GMR
The Original

PLANNED EARLY INDUCTION OF LABOR VERSUS EXPECTANT MANAGEMENT FOR PREMATURE RUPTURE OF MEMBRANE

Dr Zofashaa Shahid[1], Dr Tooba Mahrukh[2], Dr Mussarat Batool[3], Dr Saira[4], Dr Faiza Sher[5]

[1]Designation: PG Trainee, Institute Name: Pakistan Institute of Medical Sciences, Islamabad, Department: MCH Unit 1, Department of Obstetrics & Gynaecology, Email: zofashaashahid@gmail.com
[2]Designation: PG Trainee, Institute Name: Pakistan Institute of Medical Sciences, Islamabad, Department: MCH Unit 1, Department of Obstetrics & Gynaecology
[3]Designation: Assistant Professor, Institute Name: Pakistan Institute of Medical Sciences, Islamabad, Department: MCH Unit 1, Department of Obstetrics & Gynaecology
[4]Designation: PG Trainee, Institute Name: Pakistan Institute of Medical Sciences, Islamabad, Department: MCH Unit 1, Department of Obstetrics & Gynaecology
[5]Designation: PG Trainee, Institute Name: Pakistan Institute of Medical Sciences, Islamabad, Department: MCH Unit 1, Department of Obstetrics & Gynaecology
CorrespondingAuthor:, Dr Zofashaa Shahid

ABSTRACT

Objective: To compare maternal and fetal outcomes of planned early induction of labour with expectant management in women presenting with premature rupture of membranes at term.

Study Design: A randomised controlled trial.

Place and Duration of the Study: Department of Obstetrics and Gynaecology, PIMS Hospital, Islamabad, Pakistan, from 1st May to 1st November 2026.

Methodology: A total of 734 women with term premature rupture of membranes were included and randomly allocated into active management group (n=367) and expectant management group (n=367). Active management was done by induction within 24 hours using prostaglandin E2 vaginal gel, while expectant management involved observation for 24 hours for spontaneous labour. Maternal and fetal outcomes were recorded. Data were analysed using IBM-SPSS 26. Chi-square test or Fisher's exact test was applied with $p \leq 0.05$ considered significant.

Results: Mean age was 27.00 ± 4.89 years in active management and 27.25 ± 4.67 years in expectant management group. Caesarean section was significantly higher with active management, 114 (31.1%) versus 81 (22.1%) (p=0.006). Chorioamnionitis was significantly lower with active management, 23 (6.3%) versus 39 (10.6%) (p=0.034). Fetal distress occurred in 37 (10.1%) and 49 (13.4%) respectively (p=0.168). Stratification showed significant differences in caesarean section among women aged ≤30 years and those with body mass index ≤25 kg/m².

Conclusion: Planned early induction reduced chorioamnionitis but was associated with higher caesarean section rate compared with expectant management.

KEYWORDS: *Caesarean section, Chorioamnionitis, Fetal distress, Induction of labour, Premature rupture of membranes, Pregnancy, Expectant management.*

INTRODUCTION

Premature rupture of membranes (PROM) is the premature rupture of the amniotic sac membranes that occurs before the onset of labor.[1] Preterm premature rupture of membranes (PPROM) is the rupture of the membranes before 37 weeks of pregnancy.[2] The medical condition is of vital significance due to the fact that delayed rupture can increase the chances of infection in the mother and fetus, problems with the umbilical cord, among others.[3] Treatment depends on various factors such as the gestational age of the fetus, the status of the mother and fetus, presence of infection, and availability of neonatal care services.[4]

Planned induction of labor consists of inducing labor within a short period after the occurrence of PROM, normally during full-term pregnancy and in the absence of any contraindication for vaginal delivery.[5] The main objective of this procedure is the reduction of the time that elapses between the rupture of the membranes and the onset of labor, which in turn helps minimize the risk of ascending infection such as chorioamnionitis and maternal infection following delivery.[6] Induction can be easily carried out through the use of oxytocin in the case of a favorable cervix; cervical ripening techniques may also be used if necessary.[7] On the other hand, induction reduces the uncertainty involved in waiting for labor to occur spontaneously.[8]

The management of expectant care involves waiting for labor to occur spontaneously after PROM while monitoring the woman and her baby carefully.[9] This can help in the natural induction of labor without inducing it immediately, especially when there is no indication of infection or other problems.[10] In expectant management, routine surveillance will be important to ensure detection of fever, abdominal pain, foul-smelling vaginal discharge, fetal tachycardia and other indicators of infection or fetal distress.[11] Antibiotics can be given if necessary, and the time for delivery will depend on the gestational age and findings. Despite the benefits of expectant management, prolonged rupture of membranes increases the risk of infection to the woman and baby.[12]

Early induction of labor can be effective in reducing the duration of rupture and also in lowering the risk of infection while expectant management allows spontaneous labor. However, the benefits and risks of each approach differ depending on the local environment and healthcare facilities. Limited data exists in the literature about the effectiveness of the two methods in the local setting. This study, therefore, intends to compare the two methods and identify which one is associated with better outcomes for the mother and the baby.

