Evaluation of Pregnant Women’s Awareness of Birth Preparedness. A Cross-Sectional Study

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ABSTRACT
Aim: To evaluate pregnant women who are going to receive maternity care at the research area about birth preparation and catastrophe preparedness and warnings in the form of symbols throughout pregnancy, delivery, and postpartum
Study design: A cross-sectional study
Place and duration: This study was conducted at Muhammad Medical and Dental College Ratanabad Mirpurkhas Pakistan from March 2020 to March 2021.
Methodology: After receiving permission, 153 pregnant women between the ages of 20 and 45 were recruited. Data was collected using a standardized questionnaire. Throughout all three stages, information was gathered on how well they understood the early symptoms: pregnancy, labor, and postpartum (2 days after birth).
Results: A total of 63.34% of participants had never heard of BPCR. 7.1% made transportation preparations, 12 percent prepared blood donor arrangements, 27.23 percent arranged emergency funds, and 41.27 percent found a credentialed provider. 64.32% of women chose a health institution for the birth ahead of time, and 62.15% had four or more prenatal appointments. Vaginal bleeding (66.0%), placenta not delivered within 30 minutes of labor (61.2%), and vaginal bleeding (50.23%) were all stated as warning factors during pregnancy, delivery, and postpartum, respectively.
Conclusion: During all three stages of pregnancy, there was a lack of awareness about BPCR and immediate warning signs. Increased prenatal visits present an incentive to educate mothers about BPCR and warnings in the form of symbols. There was a paucity of understanding regarding BPCR and warning signals in all three periods of pregnancy.
Keywords: Antenatal care; Birth preparedness; Postpartum; Labor; Complication readiness; Complications of pregnancy

INTRODUCTION
Over 300,000 women are thought to die each year because of problems that arise during pregnancy and childbirth [1]. One-quarter of women don’t go to the doctor before they get pregnant; More than half of new mothers choose to have their babies at home, with skilled birth attendants or midwives by their side. After birth, 62% of new mothers get perinatal care [2]. According to current estimates, In Pakistan, 14 000 women die in delivery each year, equating to one fatality every 37 minutes [3]. Although, a current decline in the case of maternal mortality is hemorrhage [4]. Furthermore, lack of access to health services, inadequacy, a lack of qualified primary healthcare personnel, and illiteracy all have a part in newborn and maternal death rates [5]. BPCR (birth preparation and complication readiness) is an important aspect of prenatal care. It includes planning for both routine and sophisticated deliveries, as well as complicated and urgent events. Choosing a place to give birth, finding a birth attendant who is trained, putting together the plans to get the best care for a natural birth, and it’s important to think about what to do quickly if something goes wrong during childbirth as part of birth preparation. In the event of emergencies, an emergency plan must include locating a nearby operating 24-hour crisis perinatology care center, reserve finance, acceptable blood donors, and a person to watch over the home while the mother is away. Some communities are unable to prepare ahead for the expecting newborn and birthing due to a lack of understanding and cultural beliefs. As a result, the family only acts after labor begins, and no action is made before the birth. Most family members of pregnant women are likely to be uninformed of the warning indications of impending birth [6]. Once a problem arises, a significant amount of effort is spent identifying the issue, developing a systematized response, obtaining funds, locating transportation, and obtaining the needed health treatment. Once women and their families are aware of BPCR, they will be able to make early choices. The National Mother and Neonatal Child Health (MNCH) Program has initiated several initiatives aimed at decreasing maternal and neonatal death rates [7]. The goal of this study was to see how attentive pregnant women who were getting maternity care in the investigational sites were about BPCR and warning signals throughout pregnancy, labor, and postpartum.

