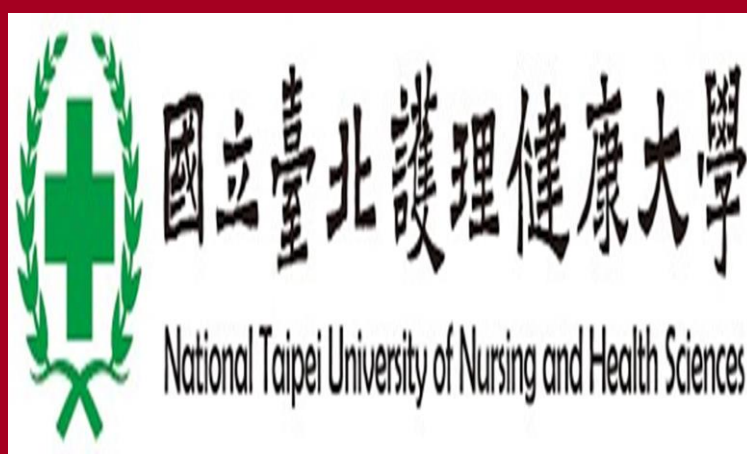




Effectiveness of the Huddles in improving the Patient Safety Attitudes among Clinical Team Members



Yi-Hung Lai^{1,2}, Hung-Ru Lin¹, Ching-Wein Chang², Ming-Ju Wu³, Hsin-Hua Chen³, Shih-Ping Lin³, Chun-Shih Chin³, Cheng-Hsien Lin³, Sz-Iuan Shiu³, Chun-Yi Wu³, Ying-Cheng Lin³, Hui-Chi Chen², Shu-Chin Hou²

¹National Taipei University of Nursing and Health Sciences, Taipei, Taiwan, ²Department of Nursing, Taichung Veterans General Hospital, Taichung, Taiwan, ³Department of Internal Medicine, Taichung Veterans General Hospital, Taichung, Taiwan

Background

Huddles mean huddling together, and the "huddle together moment" in a meeting can be described as a medical team member doing a preprepared report designed to involve clinical staff in discussing existing or emerging safety issues for better communication, cooperation and situational awareness. A huddles is a short 15-min stand-up meeting where staff gather on a fixed day, time and location of the week. Brief reports from the lead nurse and attending physician share the current status of the unit, future plan, past mistakes, staff concerns, and any issues affecting patients or employees to improve communication among team members and to regularly address clinical care issues. A huddles board can be used during the meeting. That is a whiteboard for displaying the work and workflow of the team or organization. It can also include Post it notes that are posted to show status, progress, and issues related to the project or business plan. If someone is unable to attend, the issue is still communicated via post it notes so that everyone's opinion can be heard.

Aim

The study was to determine the effects of huddles on improving the attitudes of team members toward patient safety in our medical institution.



Huddle meaning

Methods

A quasi-experimental design and selected two adult wards with similar properties as the experimental and control groups for convenience sampling. Data collection was from December 1, 2021, to June 30, 2022, at a teaching hospital in central Taiwan. Team members of the ward performing huddles formed the experimental group, and they participated 2 times per week in the 15-min huddles from 08:15 to 08:30 in the morning, which lasted for a total of 4 weeks. The control group adopted the routine team care process. Both groups completed the "Safety Attitudes Questionnaire" in the pretest and posttest of the study.

