A Randomized control study of oral v/s vaginal and sublingual Misoprostol with Mifepristone for First Trimester (49 days i.e. 7 weeks of gestation) Medical Termination of pregnancy was done by Dr Rakhee Sahu and published in Asian Journal of Obstetric & Gynaecology Practice.

Objectives: To compare the outcome of two regimes of mifepristone and misoprostol (oral v/s vaginal and sublingual administration of misoprostol) for medical termination of early pregnancy (within 49 days)

Study design: A randomized controlled study was conducted at Dr L.H.H. Hiranandani Hospital from November 2011 till August 2012. Total 75 women requested for Medical termination of pregnancy within 49 days of amenorrhea (7 weeks).

These women were divided in 2 groups:
Group 1- received Tab Mifepristone 200 mg orally followed by Tab Misoprostol 600 mcg oral after 48 hours.
Group 2- received Tab Mifepristone 200 mg orally followed by Tab Misoprostol 800 mcg, 2 tablets administered per vaginum & 2 tabs advised to be taken sublingually after 12 hours.

An Ultrasonography pelvis was performed on all patients pre MTP to confirm the location and age of gestation and Post MTP on day 15 to confirm no retained products of conception. The patients were monitored for amount & duration of bleeding, side- effects like vomiting, excessive bleeding & pain in abdomen. All patients were advised follow up on day 15 after post MTP Ultrasonography to confirm no retained products of conception. Women with incomplete abortion and persistent bleeding till 15th day were advised surgical evacuation.

Statistical analysis: Statistical analysis was done by 2 proportion test for individual side effect with the null hypothesis. If P value is >0.05 and T test of mean difference 0 is within the confidence interval, the null hypothesis is accepted at 99% confidence interval.

Results- The outcome of study was measured in terms of patient having complete abortion of pregnancy and not requiring surgical intervention. The complete abortion rates in group 1 were 91.4% as compared to 90% in group 2. As the P value is >0.05, the null hypothesis is accepted at 95% confidence interval, there is a no statistical difference in outcome of MTP between group 1 and 2. The incidence of heavy bleeding was reported in only 8.5 % of patients in group 1 and 7.5 % of patients in group 2. The duration of bleeding in both the groups was mostly between 7- 10 days. Only 11.4 % of women in group 1 and 12.5% in group 2 had bleeding for more than 15 days. The duration and amount of bleeding were statistically similar in both groups. As the P value is >0.05 for all the parameters, there is no significant difference in duration of bleeding between group 1 and group 2. Oral misoprostol 600 mcg was tolerated well by patients and lowering the dose, did not reduce the abortion rates or the duration of bleeding when compared with 800 mcg of misoprostol.

Conclusion:
We concluded that after 48 hours of administration of mifepristone, oral 600 mcg of misoprostol is as efficient as 800 mcg of misoprostol (administered vaginally- 400 mcg and sublingually- 400

mcg) in inducing medical abortion of pregnancy within 49 days of amenorrhea. There was no difference in the amount or duration of bleeding in both the regimes.