METHODOLOGY
This study was conducted at Muhammad Medical and Dental College Ratanabad Mirpurkhas Pakistan from
March 2020 to March 2021. A cross-sectional, descriptive study was conducted to investigate pregnant women's awareness of birth preparedness when they visited for their prenatal check-up. The Prime Foundation's Institutional Review Board granted ethical clearance. Before being accepted into the study, written informed consent was acquired. Throughout the study, the participant's privacy and confidentiality were respected. Pregnant women attending the two private hospitals for prenatal check-ups were sampled using a straightforward sampling approach. To examine their awareness of BPCR, 153 women were questioned. The information was gathered using a questionnaire that was adapted translated into the local language from the Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO) instrument. Using a standardized questionnaire, the participants were questioned about their sociodemographic profile, gestational age at the first prenatal visit, and Distance from home to the hospital on average. Subjects were included in the questionnaire such as professional provider identification, money reserves, blood donor identity, together with means of getting to the hospital to give birth. Throughout all three stages, information was gathered on how well they understood the early symptoms: pregnancy, labor, and postpartum (2 days after birth). Everyone married when they were pregnant and was of reproductive age (20–45 years) who went to the hospitals for prenatal check-ups was a member of the group, in addition to those who were hospitalized for prenatal care, included in the research. They were the ones who refused to give the go-ahead, were in the process of giving birth, were still recovering from childbirth, or were in an emergency were excluded from the research. The four parts of BPCR that are reviewed are: identifying a healthcare practitioner, managing transportation, arranging blood, and having money set aside in case of an emergency during delivery. These four factors were examined, as well as the participants' understanding of the main pregnancy warning symptoms. To gather data, JHPIEGO created a structured questionnaire that targeted BPCR instruments and indicators for maternal health are being monitored. The information was analyzed using SPSS version 25 to calculate frequencies and percentages.

RESULTS

The current research comprised a total of 153 women. The majority of the women were between the ages of 21 and 33 years, with 140 (91.5%) of the pregnant women being housewives. A total of 117 (76.47%) had children under three years old, and 31 (20.26%) had a college degree. The majority of participants (93%) had a family of four or more, and 63% had a monthly salary of less than 10,000 Pakistani rupees. An estimated 41% of the women in this research expected their first child. In total, 17 (11.11%) of the participants were in the first trimester of pregnancy, 27 (17.65%) in the 2nd trimester, and 102 (66.67%) in the 3rd trimester. In their previous pregnancy, almost 13% of the women suffered a stillbirth.

Among participants, 45% said they found a trained practitioner, while 98 women (64.05%) said they chose a health institution for birth. A total of 31.3% of participants selected private hospitals for their deliveries, 15.82% chose government facilities, and 6.7 percent chose trained birth attendants at home. For getting to the healthcare locations, 113 (73.86%) participants said they used a taxi or took the bus. In all, 77 (50.33%) participants said they could get to the medical institution in under 30 minutes. 4.57% of the participants were able to identify a possible blood donor.

The vast majority of those polled had no idea what the most frequent indicators of pregnancy were, except bleeding, which 50.23% of respondents indicated. Other indications were noted by just 8% of the individuals (As shown in Fig. 1). Most expecting mothers (n=117, 66.01%) cited a placenta not delivered within 30 minutes of the baby's birth as a symptom of impending labor, when 31 (20.26%), bleeding (17.0%), loss of consciousness (8.4%), and high-grade fever were mentioned by two (1.307%) of the study participants. 5.23% of pregnant women were unaware of any warning symptoms during delivery. During the first two days following birth, 77 (50.32%) participants identified bleeding as a warning indicator (As shown in Fig. 2). Consciousness loss (17.65%), vaginal discharge with a foul odor (9.80%), fever of a high grade, and trouble breathing (6.54%) were the next most common symptoms. Only approximately 3% of the participants were aware of any additional postpartum warning signals, for example, distended fingers, serious headaches, eyesight, or terrible stomach discomfort (As shown in Fig. 3). A minimum of three prenatal examinations were conducted by 35 (22.87%) and 77 (50.33%) of the women, respectively. 37 of the participants (24.18%) got their 1st prenatal test in the first month of their pregnancy, while 73 (47.71%) had their 1st antenatal test in the 2nd month. 41 (26.8%) ladies attended their last prenatal test in the 3rd trimester (8 months) of their pregnancy.