Figure 1. Participating teams

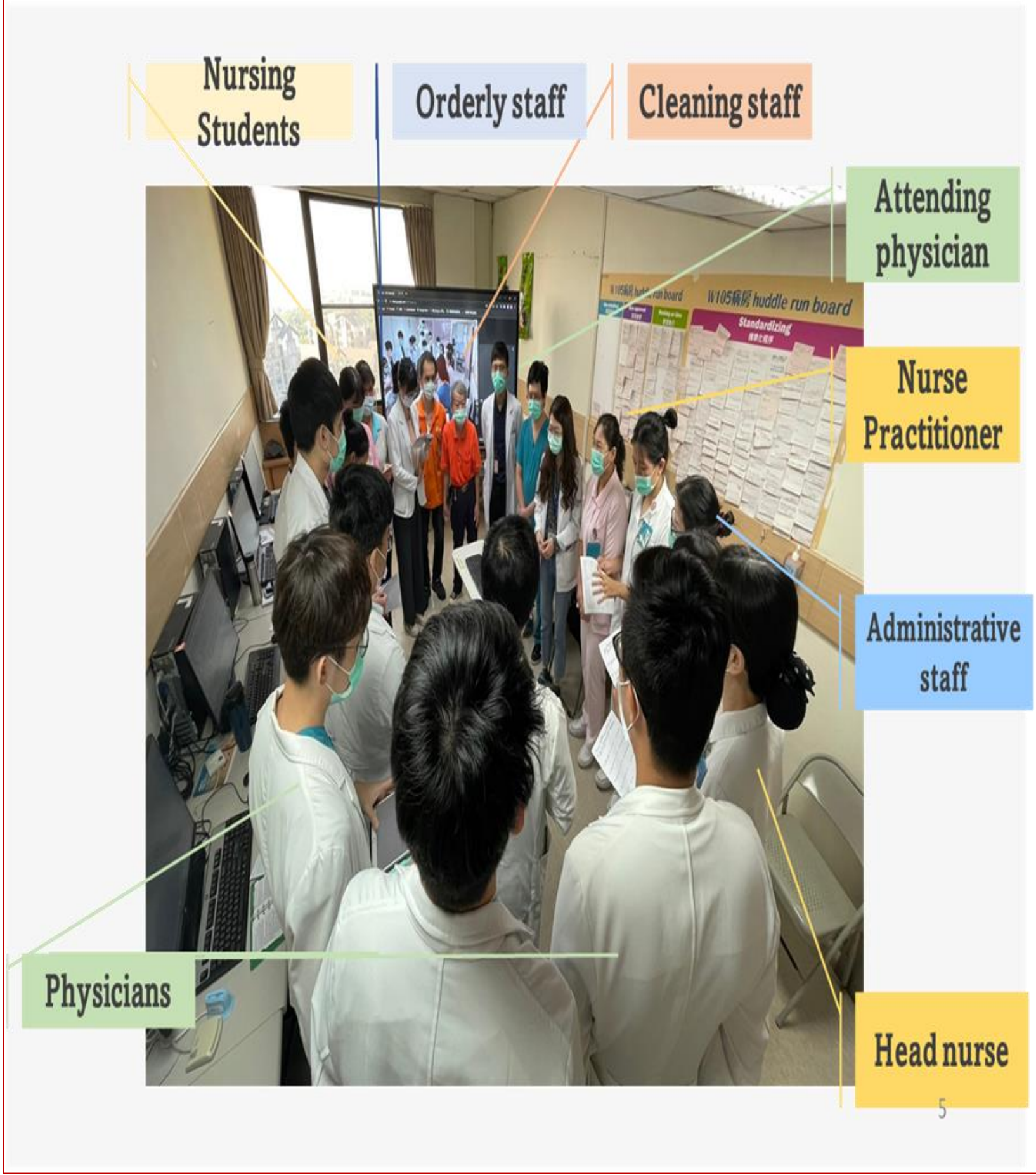
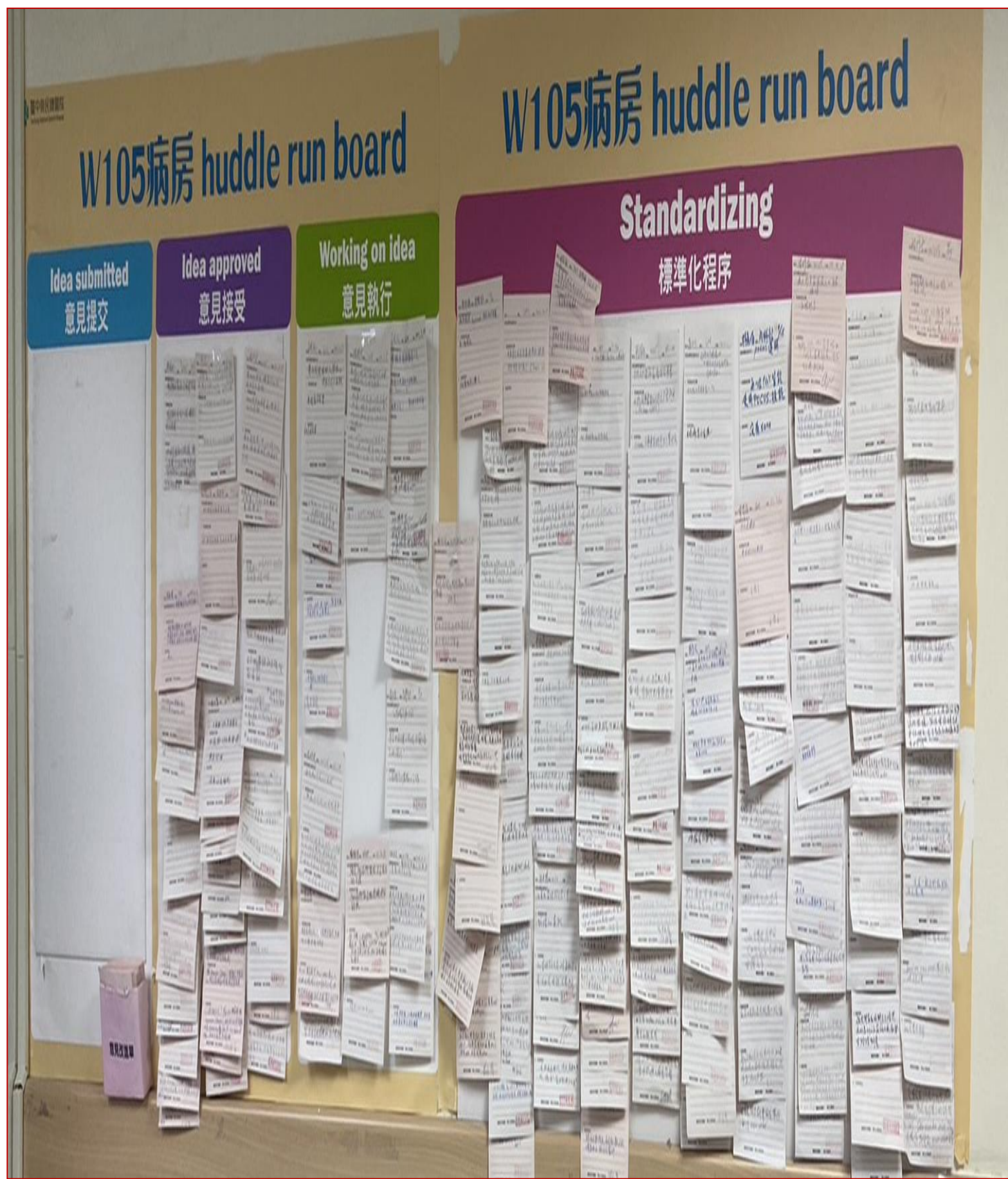


