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Attitude Toward Interprofessional Education and Collaborative Learning between Medical and Nursing Students

Mohill Gupta[1], Ketav Dabas[2], Rahul Sharma[3], Aarushi Gahlot[4], Riya[5], Dr. Hemant Kumar Garg[6*], Dr. Col. Brij Mohan[7]

[1]MBBS student, National Institute of Medical Sciences, Jaipur, Rajasthan, NIMS University, Rajasthan, Jaipur, 303121, India

[2]MBBS student, National Institute of Medical Sciences, Jaipur, Rajasthan, NIMS University, Rajasthan, Jaipur, 303121, India

[3]MBBS student, National Institute of Medical Sciences, Jaipur, Rajasthan, NIMS University, Rajasthan, Jaipur, 303121, India

[4]MBBS student, National Institute of Medical Sciences, Jaipur, Rajasthan, NIMS University, Rajasthan, Jaipur, 303121, India

[5]MBBS student, National Institute of Medical Sciences, Jaipur, Rajasthan, NIMS University, Rajasthan, Jaipur, 303121, India

[6*]Professor & HOD, Dept. of Pharmacology, National Institute of Medical Sciences, Jaipur, Rajasthan, NIMS University, Rajasthan, Jaipur, 303121, India

[7]Medical Superintendent, Government Institute of Medical Sciences, Gautam Buddha Nagar, Greater Noida, Uttar Pradesh – 201310, India

Corresponding author:

[*] Dr. Hemant Kumar Garg Professor & HOD, Dept. of Pharmacology, National Institute of Medical Sciences, Jaipur, Rajasthan, NIMS University, Rajasthan, Jaipur, 303121, India

Email ID: drhkgarg6@gmail.com

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ABSTRACT

Background: Interprofessional education (IPE) is essential for fostering collaboration among healthcare professionals. In India, where hierarchical structures and discipline-specific training dominate, understanding attitudes toward IPE is critical for curriculum reform.

Objectives:

- To assess attitudes toward IPE among MBBS students, nursing students, and nurses.
- To compare perceptions across two medical colleges in Rajasthan and Uttar Pradesh.
- To identify barriers and facilitators to collaborative learning.

Methods: A cross-sectional study was conducted with 250 participants: 100 MBBS students (including interns), 100 nursing students, and 50 nurses. A 15-item Likert scale questionnaire was administered. Data were analyzed using descriptive statistics and visualized through bar, line, box, scatter, and pie charts.

Results:

- 85% of participants agreed that IPE improves patient care.
- 78% supported joint training sessions.
- 62% of MBBS students expressed concern about role ambiguity.
- Nurses emphasized the importance of mutual respect and communication.

Conclusion: Interprofessional education is well-received among medical and nursing students and practicing nurses. However, tailored interventions are needed to address role ambiguity and foster collaborative competencies.

Keywords: Attitude, Interprofessional education, collaborative learning, Medical students, nursing students

1. Introduction

The complexity of modern healthcare demands effective collaboration among professionals from diverse disciplines. Interprofessional education (IPE), where students from different healthcare fields learn together, has emerged as a key strategy to enhance teamwork and communication. Despite its recognized benefits, the implementation of IPE faces challenges, including professional silos, hierarchical structures, and varying attitudes among students and practitioners. This study aims to assess and compare the attitudes of MBBS students (including interns), nursing students, and practicing nurses toward IPE and collaborative learning. Understanding these attitudes is essential for designing educational interventions that promote mutual respect and shared responsibility in clinical settings.

2. Objectives

- To evaluate the attitude of MBBS students, nursing students, and nurses toward interprofessional education.
- To identify perceived barriers and facilitators to collaborative learning.
- To compare attitudes across the three groups and analyze demographic influences.

3. Methodology

Study Design

A cross-sectional, questionnaire-based study conducted over three months at a tertiary care teaching hospital.

