

Role of WhatsApp in improving learning among medical students

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ABSTRACT

Background: WhatsApp is one of the most famous messaging services which everyone including youngsters use. This service is easy, cheaper, and faster. It is used to transmit information. Slow learners are the students who do not perform well which may be due to disinterest or pressure. The biggest challenge for any teacher is to uplift the slow learners. **Objectives:** The objectives of this study were to find out the role of WhatsApp in augmenting learning in ENT among the third professional MBBS students. **Materials and Methods:** Students of the third professional MBBS who use smartphones and have WhatsApp facility and willing to study through WhatsApp along with their regular teaching schedule was identified as slow learners and fast learners depending on their performance in the first semester examinations. All these students were put into a single WhatsApp group and were given assignments that they had to write and submit in JPG format and also upload one latest research article on that topic. After 5 months, the students were analyzed for performance in the second semester examinations and feedback was taken regarding their experience with this study method. **Results:** Most of the students showed that interest in this method among both slow learners (88%) and fast learners (87%) and felt their knowledge has improved (80% in slow and 77% in fast learners). The overall performance also improved in the second semester examinations. **Conclusion:** WhatsApp can improve learning, especially among slow learners by creating their interest and improving communication among students. It can motivate and play an augmenting role to traditional learning methods to improve learning.

KEY WORDS: Active learning; Communication; Didactic Lectures; Feedback; WhatsApp

INTRODUCTION

WhatsApp is one of the most popular messaging services youngsters use today due to popularity of smartphones.^[1] It has variety of functions such as text messages, images, and audio and video films.^[2] This has made the communication easier, faster, and cheaper.^[3] Groups can be formed here which lead to improved communication and collaboration among members.^[2]


Medical students are passive receptors of classroom didactic lectures.^[4] Although traditional lectures have stood the test of

time,^[5] it has led to increased gap between slow and fast learners with slow learners being the ones who show less interest in such lectures. Slow learners are the students who do not perform well which may be due to disinterest or pressure. The biggest challenge for any teacher is to uplift the slow learners. Today is the age of active learning and self-directed learning which should be student centered. Medical Council of India is also encouraging active learning among medical students.^[6]

Hence, this study was conducted to find out the role of WhatsApp in augmenting learning in ENT among the third professional MBBS students, especially among the slow learners.

MATERIALS AND METHODS

This study was conducted in the department of ENT of our medical college and hospital from July 2018 to November 2018.

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The approval of the institutional ethics committee was taken. 82 students of the third professional MBBS (2015 batch) who use smartphones and have WhatsApp facility and willing to study through WhatsApp along with their regular teaching schedule were included in this study. They were identified as slow learners and fast learners depending on their performance in the first semester examinations held in June 2018.

All these students were put into a single WhatsApp group and were given assignments on one topic that they had to write and submit in JPG format and also upload one latest research article on that topic. Each such assignment was to be completed in 1 week and then, the new assignment was started. At the end of 1 week, the facilitator (teacher) used to put his notes for the students to understand the same topic. They also had to communicate and discuss each other notes posted there among themselves and with the facilitator. Various important topics in ENT were covered in these 5 months. The students were instructed to use the group only for learning purpose and not for personal interactions.

After 5 months, the second semester examinations were held and analysis was done for:

1. Improvement in students' performance among both slow learners and fast learners.
2. Students' involvement in this WhatsApp-based learning process was also noted in these 5 months.
3. Students feedback regarding their learning improvement was also taken but after final university examinations to reduce bias.

RESULTS

Of 82 students, 25 were identified as slow learners (scored <50% in the first semester ENT examinations and 57 as fast learners (>50%) [Table 1].

Most of the students showed interest in this method among both slow learners (88%) and fast learners (87%) [Table 2].

Most of the students felt their knowledge has improved (80% in slow and 77% in fast learners) [Table 3].

There was a drastic improvement in the performance of slow learners in the second semester examinations [Table 4].

DISCUSSION

This study was done on MBBS third professional students of 2015 batch. Our results showed that the use of WhatsApp group for learning by interactions, discussions, and learning among the students has a positive impact [Figure 1]. Most of the students felt their knowledge improved and most of the students showed keen interest in the method of learning [Table 2].

Table 1: Slow and fast learners

Slow learners	Fast learners
25	57

Table 2: Students participation

Participation	Slow learners n=25 (%)	Fast learners n=57 (%)	Total n=82 (%)
Actively participated	22 (88)	50 (87)	72 (88)
Somewhat participated	3 (12)	6 (11)	9 (11)
Minimal participated	0 (0)	1 (2)	1 (1)

Table 3: Feedback

Knowledge	Slow learners n=25 (%)	Fast learners n=57 (%)	Total n=82 (%)
Improved	20 (80)	44 (77)	64 (78)
Same	5 (20)	13 (23)	18 (22)
Worsened	0 (0)	0 (0)	0 (0)

The reason for improvement among slow learners in our study was they developing interest in the topic through WhatsApp and they learnt from the way others approached the answers, leading to improvement in their knowledge and writing skills. Facilitator had a chance to observe the answers posted and discussions held and could intervene and correct at any point required. Here, students learn to work as a team and team study always produces better results as evident in our study. However, it cannot replace the traditional didactic lecture but can supplement it to improve learning, especially among slow learners.

