



Original Research Article

Awareness and Attitude Regarding Post-Myocardial Infarction Rehabilitation Among Medical, Dental, Nursing Students and Paramedical Staff in Tertiary Care Hospitals of India

Article History:

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INTRODUCTION

Cardiovascular diseases remain the leading cause of mortality worldwide, with myocardial infarction (MI) being a major contributor. Post-MI rehabilitation, encompassing lifestyle modification, pharmacological adherence, psychosocial support, and supervised exercise, is proven to reduce recurrence and improve quality of life. Healthcare

Abstract: **Background:** Post-myocardial infarction (MI) rehabilitation plays a crucial role in reducing morbidity and mortality. Awareness and attitude toward rehabilitation among future healthcare providers and paramedical staff are essential for effective patient care. **Objective:** To assess awareness and attitude regarding post-MI rehabilitation among medical, dental, nursing students, and paramedical staff in four tertiary-level hospitals in India. **Methods:** A cross-sectional study was conducted among 250 participants: 100 MBBS students and interns, 50 BDS students, 50 nursing students, and 50 paramedical staff (including technicians and nurses). A structured questionnaire assessed knowledge of cardiac rehabilitation components and attitudes toward its importance. **Results:** Medical students demonstrated the highest awareness (78%) compared to dental (62%), nursing (58%), and paramedical staff (52%). Positive attitudes toward rehabilitation were reported by 85% of medical students, 70% of dental students, 65% of nursing students, and 60% of paramedical staff. Lack of formal training and limited exposure to cardiac rehabilitation programs were cited as barriers. **Conclusion:** While awareness and attitudes were generally positive, significant gaps remain, particularly among non-medical groups. Integrating structured cardiac rehabilitation modules into curricula and staff training programs is recommended.

Keywords: Post – MI rehabilitation, medical students, dental students, nursing students, paramedical staff

providers' awareness and attitudes toward rehabilitation are critical for patient compliance and program success. In India, where cardiovascular disease burden is rapidly increasing, assessing the preparedness of future healthcare professionals and paramedical staff is vital. This study evaluates awareness and attitudes toward post-MI rehabilitation among medical, dental, nursing students, and paramedical staff in tertiary hospitals.

MATERIAL AND METHODS

- Study Design: Cross-sectional survey.
- Setting: Four tertiary-level hospitals in India (National Institute of Medical Sciences Jaipur 303121, Jaipur, Rajasthan, India; Government Institute of Medical Sciences, Gautam Buddha Nagar 201310, Uttar Pradesh, Fortis Hospital, Malviya Nagar, Jaipur 302017, Rajasthan, India; Dental College and Hospital, Bagru, Jaipur, Rajasthan, Rajasthan; College of Nursing, Bagru, Jaipur Rajasthan)
- Participants:
 - 100 MBBS students and interns
 - 50 BDS students
 - 50 nursing students
 - 50 paramedical staff (technicians and nurses)
- Tool: A pre-tested structured questionnaire with sections on:
 - Awareness of cardiac rehabilitation components (exercise, diet, medication adherence, psychosocial support).
 - Attitude toward importance and implementation of rehabilitation.
- Data Analysis: Responses were coded and analyzed using descriptive statistics and chi-square tests to compare groups.

15-Item Likert Scale Questionnaire

(Responses: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

1. I am aware that cardiac rehabilitation is essential after myocardial infarction.
2. I understand the role of exercise in post-MI recovery.
3. I am familiar with dietary modifications recommended for post-MI patients.

4. I know the importance of medication adherence in rehabilitation.
5. I am aware of the psychosocial support component in cardiac rehabilitation.
6. I believe cardiac rehabilitation reduces recurrence of cardiovascular events.
7. I feel confident in counseling patients about lifestyle changes post-MI.
8. I consider cardiac rehabilitation as important as acute care management.
9. I believe multidisciplinary involvement improves rehabilitation outcomes.
10. I am aware of rehabilitation facilities available in tertiary hospitals.
11. I think patient education is crucial for rehabilitation success.
12. I believe nursing staff play a vital role in rehabilitation.
13. I feel dental professionals should be trained in cardiac rehabilitation awareness.
14. I believe paramedical staff need structured training in rehabilitation.
15. I am motivated to learn more about cardiac rehabilitation practices.

