

Effectiveness of microteaching as a tool for enhancing teaching technique among junior residents.

Sandhya Kumari, Ojha Pushpanjali, Sanga Aradhana, Singh Smriti
Department of Anatomy, RIMS, Ranchi, Jharkhand



Introduction

In India Microteaching was implemented in 1997, but yet to be practiced in its true vigor. We conducted a KAP survey. Results showed, microteaching as an under-used medical teacher's training technique

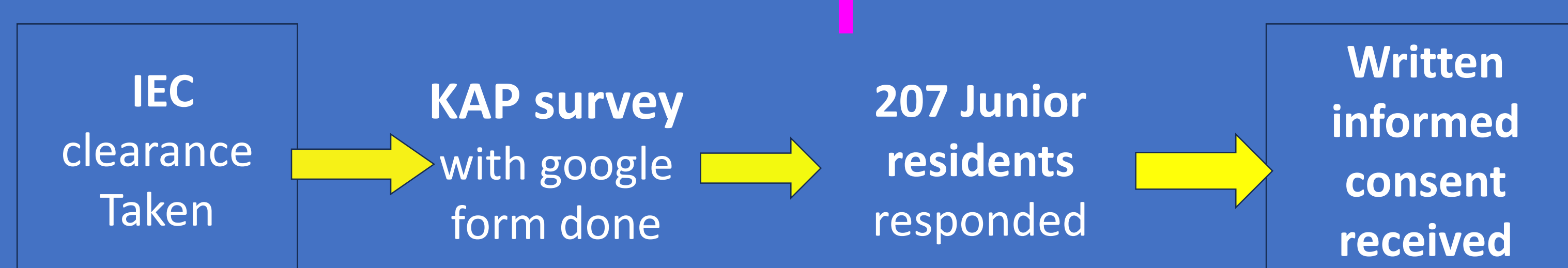
Microteaching gives a highly flexible opportunity to practice professional development with an evidence-based practice, whether done in front of supervisor, senior faculty, friends or alone with video recording

Aim : Resident doctors should **understand** well about **all aspects** of microteaching and become capable of **probing into** its different aspects for continuously **enhancing** their **knowledge** and **skill** in their professional life of teaching.

Objective: Resident doctors should be able to **define** microteaching, **describe** its cycle, phases and at least 10 teaching skills correctly at the end of workshop session.

Methodology

- **Setting :** RIMS and Watts-app on Social media
- **Sampling method-** Convenience Purposive sampling
- **Study (Research) design-** Quasi experimental



- **KAP survey** – Knowledge assessed by **Rubrics**....

Out of 206 only 13 JRs showed adequate knowledge: Need for Intervention

- **Intervention Planned with a Training cum workshop in 3 Phases and invitation for enrolment sent**

Out of 47 Junior Resident doctors enrolled for **workshop** 23 junior residents passed through all interventions so these 23 were included in the analysis process of this study.

Sample - Junior Resident doctors(11 Male + 12 Female)

Assessment tool - Questionnaires in google-forms

Intervention:

1. Self - learning by resource material provided, followed by assessment with google forms after 24 hrs. Continued 3 days.

Three (3) Assignment's scores used for calculation of **Mean(Sc-1)**

2. Pre-tes followed **by Interactive teaching learning session** on microteaching on day of workshop **Pre-test score (Sc-2)**

3. Hands-on session on **Teaching skills** with **describing** and **demonstrating skill**, but cycle and phases not included in hands on.

Residents were asked to discuss within their team, before presenting a small topic of their choice to use the assigned skill.

Feedback given in end

4. Post-test assessment with Google forms on day of workshop was done. **Score**



Result

Total participants enrolled = 42
Total participants attended the workshop = 37

Total participants submitted complete responses:
Assignment 1: 39 participants
Assignment 2: 37 participants
Assignment 3: 32 participants