METHODOLOGY

This randomized controlled trial was conducted in the Department of Obstetrics and Gynaecology, PIMS Hospital Islamabad, from 1st May 2026 to 1st November 2026. The study included pregnant women presenting with premature rupture of membrane at term and were allocated into active management and expectant management groups. Ethical approval for the study was obtained from the concerned ethical committee before commencement of the study (Ethical Certificate/Reference No. F-5-2/2024(ERRC)/PIMS) and all study procedures were performed according to the approved protocol.

The sample size was calculated by using OpenEPI sample size calculator at 5% level of significance and 80% power, by taking expected caesarean section rate as 21% in expectant management and 30% in active management group.[13] The calculated sample size was 734 patients. A total of 367 patients were included in active management group (A) and 367 patients in expectant management group (B). Patients were selected through non-probability consecutive sampling technique.

Women of age 18 to 45 years, with singleton pregnancy confirmed on ultrasound, gestational age 37 to 42 weeks according to LMP any parity and fulfilling the criteria of PROM were included. Women having history of active infection, placental abruption, preeclampsia or fetal anomalies detected on ultrasound were excluded. Premature rupture of membrane was considered when leakage of liquor occurred at least 1 hour before the onset of labour after 36 weeks of gestation, established by the history of sudden gush, recurrent dampness or continuous vaginal leakage, and/or liquor pooling in the vagina or trickling through the cervical os on speculum examination with increased leakage on coughing or straining.

After explaining the study in detail, including its possible benefits and risks written informed consent was obtained from every participant before collection of study data. At admission, demographic and baseline information was recorded including age, gestational age, parity, BMI, socioeconomic status, educational level and residential status.

A detailed history was taken and general and obstetrical examination was performed. PROM was assessed from history and by sterile speculum examination. The presence of sudden gush of fluid from vagina, recurrent dampness or continuous leakage with liquor present on pad or undergarment was considered suggestive of PROM. On speculum examination, pooling of liquor in upper vagina or fluid trickling through cervical os, with further increase during coughing or straining by Valsalva manoeuvre, was taken as confirmation. After confirmation and selection of the patient, randomisation was carried out by using a computer-generated random list. Group allocation was placed in sealed envelopes and the envelope was opened at the time of admission for management. All participants received intravenous ceftriaxone 1 g every 24 hours and metronidazole 500 mg every 8 hours until delivery.

In Group A, active management was carried out by initiating labour induction within 24 hours of diagnosis of PROM with prostaglandin E2 vaginal gel. A dose of 1 g was applied and could be repeated after 6 hours according to the response, with maximum 3 doses. In Group B, expectant management was followed after taking an endocervical swab for microscopy, culture and sensitivity. The patients were observed for 24 hours from the time of diagnosis of PROM for spontaneous onset of labour and sterile vulval pad was used during the observation period. All women in both groups were followed until delivery and the mode of delivery and maternal and fetal outcomes were recorded.

The study outcomes were assessed as caesarean section, chorioamnionitis and fetal distress and their frequency was compared between active and expectant management groups. Caesarean section was considered when delivery of the fetus was performed through surgical abdominal and uterine incision. Chorioamnionitis was considered when intrapartum maternal temperature was >100.4°F on 2 occasions more than 1 hour apart before or during labour, with one or more associated findings such as maternal tachycardia > 120 beats/min, fetal tachycardia >160–180 beats/min, purulent or foul-smelling vaginal discharge or maternal leukocytosis with total blood leukocyte count > 15,000–18,000 cells/μL. Fetal distress was considered when abnormal fetal heart rate was detected by auscultation or continuous electronic fetal monitoring with fetal heart rate > 160 beats/min or < 120 beats/min.