![Figure 1: Awareness of participants of risk signs during the prenatal period.](image1)

![Figure 2: Awareness of Participants of danger indications during delivery.](image2)
The community viewed bleeding as a cause -ed supplier and clinic, as well as the -one -ches of women toward -en for any -ch includes facility selection, blood donor -ere -ere. There are -ere. There is one flaw in this study -ere. There are more than ten teaching hospitals in the city. Three of them work for the government, while the others work in the private sector. The data from just two private sector teaching hospitals are used in this study.

DISCUSSION
According to the findings of this research, only a small percentage age of women in the studied group were prepared for delivery. They had a rudimentary understanding of the pregnancy and birth warning signs. Surprisingly, 78.5% of those who took part in the study were men who [8] visited the prenatal clinic four or more times. Only 27.23%, on the other hand, had established any kind of financial agreement for the delivery [9]. The current study's conclusions are at odds with the previous literature. Only 23.6% of the participants in the four sections of BPCR were arranged in some way in the present research, including money-saving for delivery [10], identifying a qualified supplier and clinic, as well as the transportation mode's availability, according to a local researcher. In a survey in India, 41% of women said they were well prepared for delivery [11]. African meta-analysis research found that 32% of pregnant women were preparing for the birth of their child, which was like the findings in the current study [12]. In comparison to the participants in the current research, more women (52.00%) had saved money for delivery and difficulties during delivery (38%) [13]. This gap might be attributable to the fact that in the present study, expectant women depend on their husband's family for financial support, and hence do not feel responsible for the money needed after delivery. It is considered that in joint family systems, the entire family, including the husband and in-laws, should be informed of pregnancy savings. Furthermore, the Provision of facilitated treatment at the admitting hospital where the research was done may have an impact on the amount of money saved on delivery [14]. In comparison to previous area research, the current study's results on warning sign awareness were comparatively low. Except "bleeding," which was mentioned by 68% of study participants, the other indicators of trouble were stated by fewer than 8% of the individuals, on the other hand, the research by Vineetha et al. found that just 27.8% of women were aware of anyone hazard indication [15]. An individual blood donor may be identified in the same way as in another research in the region. In the current research, 75% of patients had four or more needed prenatal visits, compared to 33.6% in previous regional findings [16]. This potential increase in prenatal care might be attributable to the greater engagement of female health professionals and community midwives in infant care during the last decade [17]. Despite an increase in prenatal visits, the country's high maternal mortality rate compared to regional countries raises severe concerns regarding its emergency obstetric care capabilities [18]. In the current research, more than 67% of participants selected a health facility for birth and obstetrics, which was much higher than the previous study's 8.1%, while another study in Nepal found that 84.7% of expecting women recognized the location of delivery [19]. Delivery scheduling in advance Poor access to transportation was a common finding, at 4.7%, which was comparable to other South Asian surveys (5.3%). In the current research, as well as others, the majority of expecting women indicated excessive bleeding as a cause of birth [20]. There was one flaw in this study. There are more than ten teaching hospitals in the city. Three of them work for the government, while the others work in the private sector. The data from just two private sector teaching hospitals are used in this study.

CONCLUSION
Even though pregnant women attend the obligatory prenatal checkups, their understanding of pregnancy preparation was found to be quite limited. Their understanding of warning indicators throughout the three stages of pregnancy was lacking. Women's understanding of birth preparation should be improved, and BPCR components should be integrated into current CH initiatives. There should be more emphasis on educating expectant mothers about pregnancy symptoms during prenatal checkups, according to experts, as well as birth readiness, which includes facility selection, blood donor arrangements, transportation, and financial resources. During antenatal check-ups, pregnant mothers' families should be present. The head of the home, including the mother-in-law and husband, should assist in the preparation for delivery.

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