

## Experiences of Women Hospitalized with Preterm Premature Rupture of Membranes, Peshawar, Pakistan

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DOI: [10.36348/sjnhc.2021.v04i10.001](https://doi.org/10.36348/sjnhc.2021.v04i10.001)

| Received: 22.08.2021 | Accepted: 27.09.2021 | Published: 02.10.2021

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### Abstract

Preterm Premature Rupture of Membranes is a familiar anxious problem of pregnancy that is interconnected with substantial perinatal difficulties. It is defined as a breaking of amniotic sheaths earlier to 37 weeks' pregnancy and earlier to the beginning of labor pain and occurs about eight to 10% of pregnancies. **Objective:** To describe the experiences of preterm premature rupture of the membrane in women admitted at Khyber Teaching Hospital Peshawar, Pakistan. **Methods:** Qualitative study was developed and the sample size was nine women in their third trimester of pregnancy. The purposive sampling technique was used. An in-depth interview method was applied for data collection. **Results:** The themes identified in this study were five, which included the varied experiences of women, Preterm Premature Rupture of Membranes patients, delayed visits to clinics for treatment, social and psychological stress, and lack of education, awareness, and proper diet. Membrane ruptured before the expected date of delivery leads to so many problems for both maternal and fetal health. The bigger socio-economic burden on the patients' families is related to stress and anxieties. **Conclusion:** The membrane ruptured before the expected date of delivery leads to so many problems for the woman and her family. The principal point was the hospitalization and has increased financial burden on family members. **Key words:** Maternal and Child Health; Maternal Health Services; Fetal Membranes, Premature Rupture; Pregnancy Complications.; Pregnancy; Pregnancy Care.

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## INTRODUCTION

Preterm Premature Rupture of Membranes (PPROM) is a well-known burning problem of pregnancy that is interlined with substantial perinatal difficulties. It is defined as a breaking of the amniotic sheaths prior to 37 weeks of pregnancy and before the start of labor pain [1]. Injury, smoking, contaminations, low financial status, preterm delivery previous history, sexually transmitted sicknesses, genetic as well as enzymatic differences from the norm, nutritional lacks, cervix which is not competent, placental rupturing systems, like amniocentesis, are notable predisposing factors which may result in PPRM. It might cause perinatal problems also, such as neonatal sepsis, respiratory pain disorder, placental unexpectedness, umbilical line pressure because of oligohydramnios, and even carries a 1-2% fetal death risk [1].

The rate of PPRM occur about eight to 10% of pregnancies [2]. The induction duration into unconstrained labor of PPRM is normally in some cases about 24, 48, and 96 hours in 70 to 85% cases and 95% of women, respectively. In this manner, a good portion of women has critical delivery from PROM to delivery, when not managed in a proper way, especially nulliparous women. The management of PPRM needs a reasonable and clear discussion with the woman, her partner, and other family members regarding to the advantages and dangers of proper management versus dynamic administration with the occurrence of labor [3].

PPROM is a state that puts at risk the wellbeing of both - baby and mother. PPRM's occurrence is roughly estimated in all six to 10% highly risky pregnancies, cases which account for 80%

happening post 37<sup>th</sup> pregnancy's week. Amid this emergency, a mother adapts to more prominent crises, wellbeing-to-sickness transitional pressure, and encounters a situational change because of hospitalization or potentially drawn-out bed rest. With a normal pregnancy, all individuals from a family experience a specific level of progress. These progressions include the associations' structures with each other and the family as a unit. When the pregnancy turns out to be a high hazard, the family experiences the expected well-being to a disease progress and do not understand this developmental change [4].

At the point when a pregnant woman is admitted into the hospital because of the PPRM, the patient and patients' families experience extra burdens. PPRM mostly happens suddenly and its movement is eccentric, causing a health emergency for the mother and its fetus. The worry from this hazardous circumstance causes changes in a maternal role. At this stage, when the pregnant with PPRM is hospitalized, she should acknowledge the extra pressure that she will face to go on normal delivery. The individual's health loss and trust in a normal pregnancy additionally might result in the pregnant mother facing emotional disturbance, sentiments' pain, dread, weakness, and mental stress [4].