Figure 2. Huddles board



Idea submission → Idea approval → Working on the idea → Standardization

Results

The experimental group scored significantly higher in the posttest than in the pretest in all aspects of safety attitude, with the exception of stress recognition. These improved aspects were teamwork climate ($P<.001$), safety climate ($P <.001$), job satisfaction ($P <.001$), perceptions of management ($P <.001$) and working conditions ($P <.001$).

Table1. Participant Attribute

	Experimental group (n=91)		Control group (n=94)		P value
	Mean(SD)	n(%)	Mean(SD)	n(%)	
Age	29.41(8.42)		30.50(7.63)		.197
<25 years old		27(30.77)		19(20.21)	
≥25 years old		63(69.23)		75(79.79)	
Working years	5.70(7.76)		6.16(7.07)		.136
<5 years		54 (59.34)		55(58.51)	
≥5 years		37 (40.66)		39(41.49)	
Gender					.968
Male		23(25.27)		24(25.53)	
Female		68(74.73)		70(74.47)	
Education level					.323
Below university		7(7.69)		4(4.26)	
University or above		84(92.31)		90(95.74)	
Job category					.912
Nurse		61(67.03)		64(68.09)	
Doctor		26(28.57)		27(28.72)	
Other		4(4.40)		3(3.19)	

Table 2. Patient Safety Attitude

Patient Safety Attitude	Experimental group (n=91)					Control group (n=94)				
	Pre-test		Post-test		P value	Pre-test		Post-test		P value
	Mean	±SD	Mean	±SD		Mean	±SD	Mean	±SD	
Teamwork Climate	76.47	15.90	83.29	13.52	<.001**	80.63	15.33	78.77	14.43	.068
Safety Climate	75.94	16.14	82.81	13.74	<.001**	79.29	14.61	79.94	13.61	.752
Job Satisfaction	74.34	20.22	84.40	17.22	<.001**	74.57	18.66	76.22	19.10	.316
Stress Recognition	72.39	24.83	76.51	25.38	.078	79.59	19.40	82.11	18.30	.047*
Perceptions of Management	78.02	19.99	85.51	15.97	<.001**	81.25	16.42	81.05	17.16	.817
Working Conditions	78.85	17.87	86.81	14.74	<.001**	81.85	16.95	81.65	17.31	.973

McNemar test. * $p<.05$, ** $p<.01$

- **Teamwork Climate:** Huddles provide more opportunities for team staff and help increase confidence in patient safety practice to enhance perceptions of peer teamwork.
- **Safety Climate:** Huddles unit solve and discuss safety issues every week to condensing the awareness of team and building team trust.
- **Job Satisfaction:** Huddles consistency in collecting patient information, determine the root cause and intervention to improve the process and results quality of care.
- **Stress Recognition:** Each person's ability, personality, life background and subjective value judgments have long-term effects on stress cognition.
- **Perception of Management:** Huddles leader conducted open and active discussion and has the ability to propose improvement actions in time.
- **Working conditions:** Huddles discuss instruments, workflow and expectations, facilitating better understanding and appreciation of each other's work.

Conclusion

Through the huddles, clinical team members improved their understanding of different aspects of safety attitudes. Such an exercise provided ward units with real-time improvement and adjustment in terms of patient safety, avoiding medical negligence during their medical work processes with better patient safety.