Most of the students in our study felt their knowledge improved [Table 3]. A study by Rambe and Bere had also achieved positive feedback among students using WhatsApp for learning.^[7] There was improved performance, especially among slow learners. Similar results were obtained in a study done by Plana *et al.*, in Spain.^[8] Mohanakrishnan *et al.* in their study in 2017 also found WhatsApp to enhance learning.^[9]

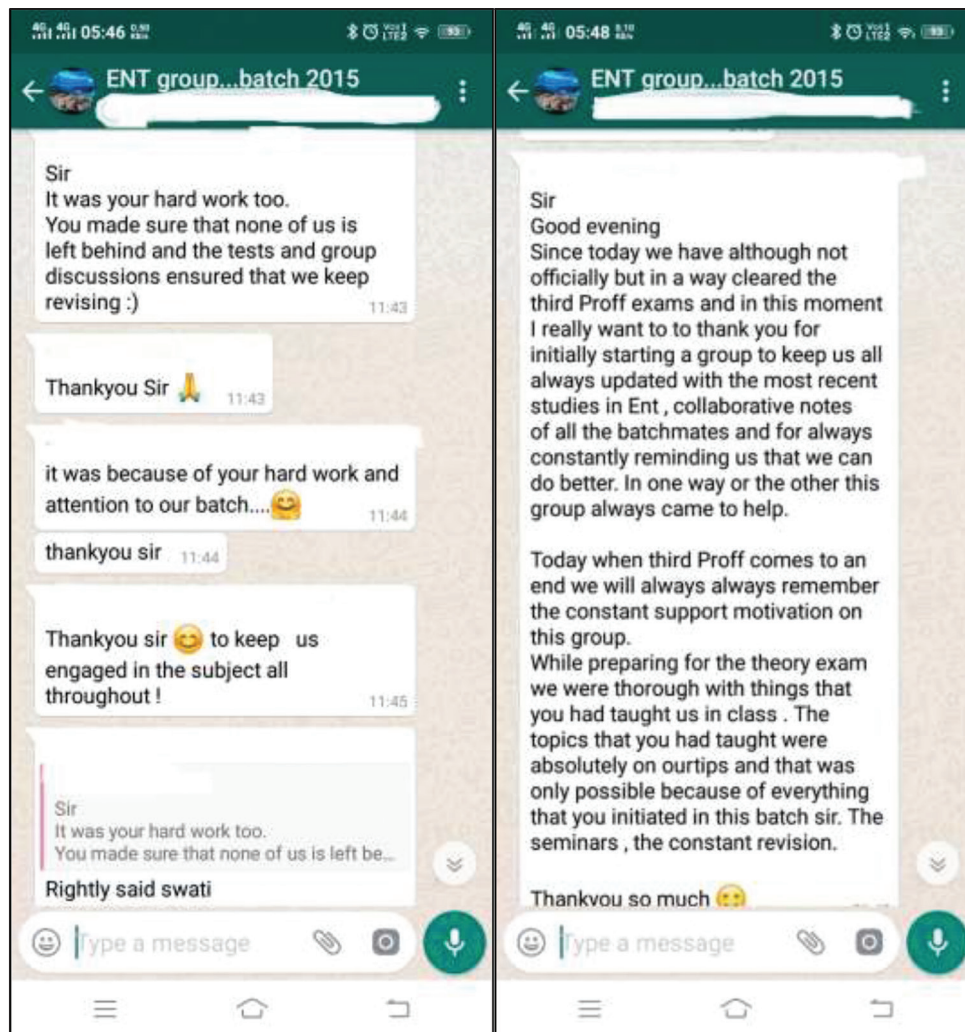
The strength of our study was that this is the first kind of study done which focuses mainly on slow learners. As we discussed improving learning, among slow learners are the major concern of all teachers in any field. The limitation of our study was that not every student can possess a smartphone in a country like India still. Moreover, second, a regular monitoring and time by facilitator are required so that students do not lose the track and aim.

CONCLUSION

WhatsApp can improve learning, especially among slow learners by creating their interest and improving communication among students. It can motivate and play an augmenting role to traditional learning methods to improve learning.

Table 4: Performance

Result	First semester examinations (June 2018)			Second semester examinations (November 2018)		
	Slow learners (n=25)	Fast learners (n=57)	Total (n=82)	Slow learners (n=25)	Fast learners (n=57)	Total (n=82)
>50% marks	0 (0%)	57	57 (70%)	21 (84%)	55	76 (93%)
<50% marks	25	0	25 (30%)	4	2	6 (7%)

**Figure 1:** Students feedback

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