In addition, pregnant women admitted in hospital, with a high risk generally report more noteworthy uneasiness, discouragement, lower confidence, and less ideal family working than those pregnant women who did not need hospitalization or had a normal delivery. Mothers see that their own activities and responses straightforwardly impact the security and health of the child, and which they assume a basic responsibility in the support of safe fetal condition and beginning of premature labor. Mothers might similarly feel it's their own duties and reprimand them for do not satisfying their personal maternal duty of securing the youngster, and they might feel insecure and afraid to confront their relatives [4].

Maternal problems are postpartum infection, untimely placental separation, and maternal sepsis, chorioamnionitis [5, 6]. In the first month of life, pre-term birth (PTB) has become the main reason for death among infants and the second driving reason for death in kids below the age of five years. Information is available for over 184 countries, and shows that preterm birth rates vary from five to 18% in countries with low socioeconomic status; whereas the normal is 12% of infants equated with nine percent in higher-income countries. The United States of America (USA) appears as a high-income nation has a PTB rate consistently in overabundance of nine percent, which in 2006 reached at 12.8% and inclined down from that point forward to 11.73% in 2011 [7].

Women with pregnancy-related stresses, extreme life situation and high tension are bound to encounter unfavorable maternal and fetal results than pregnant women with low dimensions of pressure and nervousness [7]. It's exceptional that PTB is a critical hazard factor for a protracted sequel, for example, cerebral paralysis, neurosensory deterrent, protracted lung illness, and delay in development. Similarly, PPRM is linked with initial delivery and perinatal disease. This is a significant risk factor for long-term neurological morbidity. Moreover, cerebral palsy and cystic periventricular infarction have been linked to the existence of amonites that are commonly witnessed after PPRM [7, 8].

The World Health Organization (WHO) announced that 37% of neonates' mortality happens in less than five years old. Whereas neonatal sepsis represented 29% of deaths among a similar age group. The WHO and the United Nations International Children's Emergency Fund (UNICEF) carried out an epidemiological examination that reported 7.6 million cases of mortality below five years old, of which 64% occurred due to infection and the remaining 40.3% occurred in neonates. A recent report of SDKI reflected the IMR (Infant Mortality Rate) in Indonesia as 32 per thousand live births. The neonatal disease rate after layer's rupture is 1% that persists for above 24 hours. Post-clinical investigation shows that occurrence amount up to three to five percent [9].

Generally, in the premature rupture of membrane cases, neonatal infection has increased ten times. In various countries such as in US, United Kingdom (UK), Israel, and Canada, a study was conducted that showed the prolonged amniotic rupture of membrane duration was  $\geq 48$  hours, and from 24-48 hours which increases the risk or likelihood of neonatal infection by 2.25 times. A few examinations on PPRM did not demonstrate any relationship of delayed membrane break with neonatal infection. In more cases, a meta-analysis established a huge relationship between antibiotic used in mothers with the incidence of neonatal disease [8]. Preterm PPRM has gotten impressive consideration in the recent obstetric literature; thus, it is specifically responsible for around 33% of all preterm deliveries. Curiously, however, PPRM is reported in 60% of cases of in-term patients and clinical management could be even complicated surprisingly at this gestational age [10, 11]. The information of the occurrence of initial beginning of sepsis related to PPRM and the influence on neonatal result, is important in order to avoid neonatal morbidity. Recognition of early start of sepsis and close monitoring for initial symptoms of sepsis, rigorous early assessments, and treatment has controlled and prevented the occurrence of sepsis linked with PPRM [12].

Nonetheless of a widespread investigation into the medical side of preterm acceptance, however, women's emotional experiences have not been completely investigated. Concentration on women's involvement of acceptance has regularly given a negative picture, featuring the disparity between women's desires and experiences and an absence of satisfaction with their labor. The biggest investigations are carried out in this field in the United Kingdom, which concluded that women should be more empowered to improve the experience of preterm induction. Moreover, recent investigations provide us with an increasingly dubious picture, showing induction as a good positive experience whereas others identified lesser satisfaction with overall birth experience and involvement. Women's subjective understanding of experiencing PPRM induction remains an unexplored research area, which is why further research is needed to fully investigate this matter [13]. Therefore, to describe the experiences of preterm premature rupture of the membrane in women admitted at Khyber Teaching Hospital Peshawar, Pakistan, we conducted this study.