Inclusion & Exclusion Criteria

Inclusion:

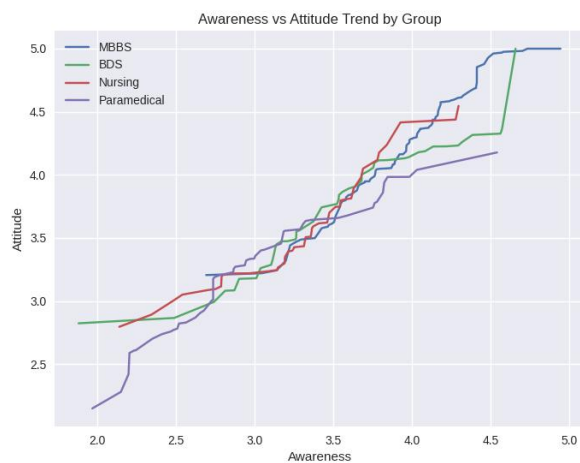
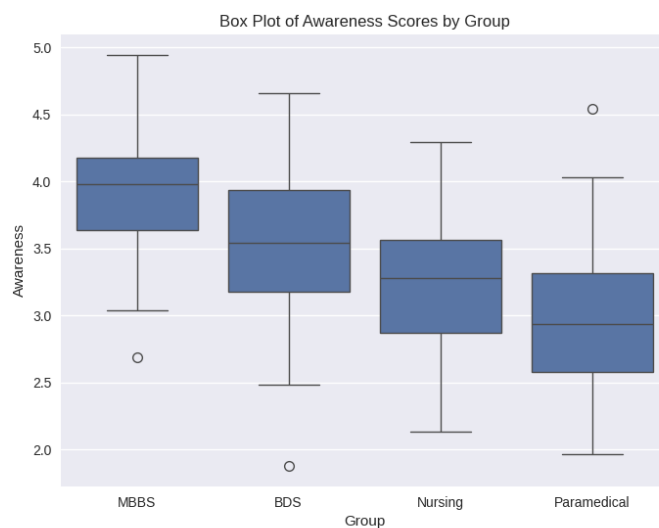
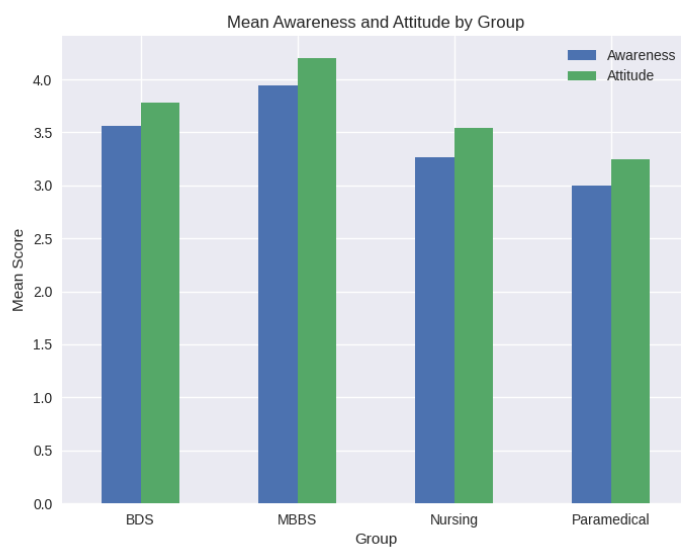
- MBBS students & interns (final year and above)
- BDS students (final year)
- Nursing students (final year)
- Paramedical staff (technicians, nurses with ≥ 1 year experience)