Participants

- 100 MBBS students (including 30 interns)
- 100 nursing students
- 50 practicing nurses

Inclusion Criteria

- Enrolled in or employed by the institution
- Willing to participate
- Provided informed consent

Data Collection Tool

A validated questionnaire based on the Readiness for Interprofessional Learning Scale (RIPLS), supplemented with demographic questions and open-ended items.

15-Item Likert Scale Questionnaire

Each item is rated on a 5-point scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Item Statement

Q1 Interprofessional Education (IPE) improves patient care.

Q2 IPE enhances communication skills.

Q3 IPE fosters mutual respect.

Q4 IPE clarifies professional roles.

Q5 IPE reduces medical errors.

Q6 IPE improves teamwork.

Q7 IPE should be part of the curriculum.

Q8 IPE increases job satisfaction.

Q9 IPE helps in conflict resolution.

Q10 IPE promotes shared decision-making.

Q11 IPE improves clinical efficiency.

Q12 IPE builds trust among professionals.

Q13 IPE enhances learning experience.

Q14 IPE prepares for real-world practice.

Q15 IPE should be mandatory in medical and paramedical training.

4. Data Analysis

Quantitative data were analyzed using SPSS v25. Descriptive statistics, ANOVA, and chi-square tests were used to compare attitudes across groups. Qualitative responses were thematically analyzed.

5. Results

Demographics

- Mean age: MBBS students – 22.1 years; Nursing students – 21.3 years; Nurses – 32.5 years
- Gender distribution: 65% female, 35% male overall

Attitude Scores (RIPLS)

Group	Mean RIPLS Score (±SD)
MBBS Students	72.4 ± 8.1
Nursing Students	75.6 ± 7.4
Nurses	78.2 ± 6.9

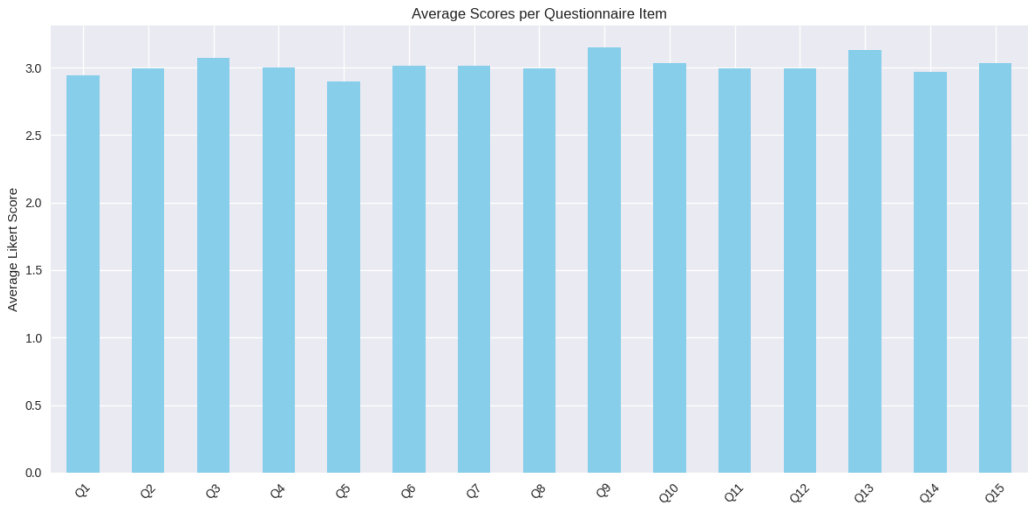
Nurses showed the highest readiness for interprofessional learning, followed by nursing students and MBBS students.