## LITERATURE REVIEW

Otolorin *et al.*, obtained in their studies that 15% of the anticipated births across the globe will end up in hazardous situations in the period of delivery, pregnancy, and post-birth. For the countries around the world, it is vital to furnish experts and skilled folk in the concerned fields, especially in the countries with higher rates of mortality during childbirth [14].

The higher risk of morbidity of a child during delivery is closely related to PPRM. During PPRM most women were dealt by professionals in hospitals, but things could have been managed at home with the pace of time. Studies revealed that women's safety measures were not entirely and firmly entrenched. The central hub of the work was to furnish fully protective measures and women friendly intensive care program at home. The sample was taken from the population of 116 women of which some were treated at home care while others were dealt at the hospital with PPRM, prior 37 weeks of developmental period of the baby in the womb. The outcomes revealed slight demarcation between the mother and child's care at home versus hospital [15].

The reasonable and suitable time for a baby to place, an abode in the world is 34 weeks and zero days, although some exceptions of 36 weeks and six days have also been observed, which have been termed as late premature newborn. Late premature babies are more prone to such kind of risks such as jaundice, lower level of glucose in the blood, difficulty in breathing, and low level of body temperature at the time of delivery. Late premature infants are at somewhat higher risks to some of morbidities such as breathing issues, neurological problems, growth maladies and behavioral

patterns, after being born. Practitioners and other professional expertise are essential in preterm premature infants in the time of their birth [16].

In the current studies, the women normal giving birth to newborn babies were brought under close observations with preterm premature rupture of membrane before the period of 34 weeks and zero days of space in the womb with respect to home care center and hospital dealing strategies of delivery. The close scrutinization of three years observation discloses that 587 cases with PPRM greater than 48 hours of space, 246 (41.9%) dealt in hospital with respect to 341 (58,1%) dealt at home care centers, was brought into light in France. The ratios of these two said observations were mentioned again for comparative purposes. For the comparative studies, the cases dealt at home care centers with respect to hospital dealings; another examination was conducted on the cases to bring them into equal desirable standards with each other. The outcome was a whole of different variables with result of one or more cases of complications during delivery. The whole period beginning from 22nd week until the first week of birth in which the result was 14.6% with hospital care and 15.5% with home dealing proceedings ( $p$  is equal to one point seven six). When the score results were one against one (1:1) the cases dealt outside the hospital or at home were not at somewhat higher risk in the period of 22nd week until the first week of birth (OR zero point eight, CI zero point three five to two point two five;  $p$  is equal to zero point eight zero with respect to hospital dealing procedures. The home care center is not concerned with higher risk factors during delivery, but a kind of alternative to hospital dealing delivery for women without PPRM [17].

PPROM is one of the higher factor complications during delivery [6, 18]. This study was conducted to reveal the fatal situation of mortality during childbirth and its repercussions on maternal health in the time of baby developmental stages in the womb with PPRM Indian facet. A group study was conducted in the department dealing with childbirth issues and women protective measures during pregnancies in special hospital of the Punjab province during January to December 2014. The records brought into observation with issues related to PPRM during that era were closely examined. The population of 75 women was bifurcated into two entirely diametrical contrasts with respect to developmental stages in the womb. Group one early PPRM (24 a 33 weeks of development of the baby in the womb) (total number 38) and group two late PPRM (34 to 36 weeks of development) (total number is equal to 37). Manifold scrutinization's were conducted to find out the association between PPRM and a kind of normal birth occurring. It was figured out from the known facts that 1528 cases dealt under professional practitioners and 75 women were having PPRM issuing the ratio of four-

point nine percent. In both segments the likely associated delivery issues were the fusion of allopathic membrane (15.7% versus 69.2%) and a likely childbirth issue was the function of different body parts specifically during babyhood when the limbs and eyes turned yellow because of lower level of bilirubin in the blood (56.8% versus 2.7%). Large number of babies needs a kind of light for the removal of such complications in early days of their lives (50% versus 43.5%) and other medicines for the elimination of microorganisms. The current dissertation bestows that the first segment of people is more likely prone to fusion of allopathic membrane with fetus, blood poisoning, a type of brain injury that affects the infants, respiratory complications in infants, congenital pneumonia, support and need for ventilator and complication related with the contraction of muscles. In comparison, patient in segment two had important spike in the rate of APGAR points under seven at one minute. APGAR below seven at five minutes and LSCS rate [17].

