Women with Recurrent Pregnancy Loss: Their Psychology During Late Pregnancy and the Supportive Behavior of Their Partners

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To elucidate the psychiatric characteristics of mothers and the supportive behavior of their partners during late pregnancy, 131 mothers who gave birth at 2 general hospitals in City A between August 2009 and September 2010 (control group: n = 90; recurrent pregnancy loss (RPL) group: n = 41) completed a self-administered questionnaire on four separate occasions: during late pregnancy, during hospitalization, at 1-month postpartum, and at 3-months postpartum. The RPL group had significantly ($p = 0.03$) lower anxiety regarding potential change in their appearance than the controls, but were more likely to worry about losing their baby (58% vs. 38%) ($p = 0.021$). At 3-months postpartum, the RPL group reported having had more stress during pregnancy than the controls (49% vs. 31%; $p = 0.041$). There were no significant differences in state or trait anxiety (State-Trait Anxiety Inventory) between the 2 groups at any of the four measurements. However, state anxiety decreased significantly throughout the hospitalization for controls ($p < 0.001$), but did not decrease significantly for the RPL group until 3 months postpartum ($p < 0.05$). RPL participants who expressed high satisfaction with their partners' supportive behavior received significantly greater psychological support than did participants with low satisfaction. Healthcare professionals should attempt to support both members of RPL couples.

Key words: recurrent pregnancy loss, persistent anxiety, supportive behavior of partner, psychological support

"Recurrent pregnancy loss" (RPL) is defined by the Japan Society of Obstetrics and Gynecology as "a condition in which pregnancy cannot be carried to full term and repeatedly results in miscarriage or stillbirth" [1]. It is believed that women who experience RPL exhibit psychiatric symptoms such as anxiety and depression due to these repeated losses [2]. Moreover, it is clear that the anxious and depressed state of mind of women who experience RPL will affect future pregnancies [3].

For women, pregnancy and childbirth bring the joys of a new life; at the same time, they can also be sources of anxiety and worry. Women who feel satisfied with the experience of giving birth have a positive attitude toward subsequent childrearing activities [4]. Conversely, women who have experienced RPL tend to be burdened with the fear of losing their babies again, and have been known to make statements such as "Whenever the baby's heartbeat stops, I will be ready" or "I am not in a position to think about how I will raise my child" [5]. In general, therefore, women who have experienced RPL are thought to have difficulty preparing themselves mentally for childbirth.

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Risk factors for RPL are (1) uterine abnormalities, (2) translocations, (3) antiphospholipid syndrome, (4) coagulopathy, and (5) endocrine disorder. Women with RPL associated with coagulopathy are administered unfractionated heparin, and low-dose aspirin.

This study gathered evidence of the effects of RPL in women during pregnancy by (1) characterizing aspects of maternal psychology during late pregnancy and (2) identifying which types of supportive behavior exhibited by partners produce the highest levels of satisfaction.

Study Methodology

Targets and methods.　　The participants were 216 women (control group: 143 women; RPL group: 73 women) who underwent pregnancy checkups and gave birth at one of 2 general hospitals located in City A between August 2009 and September 2010. Self-administered questionnaires were completed at the following times: (1) during late pregnancy, (2) during hospitalization for childbirth, (3) at 1 month postpartum, and (4) at 3 months postpartum. The questionnaire was a longitudinal survey using linkable, anonymized, self-completed forms that were later collected by the research staff. Data from 131 participants were collected and analyzed (control group: 90; RPL group: 41; recovery rate: 60.7%). No abnormalities were seen in the infants delivered by these groups and none of the women experienced complications at delivery.

Participants in the RPL group were women with a history of two or more miscarriages or stillbirths, while participants in the control group were healthy, pregnant women, including multiparous women with no history of RPL. In addition, all participants in the control group were later confirmed to have had healthy, normal pregnancies and deliveries.

Questions *(All questions were written and presented in Japanese).*

1. The psychology of maternal anxiety during late pregnancy

To characterize the psychology of anxiety experienced by mothers during late pregnancy, we used the maternal anxiety scale developed by Hanazawa [6] to assess general anxiety in subjects and maternal anxiety during pregnancy. The survey contained 16 items related to general anxiety and 8 areas related to maternal anxiety (the course of pregnancy, development of the fetus, mother's influence, anticipation of childbirth, ability to imagine children, expectations regarding childcare, change in one's own appearance, and relationship with partner), and each area contained 4 assessment items. Participants scored each item using a 4 point (0-3) scale as follows: 3 indicated very frequent occurrence, 2 indicated frequent occurrence, 1 indicated occasional occurrence, and 0 indicated rare occurrence of the event. Higher scores were associated with stronger anxiety. The participants' total scores for general anxiety, maternal anxiety, and the 8 areas of maternal anxiety were compared. Participants were also asked to answer yes or no to nine independently developed questions concerning their psychological state during late pregnancy.