Data were analysed by using IBM SPSS version 26. Quantitative variables including age, gestational age, parity and BMI were presented as mean ± SD. Qualitative variables including socioeconomic status, educational level, residential status, caesarean section, chorioamnionitis and fetal distress were presented as frequencies and percentages. Chi-square test was applied for comparison of outcomes between the active management and expectant management groups. Stratification was performed according to age, BMI to assess their effect on outcomes. Post-stratification comparison was done by Chi-square test. A p-value ≤0.05 was considered significant.

RESULTS

In Group A, the mean age was 27.00 ± 4.89 years, mean gestational age was 38.52 ± 0.81 weeks, mean parity was 1.15 ± 1.28, and mean BMI was 25.74 ± 1.88 kg/m². In Group B, the mean age was 27.25 ± 4.67 years, gestational age was 38.58 ± 0.87 weeks, parity was 1.19 ± 1.39, and BMI was 25.79 ± 1.80 kg/m². With regards to socioeconomic status, low income was reported in 152 (41.4%) and 147 (40.1%) patients in Group A and Group B respectively, middle income in 153 (41.7%) and 162 (44.1%), and high income in 62 (16.9%) and 58 (15.8%). For educational level, 117 (31.9%) patients in each group were uneducated, primary education was seen in 106 (28.9%) and 96 (26.2%), secondary education in 96 (26.2%) and 110 (30.0%), and higher education in 48 (13.1%) and 44 (12.0%) patients in Group A and Group B respectively. Regarding residential status, 207 (56.4%) patients in Group A and 211 (57.5%) in Group B were from rural areas, whilst urban residency was noted in 160 (43.6%) and 156 (42.5%) patients respectively (Table-I).

Table I: Patient Demographics in Both Groups

n=734

Variables	**Group A (n=367)**	**Group B (n=367)**
	Mean ± SD	**Mean ± SD**
Age (years)	27.00 ± 4.89	27.25 ± 4.67
Gestational Age (weeks)	38.52 ± 0.81	38.58 ± 0.87
Parity	1.15 ± 1.28	1.19 ± 1.39
BMI (kg/m²)	25.74 ± 1.88	25.79 ± 1.80
Socioeconomic Status	**n (%)**	**n (%)**
Low	152 (41.4%)	147 (40.1%)
Middle	153 (41.7%)	162 (44.1%)
High	62 (16.9%)	58 (15.8%)
Educational Level		
Uneducated	117 (31.9%)	117 (31.9%)
Primary	106 (28.9%)	96 (26.2%)
Secondary	96 (26.2%)	110 (30.0%)
Higher	48 (13.1%)	44 (12.0%)
Residential Status		
Rural	207 (56.4%)	211 (57.5%)
Urban	160 (43.6%)	156 (42.5%)

Caesarean section was performed significantly more frequently in Group A than in Group B, being recorded in 114 (31.1%) versus 81 (22.1%) patients (p = 0.006). Chorioamnionitis was also statistically different between the two groups, occurring in 23 (6.3%) patients in Group A and 39 (10.6%) patients in Group B (p = 0.034). Fetal distress was observed in 37 (10.1%) and 49 (13.4%) patients in Group A and Group B respectively, though this difference did not reached statistical significance (p = 0.168) (Table-II).

Table II: Comparison of Maternal and Fetal Outcomes Between the Two Groups

n=734

Variables	**Group A (n=367) n (%)**	**Group B (n=367) n (%)**	**P value***
Cesarean Section			

Yes	114 (31.1%)	81 (22.1%)	0.006
No	253 (68.9%)	286 (77.9%)	
Chorioamnionitis			
Yes	23 (6.3%)	39 (10.6%)	0.034
No	344 (93.7%)	328 (89.4%)	
Fetal Distress			
Yes	37 (10.1%)	49 (13.4%)	0.168
No	330 (89.9%)	318 (86.6%)	

**Chi-square test*

In the stratified analysis, among patients aged ≤30 years, caesarean section rate was significantly higher in Group A as compared to Group B, 85 (30.8%) versus 57 (20.3%) ($p = 0.004$), whilst no significant difference were observed in the >30 years subgroup ($p = 0.565$). For BMI ≤25 kg/m², caesarean section was significantly more in Group A, 47 (31.8%) versus 24 (17.9%) ($p = 0.007$), however the difference for BMI >25 kg/m² was not significant ($p = 0.144$). Fetal distress in the BMI ≤25 kg/m² subgroup was significantly differ between the groups, 9 (6.1%) in Group A versus 19 (14.2%) in Group B ($p = 0.023$). Chorioamnionitis in the BMI >25 kg/m² subgroup was significantly higher in Group B, 25 (10.7%) versus 12 (5.5%) in Group A ($p = 0.042$) (Table-III).