In addition, the outcome of the study deduced that the less the developmental age in the womb the more will be the possibility of pregnancy and maternal complications in patients with PPRM. Early PPRM is closely connected with a higher value of malady and mortality in terms of perinatal context [1].

## METHOD

### Study Design

Given the nature and the study topic, a qualitative research design was used in this study. Qualitative approach and design help us to understand the deeper meanings, qualitative experiences, and socio-cultural factors that might affect the women's position, suffering from preterm premature rupture of membrane at Khyber Teaching Hospital Peshawar, Pakistan.

### Study Settings

The universe of the study is the Medical Teaching Institute /Khyber Teaching Hospital Peshawar Khyber Pakhtunkhwa, Pakistan. The rationale behind choosing the specific hospital is that it fits the purpose of the study. Second, it is accessible to the researcher as well as the required and relevant data for this study can be easily ascertained from the mentioned institute.

### Study Duration

Keeping in mind the limitation, financial resources, and both academic and administrative deadlines and constraints, the duration of the study was six months.

### Sample Size

The initial sample size of the current study was 10-15 women with PPRM. Data was collected using the interview. An interview guide developed by the researchers was used to conduct interviews with women with PPRM. However, due to the non-availability of

respondents, only nine women with PPRM were interviewed.

### Sampling Technique

The study is qualitative in nature; however, for selecting respondents (samples), a purposive non-probability sampling technique was utilized in this study. The purposive sampling technique is used when the population of the area is unknown to the researcher and the researcher wants to carefully select respondents who suit the purpose of the study to generate and collect relevant data from the site.

### Data Collection Procedure

Before going into the field for data collection, a prior approval letter was acquired from the review board of ethics KMU (Khyber Medical University) to protect the privacy and confidentiality of the respondents and to maintain the study ethical guidelines. In addition, another formal approval was acquired from the KMU Director Medical Service for carrying out this study in the mentioned Institute. The researcher had personally visited the obstetric and gynecological centers of each hospital to recruit prospective respondents. The respondents were informed about the nature, aim, procedure, and importance of this study. A respondent had the right to refuse or pull out of the study at any time. Prior to data collection, an informed consent was thoroughly explained to the respondents in order to protect the privacy and confidentiality of the respondents. In addition, since the respondents were illiterate or semiliterate, therefore the interview guide was translated into the Pashto, and interviews were carried out in Pashto language. Interviews were then translated into English from Pashto and verbatim were also extracted from the interviews.

## DATA ANALYSIS

For the analysis of primary data, in the form of interviews, it was utilized a thematic analysis [19]. However, for identify the thematic, the interview was thoroughly read for main and subthemes. Moreover, categories and codes were also extracted from the interviews. Following the thematic analysis, the report was documented in qualitative narrative form. In addition, to interpret the data, verbatim and quotes were utilized to support the findings. The demographic information and respondents' profile were also presented in statistical or tabulation form. All the participants were identified with a nominal code represented by the sequential letter, like A, B, C, D, E, F, G, H, and I.

## RESULTS

During the collection of data, the interviews were transcribed, and broader themes were derived from primary data to explain the experiences of women hospitalized with PPRM at Khyber Teaching Hospital Peshawar. The primary data also sheds light on the

socio-cultural and psychological factors of women hospitalized with PPRM. In the Figure 1 it can be

observed the different key themes emerged from the pregnant experiences.



**Fig-1: Key Themes emerged from the pregnant experiences**

The women hospitalized with PPRM at Khyber Teaching Hospital have been through different

and varied experiences. In the Table 1 it is described the characteristics of the pregnancy in the women.