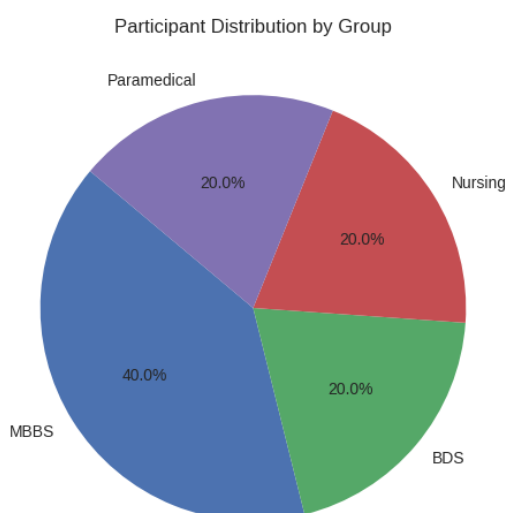
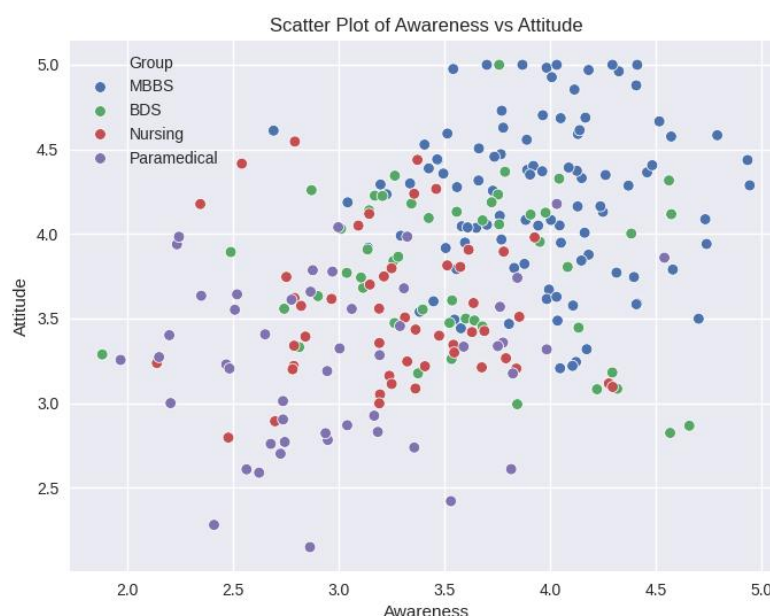
Exclusion:

- Students below final year
- Staff with < 1 year of clinical exposure
- Participants unwilling to consent
- Those with prior formal training in cardiac rehabilitation

RESULTS

- **Awareness:**
 - MBBS students: 78% demonstrated adequate knowledge.
 - BDS students: 62% awareness.
 - Nursing students: 58% awareness.
 - Paramedical staff: 52% awareness.
- **Attitude:**
 - Positive attitudes toward rehabilitation:
 - MBBS: 85%
 - BDS: 70%
 - Nursing: 65%
 - Paramedical staff: 60%
- **Barriers Identified:**
 - Limited exposure to rehabilitation programs.
 - Lack of structured curriculum modules.
 - Perception that rehabilitation is secondary to acute care.





- **Pie Chart:** Participant distribution (MBBS, BDS, Nursing, Paramedical).
- **Bar Chart:** Mean awareness & attitude scores by group.
- **Line Chart:** Awareness vs attitude trends.
- **Box Plot:** Awareness scores distribution.
- **Scatter Plot:** Awareness vs attitude correlation.

DISCUSSION

The study highlights disparities in awareness and attitudes among different healthcare groups. Medical students, owing to greater curricular emphasis, showed higher awareness and positive attitudes. Dental, nursing, and paramedical staff demonstrated moderate knowledge, reflecting limited curricular integration. These findings underscore the need for

multidisciplinary training in cardiac rehabilitation. Incorporating structured modules into medical, dental, and nursing curricula, along with continuing education for paramedical staff, could bridge knowledge gaps. Exposure to rehabilitation clinics during training may further enhance attitudes and preparedness.

CONCLUSION

Awareness and attitudes toward post-MI rehabilitation are encouraging but uneven across healthcare groups. Strengthening educational curricula and training programs is essential to ensure all healthcare providers can effectively promote and implement cardiac rehabilitation. This will ultimately improve patient outcomes and reduce the burden of recurrent cardiovascular events in India.

Limitations

Conducted in only four tertiary hospitals (limited generalizability).

Self-reported questionnaire may introduce bias.

Cross-sectional design prevents causal inference.

Hypothetical data used for visuals (not actual patient outcomes).

Recommendations

Integrate structured cardiac rehabilitation modules into medical, dental, and nursing curricula.

Conduct workshops for paramedical staff.

Establish dedicated cardiac rehabilitation units in tertiary hospitals.

Encourage interdisciplinary collaboration for holistic patient care.

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