2. Confidants during late-term pregnancy

Participants were asked to select anyone (e.g., husband, mother, friend, doctor, or nurse/midwife) whom they consulted about pregnancy/childbirth during late pregnancy. Multiple selections were permitted.

3. The State Trait Anxiety Inventory (STAI)

The Japanese-language State-Trait Anxiety Inventory (STAI) [7] was used to assess each participant's level of anxiety (state) and predisposition toward anxiety (trait) during late pregnancy, and at the following stages: during hospitalization for childbirth, at 1 month postpartum, and at 3 months postpartum. An anxious state is a temporary, situational experience of anxiety, while the trait of anxiety is a tendency to easily become anxious in certain stressful situations; it can reflect individual idiosyncrasies. Participants rated each item using a 4-point scale, with 4 indicating complete agreement, 3 indicating a good level of agreement, 2 indicating little agreement, and 1 indicating no agreement with the content of the question. Higher scores were associated with greater anxiety.

4. Period when participants felt the most stress regarding their baby

Reflecting on their experiences at 3 months postpartum, participants provided multiple responses regarding periods when baby-related stress was the strongest (including during pregnancy, hospitalization for childbirth, and 3 days, 2 weeks, 1 month, 2 months, and 3 months post-discharge).

5. Supportive behavior by partners with RPL

Only RPL participants were asked about the support they received from their partners during late pregnancy. They selected an appropriate response from a list of 10

independently created choices; multiple selections were permitted. Participants were also asked to evaluate their level of satisfaction with their partners' supportive behavior using a 10-point Visual Analog Scale.

6. Analytical methods

To compare variables between the RPL and control groups, we used the following statistical tests: background factors were compared using the *t*-test and chi-square test; maternal anxiety and STAI scores were compared using the Mann-Whitney *U*-test; psychology, confidants, period of feeling the most stress, and supportive behavior of the partner in late-term pregnancy were compared using the chi-square test; and changes in STAI over time were compared using the Friedman test and Wilcoxon signed rank test. The level of statistical significance was set at $p < 0.05$. The statistical analysis software used in this study was SPSS for Windows ver. 20.

Ethical concerns.   This study was conducted after obtaining approval from the Ethical Review Committee of the Department of Nursing at the Graduate School of Health Sciences at Okayama University (approval number: M09-08). In the interest of protecting the research participants, all participants were briefed about the purpose of our study when they were invited to participate. At that time, they were informed that their personal information would be protected and reassured that they would face no penalties or disadvantages should they choose not to participate in the study. It was explained that some survey questions might be difficult to answer, and they were free to refuse to do so; they were also free to end their participation in the study at any time, with no disadvantage to themselves. They were informed that the researchers would employ

suitable methods of storing and managing data, and that data would be discarded, as appropriate, following the completion of the study. The oral and written consent of women who agreed to participate was obtained.

The questions that we developed for use in this study were derived from our daily interactions and conversations with RPL patients. Questionnaires were administered in the outpatient waiting room of the hospital, allowing doctors and nurses to respond at any time and to make expert referrals, as necessary, if the mood or condition of a participant became unfavorable.

Results

Participants' backgrounds.   Participants were aged 30.3 ± 5.4 years (mean $\pm$ SD) in the control group and 33.6 ± 3.9 years in the RPL group; the mean participant age was significantly higher in the RPL group ($p < 0.001$) (Table 1). The proportion of participants who had a history of hospitalization for imminent miscarriage was significantly higher in the RPL group (14%) than in the control group (4%) ($p = 0.044$). There were no significant differences between the 2 groups with respect to the other items assessed.

In the RPL group, the number of miscarriages was 3.1 ± 1.2; 40 participants (98%) had taken oral low-dose aspirin as a treatment for RPL, 22 participants (54%) had received unfractionated heparin injections, and 21 (51%) had received both treatments.