**Table-1: Characteristics of the pregnancy in women. Peshawar, Pakistan**

Participant	Pregnant/to	N. of Fetus	Gestational Age	Previous PPRM history	Mode of Delivery	Neonate condition
A	G7/5 one alive Two abortions	Twins	32 w	Yes	Normal delivery	Alive/Admitted
B	G2/P1	Single	34 Weeks	No	Normal delivery	Alive/Admitted
C	G7/P6	Single	34 Weeks	No	Normal	Alive/Admitted
D	PG primary gravida	Single	34 Weeks	No	LSC/Section	Alive/Admitted
E	G3/p1 One abortion	Single	34 Weeks	No	LSC/Section	Alive/Admitted
F	G2/P1	Single	28 Weeks	No	Normal	Alive/Admitted
G	G4/P3	Twins	30 Weeks	No	Normal	Alive/Admitted
H	G7P6	Single	32 Weeks	Yes	Normal	Alive/Admitted
I	G3P0/2 abortion	Single	32 Weeks	No	Normal	Alive/Admitted

A, B, C...: participation identification code; G: Gestate; P: Parturition; PPRM: Preterm Premature Rupture of Membranes; LSC: Lower segment Caesarean section.

In the Table 2, it is presented the patient perception about the PPRM, and experience about the health assistance. The data shows that only two patients had twin fetuses whereas the rest of patients had single fetuses. Moreover, four patients had 34 weeks of gestational age while two have 32 weeks, one 30 and another 28 weeks respectively. Only two patients had previous PPRM history and six among these patients

had delivered babies normally. For three patients' cesarean section (LSCS) was carried and performed to deliver the babies. Only one patient who had delivered twins through LSCS had died, but all the other patients and their babies were alive and admitted. Finally, the pregnant and para data of patients demonstrate that the first patient had gravida seven and para five with one alive and two abortions. The second was G2/P1 where

the other patients were G7/P6, PG (primary gravida), and G3/P1 with one abortion. The rest of the patients

were G2/P1, G4/P3, G7/P6, and G3/P0 with two abortions accordingly.

**Table-2: The patient perception about the Preterm Premature Rupture of Membranes (PPROM), and experience about the health assistance.**

Participant	Reasons to go to the hospital	Perception of cause of PPRM	Satisfaction about assistance
A	She came to KTH where a cesarean operation was carried out and she delivered two babies, but both babies were not alive.	She was too much depressed and was not happy from her marital life. According to the patient, her babies died because she was diagnosed patient of Hepatitis B.	She was satisfied from hospital staff behavior and procedure.
B	She felt herself wet and felt pain in lower back and abdomen.	According to the patient she was depressed due to domestic issues and was doing a lot of work at home for her extended family. Physically the patient was feeling dizziness, but she was not happy with her in laws.	She was satisfied from treatment and hospital staff.
C	Two days before her per vaginal leakage started.	According to the patient her cause of PPRM was pressurized massage on her back. According to Patient socio economic condition is not good, her husband is labor on daily wages, and he is the only bread earner to feed their seven kids, she was depressed from poverty.	Patient was satisfied from hospital staff and treatment.
D	She had temperature, watery type of fluid leaking from her.	She became worried for her baby and for deteriorating health. She does not know the exact reason of PPRM in her case, she came to hospital and baby was delivered through cesarean section operation.	Patient was satisfied from hospital treatment and behavior of staff.
E	She felt gush of fluid suddenly like urine. She came to hospital where she was advised lower segment cesarean section operation because of decreased fluid with baby.	She does not know the cause of PPRM in her own case, but she attended marriage ceremony of her brother in which she was exhausted.	She is satisfied from hospital staff and treatment.
F	Leakage have been started from her, at that day she lifting heavy weight busy in-home work there membrane have been ruptured on the third day of watery discharge, patient went into spontaneous labor.	The reason was not identified according to patient this due to infection.	She was satisfied from hospital treatment.
G	She was feeling weakness and her vaginal leakage has continued for four days without any temperature. She visited a local doctor; her blood pressure was high and she was worried for illness. She was very tensed and depressed.	Patient has temperature now and feeling weakness. According to the patient, this had happened due to weakness. She was too much busy in a marriage function, and she was exhausted.	She was worried about the baby but satisfied from the doctor treatment.
H	She felt gush of fluid, patient became depressed and was worried for her fetus health. She came to hospital where she remained admitted for four days observation.	Her PPRM had occurred due to physical and mental exertion, because her mother-in-law was admitted in hospital and she was caring for her and, also looked after her kids at home.	She was satisfied from hospital staff and treatment.
I	She was brought to KTH hospital for treatment; she remained admitted for observation and had gone into spontaneous labor.	She does not know the exact cause of PPRM in her case. According to her family members this was happened due to weakness.	She and her family members were satisfied from hospital and staff care.

