



# Online video consultation skills for virtual patient care: A pilot telemedicine training module for second year medical students

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## Introduction

Teleconsultations are on the rise in India. Despite proposed national telemedicine guidelines for practicing doctors and enhanced student and faculty receptivity, there is a paucity of training modules for undergraduate (UG) medicos.

\*(CAGR) of 21.2%



Concerns

↑ Burden of untrained medicos

Lack of skilled professionals

≈1L students/ year entry into MBBS

Additional skills required

Only ≈2.3 L medical professionals have formal telemedicine training

No formal training in MBBS curriculum

\*CAGR – Compound Annual Growth Rate

Lack of a structured, formal training module in the Indian UG medical curriculum, adds to the increasing burden of untrained professionals, thus limiting availability of telemedicine services and in turn jeopardizing patient care.

**Objectives:** This pilot project aimed to address an important gap in training, align student learning with national guidelines and positively impact virtual patient-care.

## Methodology

**Study Design:** Exploratory sequential Mixed Method; II MBBS students (n=30)

**Ethical considerations:** Approval from Institutional Ethics Committee & Informed consent from participants procured

PLAN

DO

STUDY

ACT

Stage 1: Stakeholder consultation & analysis

Stage 2: Intervention Design

Stage 3: Pilot module teaching & evaluation

Stage 4: Result review Planning of study expansion

• In-depth interview of students & consultants (offering telemedicine) regarding perceptions on TM (Qualitative)

• Pre-test Knowledge Questionnaire – MCQ based; Confidence-rating Visual Analogue Scale  
• Baseline Simulated Patient encounter (SPE) – Checklist based  
• Case-based scenario, scripts for role-plays & video, training of Simulated Patients  
• Validated by Expert panel

