substantial predictor of speaking up in our study, as reported by others.

Our findings support the notion that clinical function, and consequently hierarchy, are linked to both types of voicing behaviors as 62.6% believe hierarchy plays a great role as a barrier to speaking up. In comparison to other professional groups, we found that nurses were more inclined to speak up and less likely to remain silent. Nurses may be better informed of current standards and rules, which may encourage them to speak up. They are presumably more attentive to potential risks and rule infractions in their role as nurses, and they are more likely to provide criticism to other nurses. In comparison to nurses and doctors, nurses indicated a higher level of speaking up.

There are a few limitations to these study findings. Due to COVID 19 pandemic - Data was mainly collected via Google forms with limited physical presence into Emergency Departments. Sample size was limited by considering the Exclusion Criteria - E.g. There were many doctors and nurses who recently started their jobs in ED but were not considered for data collection as per Exclusion Criteria. Despite the limitations the study findings add to existing knowledge of how likely HCWs are to engage in speaking up behaviors. However, it is important to encourage HCWs to speak up, as well as organizations' responsiveness to 'voice.' Our findings show that withholding voice or 'silencing' personnel is substantially linked to negative experiences and repercussions with the ineffectiveness of previous speaking up instances. We believe that empowering workers to speak up through encouragement and reinforcement, as well as developing organizations' ability to 'hear' and respond appropriately to voiced concerns, are both critical to achieving safety-oriented healthcare that values staff input as a vital resource for preventing harm.

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