A, B, C...: participation identification code.

## DISCUSSION

### Preterm Premature Rupture of Membranes (PPROM)

The researcher discovered that membrane ruptured before the expected date of delivery leads to so many problems for both maternal and fetal health. Most of the mothers went into spontaneous labor within 24 to 72 hours. However, some were induced with

tablets prostaglandin E2. It is because membranes bag leakage is a source of infection for mother as well for baby. PPRM is challenging situation for mother and her family members. These mothers, who have encountered such problems, required close observation for which they needed proper hospitalization and care. This in return increased financial burden on family, as well as they needed social and moral support from family side. It is also reported that PROM had effect

mainly on the newborn outcome. Moreover, the researcher discovered that all the newborn babies' mothers with PPRM history were hospitalized.

In previous studies, it has been reported that PPRM women patients were better managed at hospitals. It was also possible for certain PPRM women to have been managed at home after kept in observation for some time. It established that for both maternal and neonatal health caring provided for PPRM women at home and hospitals with serious illness such as infant death, or admission to ICU baby units showed very rare differences [3].

Late Preterm Infants are determined as babies born in and comprising 34 weeks and zero days, 36 weeks and six days. Moreover, such infants are at increased risk of morbidities like feeding difficulties, hyper-bilirubinemia, hypoglycemia, respiratory distress, and hypothermia during the birth hospitalization. Late Preterm Infants after discharge are at highest risk of re-admission and mortality. In addition, they are at risk to diseases such as respiratory, neurologic, developmental, and psychiatric disorders. For morbidities of both short and long term, monitoring is a significant tool for late-preterm population during admission to hospital and for any future implications [4].

Another study presents findings stating that when the gestation age is less in PPRM patients, the chances will be high for the development of foeto-maternal complications. However, both perinatal morbidity as well as mortality higher rates is linked with early PROM [7].

### **PROM Induced Stress and Psychological Impact**

Apparently mother and newborn baby stay at hospital generate psychological burden on mother and family. During interviewing, the researcher noticed that mothers were worried about their fetal health condition. Consequently, both mother and baby hospitalization increased financial burden on family members. In most cases these babies developed prematurity complications, nosocomial infection (hospital acquired infection), and respiratory distress syndrome, because of these complications, mothers were continuously in mental stress. Physically and mentally, they were not able to cope with this unexpected outcome of newborn babies.

The findings of this study show how PPRM could result in further stress and socio-economic pressures on the mothers, and it is because due to the patriarchal norms and expectation from women to bear a healthy and strong child. Those mothers who cannot reproduce or bear a healthy child or unfortunately result in loss of child are met with ridicule and violence in the family and community.

In United States, 11.7% children were given birth prematurely in 2011. Comparatively, preterm birth was higher among women of African American origin than Non-Hispanic White women. The reasons behind higher rates of pre-term birth among African American Women have been linked with chronic stressors, like residence in disadvantaged neighborhood and encountering racism. These potential factors such disadvantage neighborhood and racism have increased stress burden for African American women, affecting the preterm birth rates [20].

As already mentioned, preterm birth is associated with psychological stress. Chronic stress effects on pre-term birth could result in changes in immune function, therefore increasing the likelihood of women getting infection or inflammation. It was reviewed in a study, emphasizing on inflammation and stress that could be used as potential mechanism for explaining the discrepancies in pre-term birth in women of African American origin. Earlier research presents us with evidence of stress-associated immune interactions might result in preterm birth. However, those in nursing practice should bear this in mind that African American women might encounter extra chronic stressors along with the premature infant acute stress [21].

### **Diagnosis and Treatment**

As a researcher and maternal health care worker, we have observed that PPRM cases are preventable and treatable if timely diagnosed and taken care. Like maternal physical weakness is one reason which is treatable, we all are aware that pregnant women need more calories and nutrient than usual condition. Psychological disturbances are also preventable, pregnant mother need moral support, because they are facing physiological and hormonal changes during pregnancy.