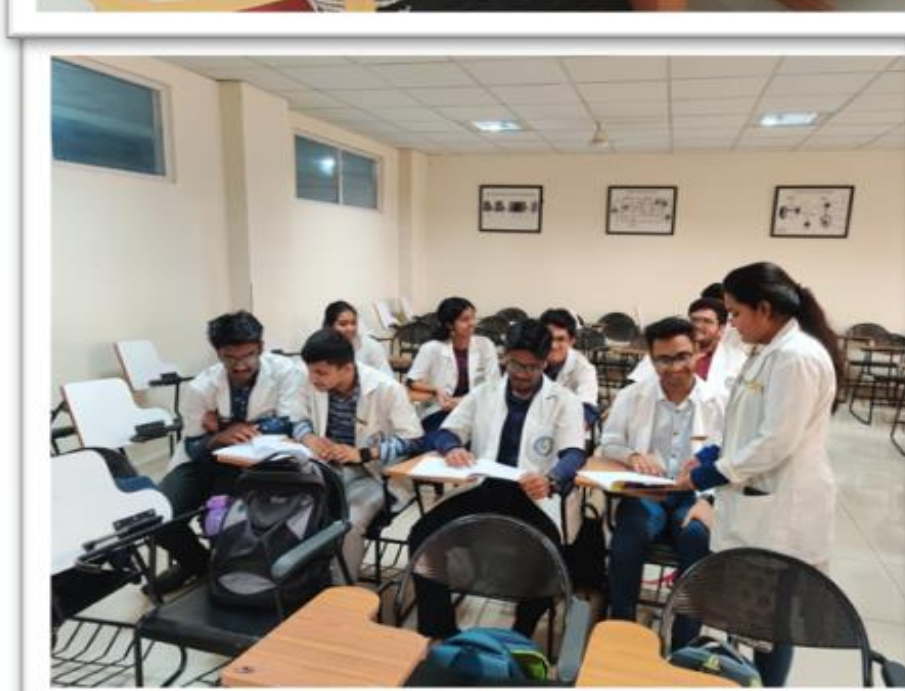
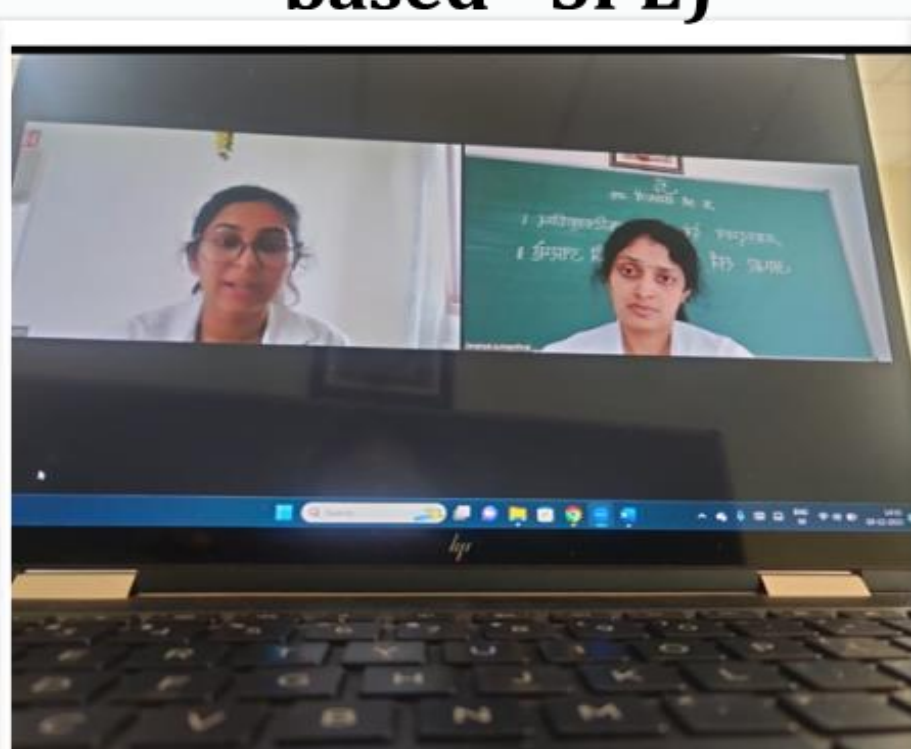
Synchronous & Asynchronous modules (2 each)  
• Introduction to Telemedicine  
• Communication module  
• E-prescription  
• Informed consent  
• Post-module assessment of knowledge, competence & confidence  
• Faculty & Student feedback (FGD)

## Interventions

Faculty Development Program (Training of Trainers)

Role-play (Case-scenario based - SPE)