Table III: Association of Outcomes with Demographic Variables

Demographic Variable	Group	Cesarean Section		P-value*	Chorioamnionitis		P-value*	Fetal Distress		P-value*
		Yes n (%)	No n (%)		Yes n (%)	No n (%)		Yes n (%)	No n (%)	
Age (years)	**≤30**									
	Group A	85 (30.8%)	191 (69.2%)	0.004	15 (5.4%)	261 (94.6%)	0.114	26 (9.4%)	250 (90.6%)	0.203
	Group B	57 (20.3%)	224 (79.7%)		25 (8.9%)	256 (91.1%)		36 (12.8%)	245 (87.2%)	
	>30									
	Group A	29 (31.9%)	62 (68.1%)	0.565	8 (8.8%)	83 (91.2%)	0.131	11 (12.1%)	80 (87.9%)	0.556
	Group B	24 (27.9%)	62 (72.1%)		14 (16.3%)	72 (83.7%)		13 (15.1%)	73 (84.9%)	
BMI (kg/m²)	**≤25**									
	Group A	47 (31.8%)	101 (68.2%)	0.007	11 (7.4%)	137 (92.6%)	0.374	9 (6.1%)	139 (93.9%)	0.023
	Group B	24 (17.9%)	110 (82.1%)		14 (10.4%)	120 (89.6%)		19 (14.2%)	115 (85.8%)	
	>25									
	Group A	67 (30.6%)	152 (69.4%)	0.144	12 (5.5%)	207 (94.5%)	0.042	28 (12.8%)	191 (87.2%)	0.977
	Group B	57 (24.5%)	176 (75.5%)		25 (10.7%)	208 (89.3%)		30 (12.9%)	203 (87.1%)	

**Chi-square test*

DISCUSSION

Caesarean section rate was found to be significantly higher in Group A as compared to Group B, 114 (31.1%) versus 81 (22.1%) (p = 0.006). This could be explained by the fact that induction of labour, particularly when cervix is unfavourable, often leads to prolonged and poorly progressive labour, which ultimately increasing the likelihood of operative delivery. The uterine contractions induced artificially may not always coordinates well, resulting in foetal malpositioning and cervical dystocia that further predispose to caesarean section.

Interestingly, chorioamnionitis was observed more frequently in Group B, that is 39 (10.6%) versus 23 (6.3%) in Group A (p = 0.034). This observation can be easily understood from a clinical perspective in view of the fact that the process of expectant management involves a period of time during which the membranes are ruptured and thus allow bacterial contamination to reach the uterus from the lower genital tract. This correlation exists between the length of membrane rupture and the chance of developing intrauterine infection.

Foetal distress, although were more frequently noted in Group B as compared to Group A, 49 (13.4%) versus 37 (10.1%), the difference did not reached statistical significance (p = 0.168). However, the fact that a numerical increase is seen among the expectant management cases might be due to the effect of intrauterine exposure to infection or inflammation in the amniotic cavity over a period of time.

The significantly higher caesarean section rate observed in the induction group, 114 (31.1%) versus 81 (22.1%) (p=0.006), was consistent with findings reported by Irshad S *et al.* [14] who also noted caesarean delivery to be more frequent in the induction group, 55.2% versus 37.3% (p=0.038), and similarly by Quist-Nelson J *et al.* [15] where immediate delivery was associated with increased caesarean delivery (RR 1.26, 95% CI 1.08–1.47). This pattern may attributed to the fact that artificially induced contractions, especially in women with unfavourable cervix, leads to poorly coordinated uterine activity and progressive labour dystocia, ultimately necessitating operative delivery. In contrast, Maqbool S *et al.* [16] and Ashraf S *et al.* [17] reported opposite findings, with caesarean section being significantly lower in the induction group, 93 (33%) versus 171 (61%) (p<0.001) and 23 (35.4%) versus 41 (63%) respectively, which could be explained by differences in cervical ripening protocols, patient selection criteria, and the timing and method of induction used across these studies.