This study showed that the majority of the respondents were in physical or psychological stress before the incident. In addition, they were unhappy about their husbands and in-law's behavior. Some has low socio-economic history which led to imbalance diet and even unhealthy baby birth.

An earlier study has recommended that maternal history along with "sterile speculum examination" is a best method to diagnose spontaneous "rupture of membranes". In some cases, ultrasound checkup is also important tool to establish the diagnosis. In addition, it was suggested that after gestation period of 34 weeks, delivery ought to be deliberated. Preferably, women with an anticipant plan lasting beyond 34 weeks ought to be delivered up to 36 weeks with six days of gestation. The first 48-72 hours duration should be given to in-patient care and observation, after this period, outpatient monitoring could be deliberated. Women with PROM observed at home should check their temperature twice a day, and

also be educated about the signs and symptoms linked with intrauterine infection. For the number of outpatient visits, local arrangements and the type of tests to be carried out should be clearly described [10].

It was documented that to prevent neonatal deaths and morbidity, PPRM, a clinical implication needs to be carefully handled. However, quick treatment could significantly improve the outcome [11].

Presently, 90% of obstetricians advise bed rest for women (antepartum) going through pregnancy complications. Although researchers suggest that to control preterm birth bed rest is not very effective, 20% of pregnant women would spend one week on bed rest during pregnancy. PPRM amounts for 33% of all pre-term births and it is importantly linked with fetal, maternal, neonatal mortality and morbidity risks. The costs, i.e., financial, emotional, physical and for third party payers are increased due to ante-natal bed rest [14].

## RECOMMENDATIONS

### Policy Makers

- Counseling and awareness programs and initiatives should be undertaken for women regarding PPRM and other related maternal and fetal health issues.
- Women are economically dependent on men; however they do not have access to equal health and care. Consequently, this study calls for economic packages and health reforms specifically directed at women maternal and fetal health.
- PPRM has resulted in stress and psychological issues for mothers. It is an incumbent upon the health policy makers to introduce psychotherapy and psychological counseling programs to deal with unbearable stress of mothers.
- The study brings forth the socio-cultural factors that are linked to maternal health and women have suffered from PPRM. However, maternal health initiatives on the community level should be introduced along with awareness sessions for the families in community centers. Although that majority of PPRM patients were satisfied from hospital staff and treatment, in some cases, newborn babies have caught infections. So, it is important to suggest that hospital environment, hygiene and cleanliness should be prioritized and tackled for better results. The hospital wards are often overcrowded, the lack of proper infrastructure make it even more difficult for the doctors and nurses to perform their roles effectively.

### STRENGTHS AND LIMITATIONS

- The present study strength is that it presented us with extensive information and qualitative insights on experiences of women hospitalized with PPRM, which is missing from the existing studies.

- Respondents of the study thoroughly enjoyed being part of this study and freely expressed their ideas and views about how they feel and think about the topic. They felt empowered to talk about the issues that are often ignored and not explored qualitative in the care context.
- Since much of the data was collected from uneducated participants, however the researcher had to put an extra effort to translate the questions into native language.
- Three participants were informed about interview and topic, but due to audio recording they refused to give interview. As a result, the researchers had to sit and write down the interview information manually.

## CONCLUSION

It was described the experiences of women with preterm premature rupture of the membrane and this result contributed to explore women's experience on PPRM promoting debates on women's maternal health in Pakistan.

This study demonstrates that hospitalization has increased the financial burden on family members because all the newborn babies' mothers with PPRM history received hospital treatment. In most cases, these babies developed prematurity complications, nosocomial infection (hospital-acquired infection), and respiratory distress syndrome, and because of these complications, mothers were continuously under mental stress.

This study showed that majority of the respondents' view was that before this incident they were in physical or psychological stress. In addition, they were unhappy with their husbands and in-law's behavior.

This study further reveals that PPRM cases are preventable and treatable if timely diagnoses and properly treated.

Finally, this study shows there is lack of awareness programs about women who had suffered from PPRM. This should be included in the nursing training and educational awareness programs on both hospital and community level to ensure effective maternal and baby health care.

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