Pre test:33 participants

Post test: 45 participants

Self perceived confidence level: 35 participants

Feedback:35 participants

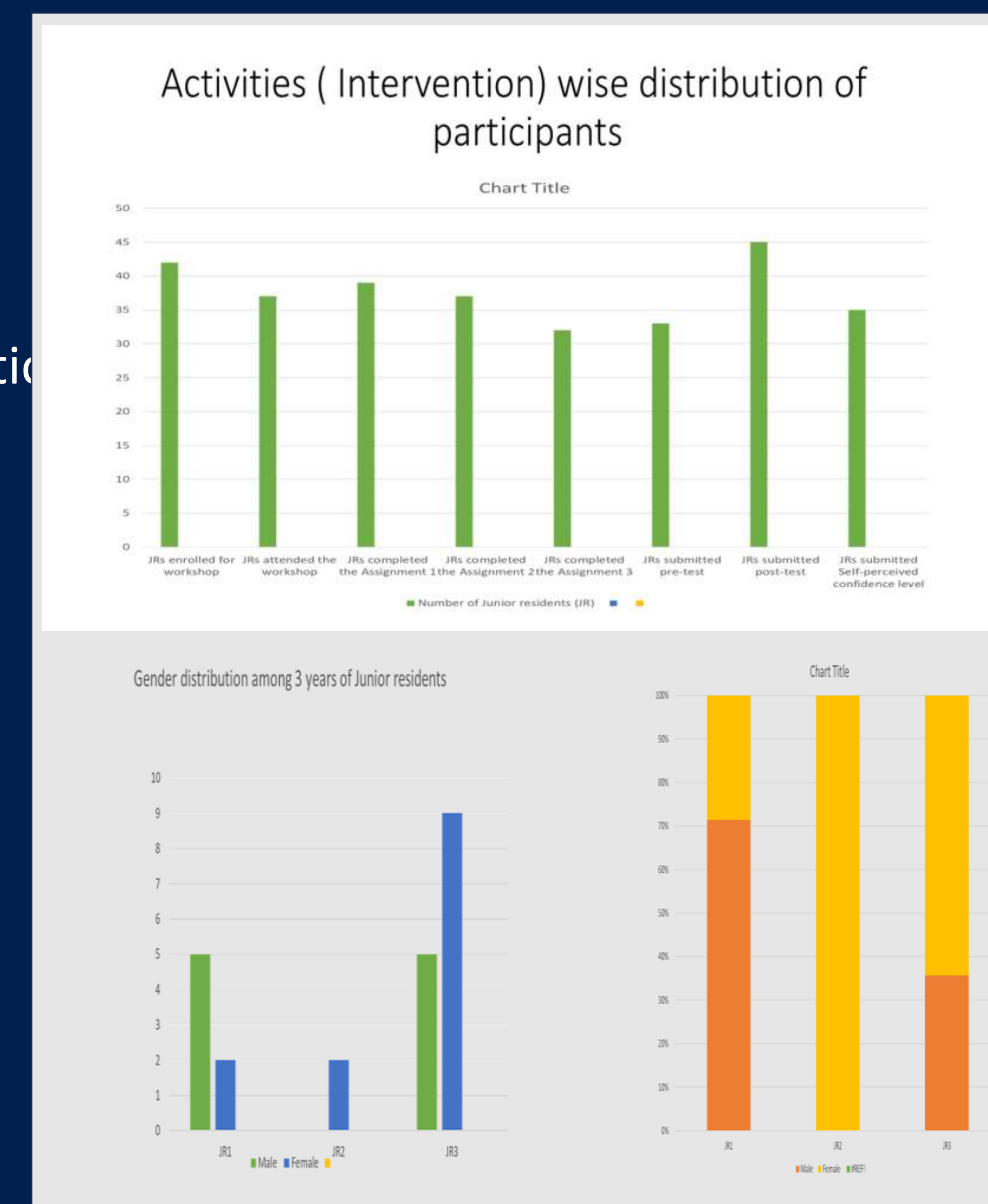
Number of JR1:10

Number of JR2:02

Number of JR3:30

Clinical sciences:16

Basic sciences: 26



Variables	Mean	Standard deviation	Standard error of mean
Pre test score	7.74	3.08	0.64
Post test score	8.44	1.24	0.26

Paired 't' test was performed on Sc-2 (Score of Pre-test on day of workshop, before start and Sc-3) Score of Post test at end of workshop) showing gradual increase in their knowledge on microteaching.

Null hypothesis H0 : D=0 (Difference between Post test score and Pre Test Score)

Alternative Hypothesis: H1: D > 0

3rd intervention is more effective than 2nd intervention

Conclusion

Microteaching sessions are **effective for enhancing the knowledge about microteaching purpose, method, cycle and different teaching skills among junior resident doctors**

Challenges

1.This project being a longitudinal one spread over a long duration of period result in difficult to sustain the same population of participants through out 2. Junior resident doctors from clinical department on emergency duty missed the opportunity to participate

Enabling factors

1. most important was our team members motivation, spirit and cohesiveness.
2. Response from junior residents participating : their enthusiasm and through involvement in workshop was beyond our expectation and very encouraging for us.

References

1. Remesh A. (2013). Microteaching, an efficient technique for learning effective teaching. Journal of research in medical sciences : the official journal of Isfahan University of Medical Sciences, 18(2), 158–163.
2. Shane Cavanaugh(2022) Microteaching: Theoretical Origins and Practice Central Michigan University © 2022 James Nicholas Publishers Educational Practice and Theory Vol. 44, No. 1, pp. 23-40

Acknowledgements

1. Our gratitude to the workforce of MMRC, including technical personnel to support staffs
2. We give our heartfelt thanks to our academic Dean for supporting us in sending letters to departments for letting Junior residents participate.
3. We are thankful to all HODs for sparing their resident doctors,
4. Last but not least, I am grateful to my husband for guiding me in statistical analysis