Chorioamnionitis was found to be significantly more frequent in the expectant management group, 39 (10.6%) versus 23 (6.3%) (p=0.034), a finding that was in agreement with several published studies. Ashraf S *et al.* [17] reported chorioamnionitis in 14 (21.5%) expectantly managed women compared to only 3 (4.6%) in induced women, whilst Maqbool S *et al.* [16] similarly documented chorioamnionitis in 71 (25%) versus 15 (5%) (p<0.001) in expectant versus induction groups respectively. Sadaf J *et al.* [18] likewise found chorioamnionitis more frequent in conservatively managed women, 13 (26%) versus 5 (10%) (p=0.037). The biological rationale for this association is well established, as prolonged rupture of membranes allows ascending colonisation of the amniotic cavity by vaginal flora, and the longer the latency period, the greater is the risk of intrauterine infection. However, Yaqub U *et al.* [19] and van der Ham DP *et al.* [20] reported comparatively lower chorioamnionitis rates and non-significant differences between both groups, 8 (4.17%) versus 13 (6.77%) (p=0.262) and 6 (2.3%) versus 15 (5.6%) (p=0.045) respectively, which may reflects differences in the duration of expectant management permitted, antibiotic prophylaxis protocols, and gestational age at enrolment across these study populations.

Foetal distress was observed in 37 (10.1%) patients in the induction group and 49 (13.4%) in the expectant group, though this difference did not reached statistical significance (p=0.168). This non-significant finding was similarly reported by Sadaf J *et al.* [18] who documented foetal distress in 7 (14%) versus 5 (10%) (p=0.538), and by Gull S *et al.* [21] where foetal distress was 68 (46.3%) versus 57 (38.8%) with no significant difference between the groups. The higher numerical frequency of foetal distres in the expectant group across these studies may be attributed to the progressive deterioration of amniotic fluid volume and the cumulative foetal exposure to a potentially infected intrauterine environment during prolonged latency both of which can impair uteroplacental perfusion and foetal oxygenation even when the overall statistical threshold is not met.

However, the current study has some limitations, which need to be noted. In the first place, the research was carried out in one institution only, and thus the generalizability of the findings can be hindered. In addition, the sample included only those pregnant women who had term and preterm pregnancies, and thus the findings cannot be generalized to any other gestational age groups. Additionally, the researchers did not assess the long-term effects of both management methods on the mothers and babies.

CONCLUSION

In summary, the present research finds that planned induction of labor among women with PROM is significantly more likely to result in cesarean delivery while expectant management is significantly more likely to increase the risk of chorioamnionitis as a consequence of the extended infection within the amniotic cavity.

Ethical Approval

Ethical clearance for the research was taken from the Institutional Ethical Committee of the concerned hospital before starting the study.

Patients' Consent
All participants were informed about the research and written consent was taken from each participant before their inclusions.
Competing Interests
The authors declared that there was no conflict of interest associated with the present research.

