Education and training of the various members of pain management team enhances their skills, knowledge and improves patient care. In our hospital, we found deficiency in the knowledge of anaesthesia post-graduate students with respect to post-operative pain management. With a desire to improve our traditional teaching techniques, this educational project was designed to evaluate the benefit of virtual classroom teaching using WhatsApp based discussion, on pain knowledge, using pre and post intervention model.

Methodology: After acquiring exemption for review by the hospital ethics board, the trial was registered with Clinical Trials Registry. The newly joined anaesthesia post-graduate students of 2016 batch (Gr II), after verbal consenting and assurance of no negative impact if they desired not to participate, were included in a WhatsApp integrated teaching programme. Essential aspects of acute pain management were discussed in the WhatsApp group for a period of six months in addition to traditional teaching. Knowledge scores were assessed by a pre designed questionnaire at the beginning and at the end of the 6-month program. The knowledge score of the previous year served as a control (Gr I).

In absence of a questionnaire specific for evaluation of knowledge with respect to acute post-operative pain, two knowledge based questionnaire were drafted by a group of consultants using the Delphi technique. Each questionnaire included 25 statements for which the participants had to indicate whether they agreed or disagreed; an option of ‘Do not know’ was included. The participants were made to answer the questionnaire within 30 minutes in a supervised environment. The right answer was scored as 1 and wrong answer or answer ‘not known’ was scored as zero. The maximum score was 25. In addition, at the end of 6 months, students had to rate the current teaching program on a 5 point Likert scale ranging from excellent to very poor.

Results: The median test score for correct answers for Gr II at the end of six months was significantly higher 13 [IQR 12-17] when compared to baseline (p=0.015) and with the control group (p=0.034), refer graph 1. The rating for the teaching program was higher for the WhatsApp integrated program with 68% of students from 2016 scoring the teaching as excellent/very good versus 26% similar response from the 2015 batch (p<0.001)

Discussion and conclusion:

Students work at variable times, at numerous locations and often do not get the benefit of scheduled educational sessions. Restrictions on the available teaching time slots, made us explore for newer a-synchronous methods for learning. The improvement in knowledge and positive feedback from students has been instrumental in incorporating this novel teaching method into our regular teaching program for post operative pain management.

References:
3. Indian J Anaesth 2014;58:127-31

Graph 1 : Box plot comparing total scores, median (IQR)
Gr I(6) : Test Scores for resident doctors from 2015 batch at end of 6 months (control group) GrII(0): Test scores for resident doctors from 2016 batch at the beginning of the teaching program (baseline scores) Gr II(6): Test scores for resident doctors from 2016 batch at the end of 6 months