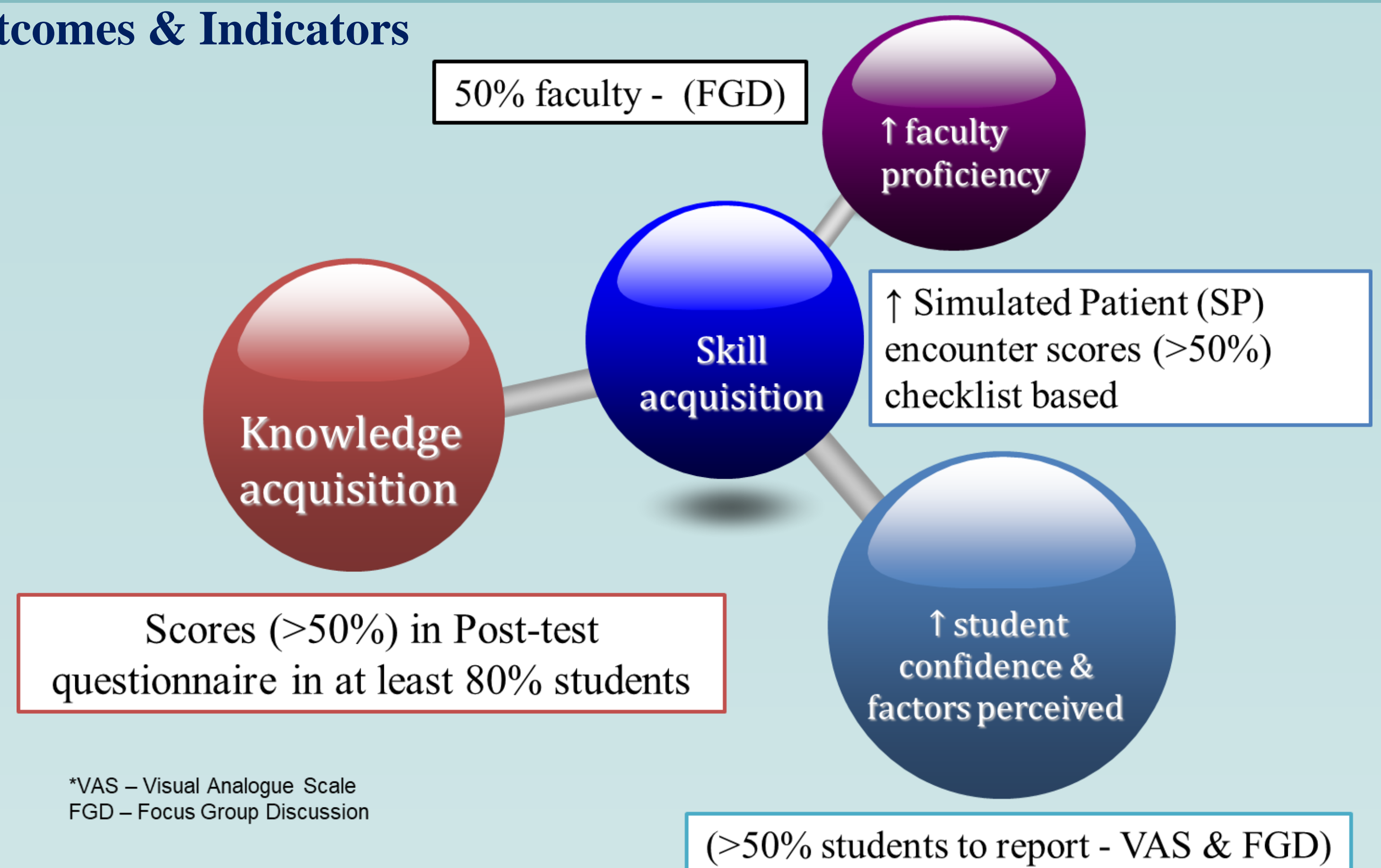
Focus Group Discussion (Student perceptions on skills)