REFERENCES

1. Cossart A, Storme L, Ghesquiere L, Houfflin-Debarge V, Le Duc K, Boukhris MR. Previable preterm premature rupture of membranes (before 24 weeks gestation): pregnancy and neonatal outcomes. *Eur J Pediatr*. 2026;**185(2)**:113. doi: 10.1007/s00431-026-06773-1.
2. Wahabi H, Elmorshedy H, Bakhsh H, Ahmed S, AlSubki RE, Aburasyin AS, *et al.* Predictors and outcomes of premature rupture of membranes among pregnant women admitted to a teaching hospital in Saudi Arabia: a cohort study. *BMC Pregnancy Childbirth*. 2024;**24(1)**:850. doi: 10.1186/s12884-024-07020-x.
3. Ağaoğlu RT, Öztürk Ö, Ulusoy CO, Günday F, Sarikaya Kurt D, Aksu M, *et al.* Perinatal outcomes and predictors of neonatal mortality in preterm premature rupture of membranes: a tertiary center experience. *BMC Pregnancy Childbirth*. 2025;**25(1)**:585. doi: 10.1186/s12884-025-07688-9.
4. Seyral A, Barrois M, Girault A, Perrella B, Goffinet F, Le Ray C. Management of preterm pre-labor rupture of membranes between 24 and 34 weeks: a before-and-after study of the implementation and modifications of an outpatient management protocol. *Acta Obstet Gynecol Scand*. 2026;**105(5)**:896-903. doi: 10.1111/aogs.70162.
5. Bas Lando M, Majida E, Solnica A, Helman S, Margaliot Kalifa T, Grisaru-Granovsky S, *et al.* Nulliparas at term with premature rupture of membranes and an unfavorable cervix: labor induction with prostaglandin or oxytocin? A retrospective matched case study. *J Clin Med*. 2024;**13(12)**:3384. doi: 10.3390/jcm13123384.
6. Cervantes EM, Girard S. Placental inflammation in preterm premature rupture of membranes and risk of neurodevelopmental disorders. *Cells*. 2025;**14(13)**:965. doi: 10.3390/cells14130965.
7. Yu J, Chen L, Wang X, Li X. Efficacy and safety analysis of phloroglucinol in combination with oxytocin for the induction of labor in women with term premature rupture of membranes (PROM). *Comput Math Methods Med*. 2022;**2022**:2617075. doi: 10.1155/2022/2617075.
8. Khanjani S, Mousavi L, Abbasi F. Determination of the practical latent phase for term and low-risk women with premature rupture of membrane. *Adv Biomed Res*. 2025;**14**:125. doi: 10.4103/abr.abr_655_24.
9. Zheng J, Wang B, Duan D, Wu Y, Yang L. Effect of labor dance on induction duration, first-stage labor, and maternal anxiety in pregnant women with term premature rupture of membranes: a randomized controlled trial. *Eur J Midwifery*. 2026;**10**. doi: 10.18332/ejm/219323.
10. Alansari B, Almiraisi H, Alani R, Abozenah Y, Ghorabah M. Immediate induction versus expectant management in term premature rupture of membranes: a longitudinal analysis of maternal and neonatal outcomes. *Cureus*. 2025;**17(7)**:e87640. doi: 10.7759/cureus.87640.
11. Wang X, Huang Z, Ma Y. Development and validation of a multivariable predictive model for the risk of histologic chorioamnionitis in patients with premature rupture of membranes in the late preterm and term. *Int J Gen Med*. 2024;**17**:141-152. doi: 10.2147/IJGM.S445374.
12. Bohilțea RE, Cioca AM, Dima V, Ducu I, Grigoriu C, Varlas V, *et al.* Expectant management of PPROM improves neonatal outcome-a retrospective study of 562 patients. *J Clin Med*. 2021;**11(1)**:214. doi: 10.3390/jcm11010214.
13. Awkadigwe FI, Ezugwu FO, Eleje GU, Nweze SO, Odugu BU, Dinwoke VO, *et al.* Active versus expectant management for premature rupture of membranes at term: a randomized, controlled study. *J Int Med Res*. 2023;**51(8)**:3000605231195451.
14. Irshad S, Ahad M, Faizan M. Comparison of fetomaternal outcome between early planned labor induction and expectant management in late preterm pre-labor rupture of membrane (PPROM): fetomaternal outcomes in late preterm PPROM: induction vs expectant management. *Pak J Health Sci*. 2025;**6(11)**:61-6. doi: 10.54393/pjhs.v6i11.3378.
15. Quist-Nelson J, de Ruigh AA, Seidler AL, van der Ham DP, Willekes C, Berghella V, *et al.* Immediate delivery compared with expectant management in late preterm prelabor rupture of membranes: an individual participant data meta-analysis. *Obstet Gynecol*. 2018;**131(2)**:269-79. doi: 10.1097/AOG.0000000000002447.
16. Maqbool S, Usmani AS, Bano B. Comparison of induction and expectant management of prelabour rupture of membranes at term for maternal outcome. *Pak J Med Health Sci*. 2014;**8(3)**:648-51.
17. Ashraf S, Sultana H, Qadir SY, Khalid M. Maternal outcomes of expectant management in comparison with induction of labour within twenty four hours of premature rupture of membranes (PROM). *Professional Med J*. 2020;**27(8)**:1565-9. doi: 10.29309/TPMJ/2020.27.08.4182.
18. Sadaf J, Qayyum B, Fatima N. Preterm prelabor rupture of membranes at 34-37 weeks: conservative versus active management. *J Surg Pakistan (Int)*. 2011;**16(1)**:6-7.

19. Yaqub U, Mushtaq R, Mushtaq M. Obstetric and perinatal outcome in induction of labor compared with expectant management for prelabor rupture of the membranes at term. *Pak Armed Forces Med J*. 2015;**65(2)**:179-83.
20. van der Ham DP, Vijgen SMC, Nijhuis JG, van Beek JJ, Opmeer BC, Mulder AL, *et al.* Induction of labor versus expectant management in women with preterm prelabor rupture of membranes between 34 and 37 weeks: a randomized controlled trial. *PLoS Med*. 2012;**9(4)**:e1001208. doi: 10.1371/journal.pmed.1001208.
21. Gull S, Jamil M, Basharat A, Khan MA. Early planned birth: a better way to manage pre-labor rupture of membranes at term. *Pak Armed Forces Med J*. 2021;**71(2)**:545-8.