

# EFFECTIVENESS OF FACULTY DEVELOPMENT PROGRAM ON DEBRIEFING SKILLS

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## Introduction

Simulation-based training (SBT) in healthcare is emerging as an important methodology for knowledge translation and facilitating acquisition of technical, non-technical skills, and behavioral skills. To be effective, skilled facilitators need to guide learners during simulation training to optimize learning outcomes. This form of facilitated learning is termed debriefing, which is defined as a 'discussion of actions and thought processes after an event to promote reflective learning and improved clinical performance, making debriefing a key tenet of the experiential learning theory. Effective debriefing during simulation-based training (SBT) is critical to promoting learning outcomes.

**Research Question:** Can a formal in-house Faculty Development Program (FDP) on post-simulation debriefing improve the debriefing skills of first-year basic science medical educators?

## Methodology

**Study Design and Setting Type:** Mixed-method, interventional, Duration: 2 months.

**Sample Size & sampling method:** Purposive, all 21 basic science educators (from Biochemistry, Physiology, and Anatomy departments) involved in teaching first-year medical undergraduates.

**Intervention:** Post Simulation Debriefing FDP module was developed and validated by experts from an accredited Healthcare Simulation Centre, consisting of pre-course materials, interactive sessions, and scenario-based group activities.

**Development and Implementation:** A pilot FDP module was created for basic science educators. A 4-hour immersive FDP session included: Orientation and Interactive Session: First 2 hours focused on introducing post-simulation debriefing models. Hands on: Participants divided into small groups, role-played debriefing scenarios, followed by instructor feedback.

**Training Goals:** To ensure all facilitators could debrief students using structured methods, specifically for use in a simulation of myocardial infarction (MI) with first-year medical students.

### Data Collection

**Phase 1:** Pre- and Post-Tests: To measure participant knowledge. Likert Scale Questionnaire: To assess participant attitudes toward post-simulation debriefing. Feedback Survey: To gather feedback on the FDP.

**Phase 2:** Simulation Sessions for Medical Students- testing the debriefing skills of facilitators.

**Participants:** Out of the initial 21 educators, 11 were able to participate as facilitators. **Simulation Topic:** Myocardial Infarction (MI). **Student Groups:** 150 first-year students divided into 4 batches of 37-38 students.

**Debriefing Method:** Plus/Delta method, with a rotating set of 3 facilitators each day.

**DASH Rating:** After each debriefing session, facilitators were rated by

Self: 11 facilitators self-rated using DASH.

Students: 121 students provided feedback on the facilitators.

Independent Raters: 11 raters used the DASH score sheet.

**Analysis:** Quantitative assessment of pre- and post-tests, Likert scales, and DASH scores, while qualitative feedback provided insights into participants' experiences and perceptions of the FDP's effectiveness.

## Results

Table 1: comparison of pre-post test scores of

% Score	Pretest (n=25)	Post test (n=25)
>90	5	10
75-89	8	6
60-74	11	9
40-59	1	0
<39	0	0

Table 2: observer rating using DASH instructor rating scale.

DASH CRITERIA	Facilitator 1	Facilitator 2	Facilitator 3	Facilitator 4	Facilitator 5	Facilitator 6	Facilitator 7	Facilitator 8	Facilitator 9	Facilitator 11	Facilitator 12
ELEMENT 1 I set the stage for an engaging learning experience	5	5.5	6	6	6	6	6	6	4	5.6	5.4
ELEMENT 2 I maintained an engaging context for learning	5.5	5.5	6	6	6	5	7	6	5	5.6	6
ELEMENT 3 I structured the debriefing in an organized way	5	6	6	5	6	4	6.5	5	5	5.6	5.5
ELEMENT 4 I provoked in-depth discussions that led them to reflect on their performance	5	5.5	6	6	6	5	7	6	5	5.6	6
ELEMENT 5 I identified what they did well or poorly - and why	5.5	6	6	6	6	5	7	6	5	6.3	6
ELEMENT 6 I helped them see how to improve or how to sustain good performance	5.5	5.5	5	5	6	5	7	6	5	6	6.5

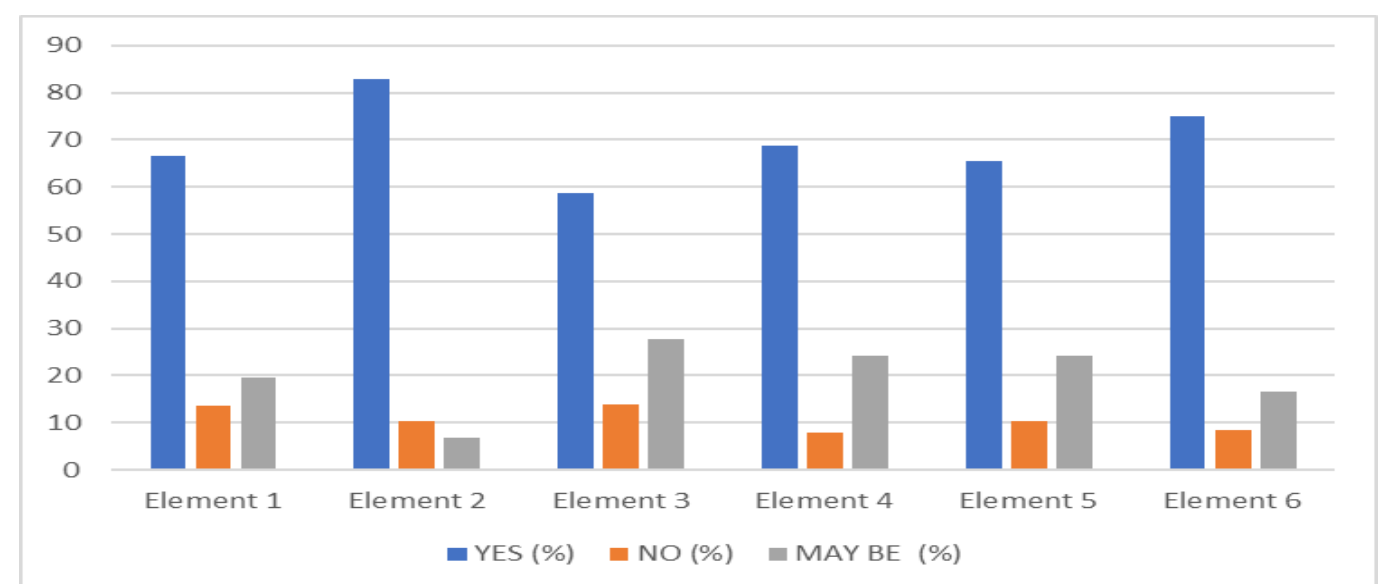


Figure 1: Aided recall survey by the participants on the attitude and practice of post simulation debriefing.

## Conclusion

FDP was successful in enhancing debriefing skills, suggesting its applicability in similar educational settings. Further studies are recommended to validate these findings across larger samples. Individually debriefing was seen good improvement, however the Co-debriefing was found to be limitation in participants, which itself can be scope for future studies..

## Acknowledgements

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