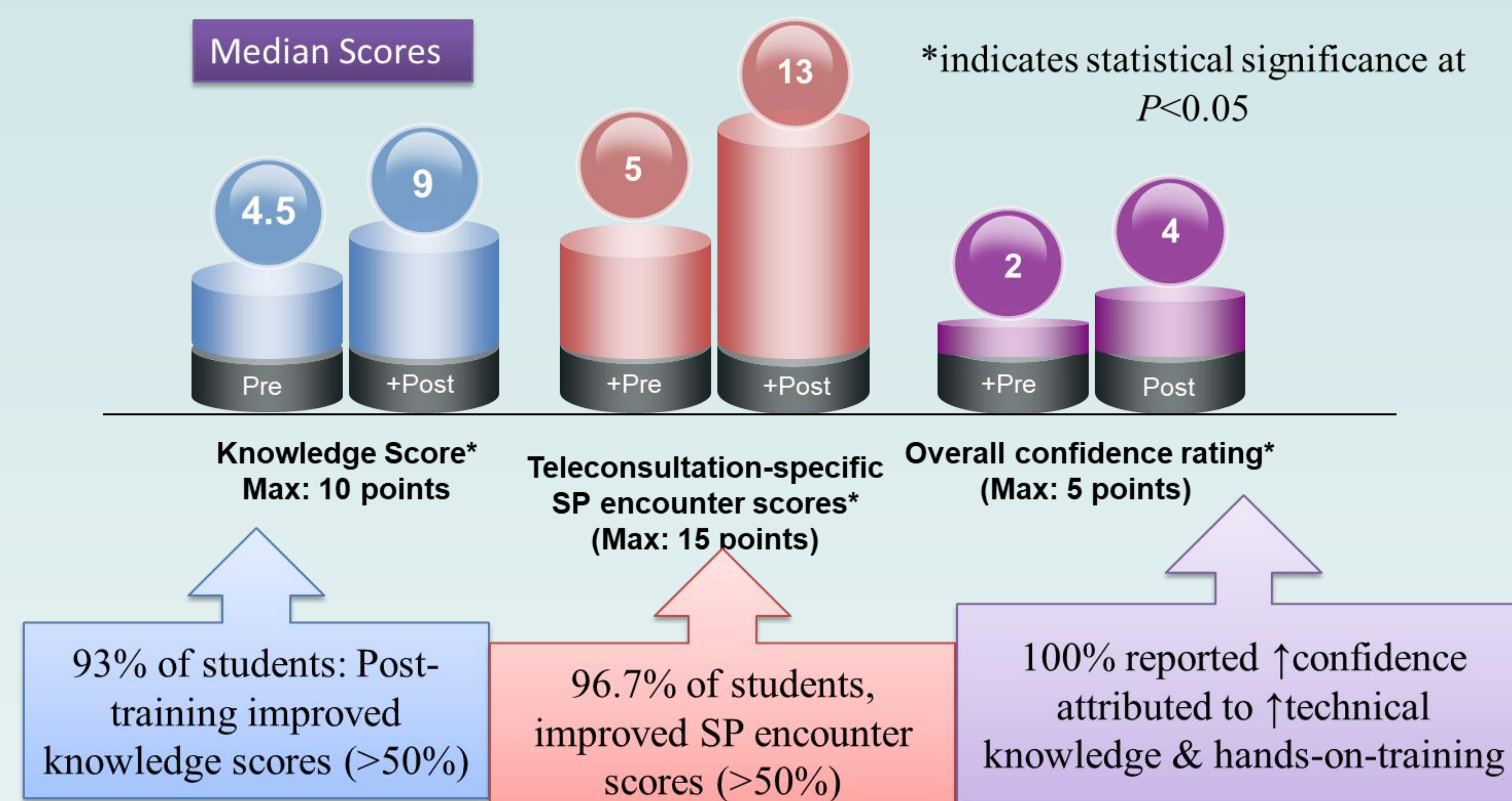
Interactive Lectures/ Small Group Discussions

## Results

### Outcomes & Indicators



### Program Evaluation Findings



Faculty reports of ↑ proficiency in presenting modules and skill-assessment – 100%

## Conclusion

- As healthcare evolves, students need formal training in teleconsultation, including 'web-side' etiquette and virtual care skills, to deliver high-quality telemedicine services in India.

### Strengths:

Student enthusiasm  
Skilled experts and validation team  
Trained faculty  
Institutional support  
Systematic planning

### Challenges (Mitigation)

Attrition of trained faculty (training of additional faculty)  
Keeping stakeholders motivated (consistent & frequent communication)

**The Way-Forward:** With the family adoption program made mandatory in India by the National Medical Commission, these additional skills of teleconsultation can aid in remote monitoring of families; thus facilitating patient care

## References

Telemedicine Practice Guidelines <https://www.mohfw.gov.in/pdf/Telemedicine.pdf>  
Gunner CK et al. Teaching web-side manner. Med Educ Online. 2021;26(1):1954492  
Budakoğlu İI (2021). Telemedicine curriculum in undergraduate medical education. Health Technol (Berl);11(4):773-781.

## Acknowledgements

The study is a part of FAIMER fellowship program, IFI 2023, Philadelphia – Entire IFI Team Expert Panel, Management, Dean, Faculty, Students, Department of Pharmacology, BGSIGMS  
**Disclosure:** The abstract is submitted in RGS format to Medical Education Journal (under review)