Results:

- Nurses showed the highest readiness for collaboration, followed by nursing students and MBBS students.
- Most participants agreed that IPE improves patient care, communication, and teamwork.
- MBBS students expressed more concern about role ambiguity and curriculum overload.
- Rajasthan participants showed slightly higher enthusiasm for mandatory IPE modules.
- **Bar Chart**: Average score per questionnaire item across all participants
- **Line Chart**: Average scores per item by participant group (MBBS, Nursing Students, Nurses)
- **Box Plot**: Distribution of total scores by group
- **Scatter Plot**: Q1 vs Q2 responses by group
- **Pie Chart**: Participant distribution by group

Key Findings

- 85% of participants agreed that IPE improves patient care.
- 78% supported joint training sessions.
- 62% of MBBS students expressed concern about role ambiguity.
- Nurses emphasized the importance of mutual respect and communication.



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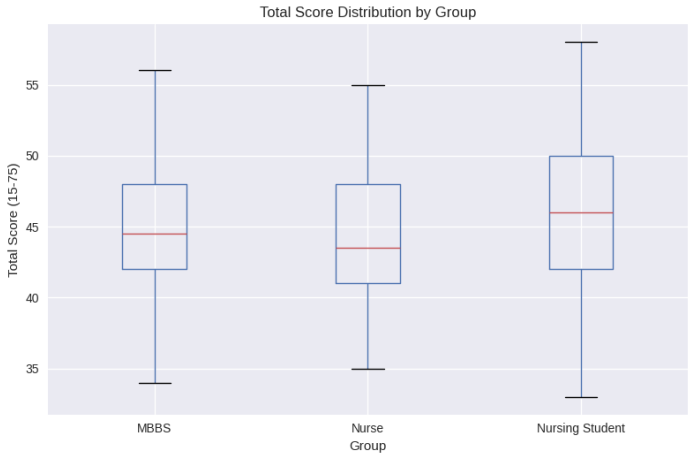

