



Implementation and utility of a short course on patient safety during health professions training based on the WHO patient safety curriculum guide: a pilot study

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Introduction:

- Curricular revision to include patient safety training in Indian health professions education courses is recommended in National Patient Safety Implementation Framework 2018-2025 (NPSIF).^[1]
- "...punitive approach to adverse events and rigid workplace hierarchy" and inadequate training in patient safety is very common.^[2]
- Lack of awareness and inadequate safety culture can be addressed by improved undergraduate training.
- Structured course on this subject is currently lacking in our institute.

Aim:

To study the utility of implementing a short course on *patient safety and clinical risk management (PSCRM)* at our institute.

Objectives:

1. To create a foundational workshop on PSCRM for students of health professions courses.
2. To measure the learning gain among participants.
3. To obtain data on feasibility of such a workshop from participants.

Materials & Methods:

1. Need for program was established through a Targeted Needs Analysis at institute level (August, 2023) using data obtained from 17 students and 22 Faculty/ Staff (survey shared via Google Forms).
2. 1-½ day workshop was designed based on WHO Patient Safety Curriculum Guides (multi-professional & medical school editions).³
3. IEC approval was obtained.
4. 5 workshops for multi-professional groups (medical, nursing, dental, physiotherapy- consenting undergraduate & post-graduate students) were conducted in December, 2023.
5. 30-marks pre-validated MCQs-based pre and post-testing was conducted; retro-pre feedback for perceived knowledge & importance of topics & free response feedback was also obtained.
6. Data analysis was done by calculating Hake's normalized learning gain (*g*); paired *t* test & Wilcoxon signed-rank test of significance of difference; and qualitative (thematic) analysis of free response feedback was performed.

Results: Total workshop participants for whom pre-post data was available (*n*)= 141

Table 1- Hake's Normalized Learning Gain (*g*):

Group	Learning gain (<i>g</i>)	Interpretation of gain
Entire Cohort (<i>n</i> = 141)	0.42	42% (Proficient)
Medical Sciences (<i>n</i> = 69)	0.45	45% (Proficient)
Nursing Sciences (<i>n</i> = 32)	0.3	30% (Marginal)
Physiotherapy (<i>n</i> = 32)	0.5	50% (Proficient)
Dental Sciences (<i>n</i> = 8)	0.4	40% (Proficient)



A workshop in progress

Table 2- Comparison of mean pre and post-test scores:

Group	Pre-test score Mean ± SD	Post-test score Mean ± SD	<i>p</i> value
Entire Cohort (<i>n</i> = 141)	10.11 ± 3.2	18.5 ± 4.7	< .01 *#
Medical Sciences (<i>n</i> = 69)	11.6 ± 3.3	20.1 ± 4.2	< .01 *#
Nursing Sciences (<i>n</i> = 32)	8.2 ± 2.4	14.2 ± 4.4	< .01 *#
Physiotherapy (<i>n</i> = 32)	9.3 ± 2.4	19.6 ± 3.4	< .01 *#
Dental Sciences (<i>n</i> = 8)	7.6 ± 1.7	17.08 ± 3.9	< .05 * ^

* Significant at *p* < .05; # Paired *t* test; ^ Wilcoxon Signed-Rank Test

Table 3- Retro-Pre-feedback analysis: (*n*= 135):

Variable	Before workshop	After workshop	<i>p</i> value
Knowledge and understanding of topic (1- Very poor to 5- Very good); Min- 26, Max- 130; 26 items	72	113	< .01 *
Perception of importance of topic (1- Not at all important to 5- Extremely important); Min- 26, Max- 130; 26 items	88.5	116	< .01 *

* Significant at *p* < .05; Paired *t* test

Table 4- Thematic Analysis of Free-response Feedback:

Emergent Themes	Frequency	Emergent Themes	Frequency
Novelty	60	Relevance/ Importance	48
Good experience	59	Course structure	16
Well-designed	59	Difficult matter	3
Practical utility	48	Impractical/ Utopian content	1

Inference & Conclusion: Workshop format of PSCRM course is an effective method of delivery to achieve learning goals.

Objective and subjective learning gains are significant. It is acceptable to the students.

Enabling factors: Teaching resources are freely available; execution of course is possible at low-cost; administrative support available

Challenges: Student motivation; faculty interest; conflicting academic schedules; time commitment from facilitators

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References:

1. National Patient Safety Implementation Framework (2018- 2025), Ministry of Health and Family Welfare, Government of India (https://main.mohfw.gov.in/sites/default/files/national%20patient%20safety%20implimentation_for%20web.pdf)
2. Landefeld J, Sivaraman R, Arora NK. Barriers to improving patient safety in India: Focus groups with providers in the Southern state of Kerala. Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive & Social Medicine. 2015 Apr;40(2):116.
3. WHO patient safety curriculum guides: <https://www.who.int/publications/i/item/9789241598316>; <https://www.who.int/publications/i/item/9789241501958>