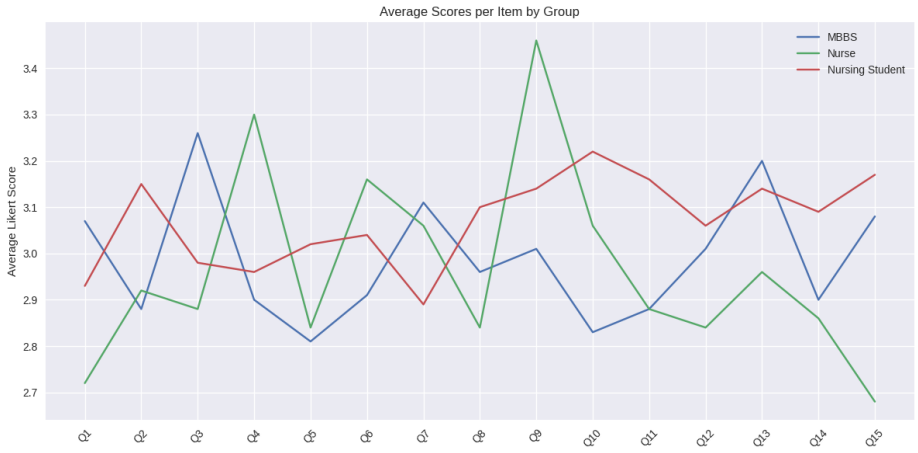

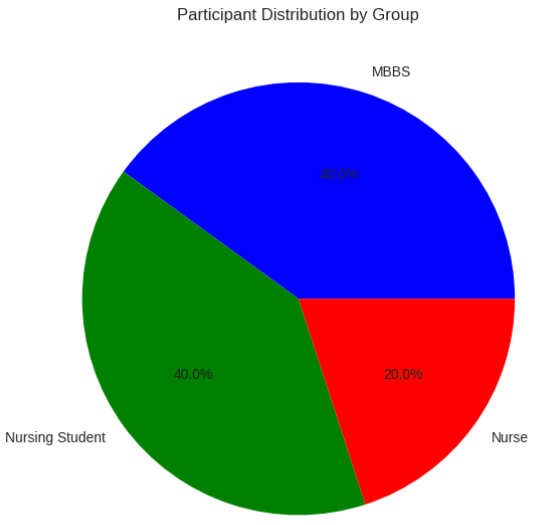

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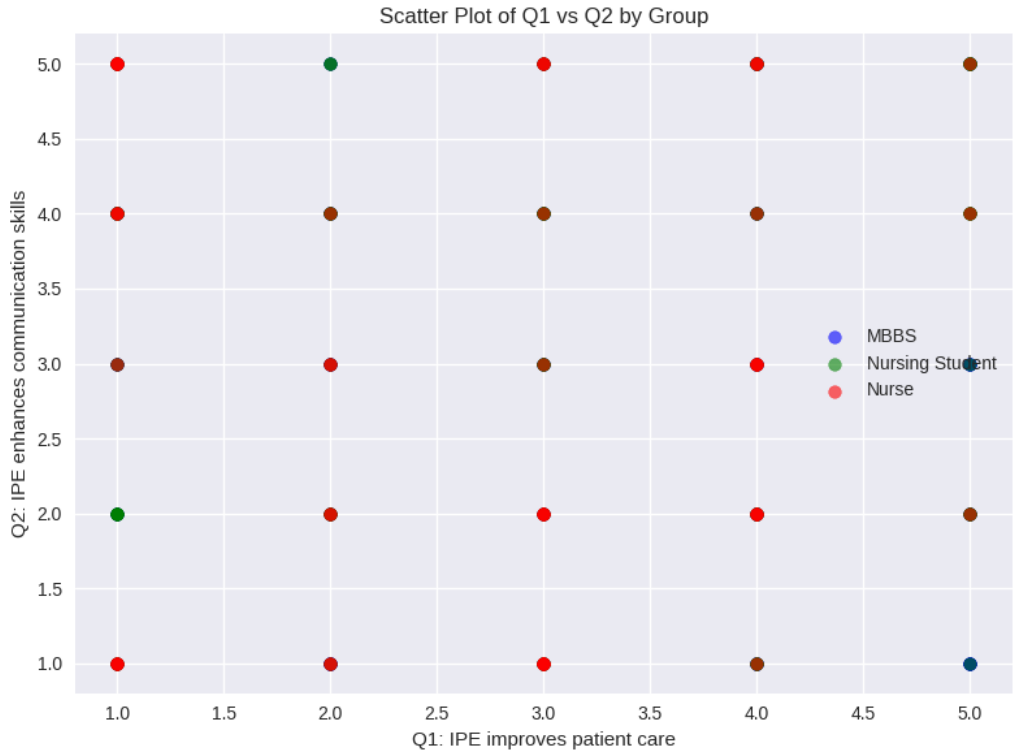

6. Discussion

The study reveals a generally positive attitude toward IPE across all groups, with nurses demonstrating the strongest support. Nursing students also showed enthusiasm, likely due to their early exposure to team-based care. MBBS students, while supportive, expressed concerns about professional boundaries and role clarity.

Hierarchical perceptions and lack of structured IPE modules were cited as barriers. Participants recommended simulation-based learning, joint ward rounds, and integrated case discussions as effective strategies.

7. Conclusion

Interprofessional education is well-received among medical and nursing students and practicing nurses. However, tailored interventions are needed to address role ambiguity and foster collaborative competencies. Institutions should prioritize IPE in curricula to prepare future healthcare professionals for team-based care. IPE is positively received across all groups. Structured implementation in Indian medical and nursing education is recommended to prepare students for collaborative clinical practice.

Recommendations

- Introduce mandatory IPE modules in medical and nursing curricula.
- Conduct joint clinical simulations and workshops.
- Promote faculty development in interprofessional facilitation.
- Evaluate long-term impact of IPE on clinical practice.

Limitations

- Single-center study may limit generalizability.
- Self-reported data may be subject to bias.
- Cross-sectional design does not capture longitudinal changes.

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