The psychology of late pregnancy anxiety.   The assessment carried out using the maternity anxiety scale for pregnancy revealed significant differences between the 2 groups only in the category concerning "change in one's own appearance." Participants in the control

Table 1   Subjects' background

				Mean $\pm$ SD [range] n (%)
Item	Total (n = 131)	Control (n = 90)	RPL (n = 41)	*p* value
Age (years)	31.3 $\pm$ 5.2 [22–43]	30.3 $\pm$ 5.4 [29–43]	33.6 $\pm$ 3.9 [22–40]	< 0.001
Primiparous	73 (56)	47 (52)	26 (63)	0.3
Hospitalization Threatened abortion	10 (8)	4 (4)	6 (14)	0.044
Hospitalization Threatened premature	10 (8)	8 (9)	2 (5)	0.4
Duration pregnancy	38.9 $\pm$ 1.3 [36–41]	39.0 $\pm$ 1.3 [36–41]	38.7 $\pm$ 1.5 [36–41]	0.4
Birth weight	3,016 $\pm$ 431 [2,116–4,360]	3,075 $\pm$ 400 [2,478–4,360]	2,885 $\pm$ 470 [2,116–3,888]	0.2
Vaginal delivery	103 (79)	74 (82)	29 (71)	0.2
University graduate	31 (24)	18 (20)	13 (31)	0.08
Work existence	71 (54)	52 (58)	19 (45)	0.2

group had a median [lower quartile, upper quartile] score of 2.0 [1.0, 3.0], while those in the RPL group had a median score of 1.0 [0, 2.0]. The RPL group score was significantly lower than that of the control group (Table 2).

In response to the 9 original questions relating to the psychology of pregnant women, a majority of participants answered "yes" to the item "I am worried about whether my baby will have an abnormality"; 34 participants in the RPL group (83%) and 72 participants in the control group answered affirmatively to this item (80%) (Table 3). A significant difference was observed with respect to the item "I am worried that my baby will die during pregnancy," which was selected by 24 participants (58%) in the RPL group and 34 participants (38%) in the control group, with the former percentage being significantly higher ($p = 0.021$).

Next, when considering responses to the statement, "I am worried that my baby will die during pregnancy" from primiparous participants only, 16 participants (64%) responded positively in the RPL group and 23

participants (49%) did so in the control group; no significant difference was observed. However, when considering responses from multiparous participants, 8 participants (50%) chose this statement in the RPL group and 11 participants (26%) chose it in the control group; the proportion of multiparous RPL participants worrying about the death of their baby was thus significantly higher than that of the multiparous control participants ($p = 0.046$).

Confidants in late-term pregnancy. Twenty-eight participants (68%) in the RPL group and 56 participants (62%) in the control group replied that they consulted most frequently with their partner about pregnancy and childbirth (Table 4). Next, 27 participants (66%) in the RPL group and 51 participants (57%) in the control group responded that they consulted most frequently with their own mothers. Sixteen participants (39%) in the RPL group and 18 participants (20%) in the control group responded that they consulted most frequently with nurses and midwives. The RPL participants tended to select this last option sig-

Table 2 Maternal anxiety in late-term pregnancy

median [interquartile range]

Items	Total (n = 131)	Control (n = 90)	RPL (n = 41)	p value
General anxiety	11.0 [6.0, 17.0]	11.5 [6.0, 17.0]	10.0 [3.5, 17.0]	0.61
Maternal anxiety	22.0 [14.0, 30.0]	22.0 [14.8, 30.3]	21.0 [13.0, 30.5]	0.71
Progress in pregnancy	4.0 [2.0, 5.0]	3.0 [2.0, 5.0]	4.0 [3.0, 6.0]	0.08
Growth of fetus	2.0 [1.0, 3.0]	2.0 [1.0, 3.0]	3.0 [1.0, 4.0]	0.72
Influence of mother	3.0 [2.0, 4.0]	3.0 [2.0, 5.0]	3.0 [2.0, 4.0]	0.75
Prediction of delivery	4.0 [3.0, 6.0]	4.0 [3.0, 6.0]	4.0 [2.5, 6.5]	0.82
Expectation of fetus	2.0 [1.0, 3.0]	2.0 [1.0, 4.0]	2.0 [0.5, 3.0]	0.44
Prediction of childcare	3.0 [2.0, 5.0]	3.0 [2.0, 5.0]	3.0 [2.0, 6.0]	0.76
Change in one's own appearance	2.0 [0.0, 3.0]	2.0 [1.0, 3.0]	1.0 [0.0, 2.0]	0.027
Relationship with husband	0.0 [0.0, 1.0]	0.0 [0.0, 1.0]	0.0 [0.0, 1.0]	0.35

Table 3 Psychology in late-term pregnancy

n (%)

Items	Total (n = 131)	Control (n = 90)	RPL (n = 41)	p value
I am worried about whether my baby will have an abnormality	106 (81)	72 (80)	34 (83)	0.5
I am anxious as to whether I will give birth safely with no complications	93 (71)	62 (69)	31 (76)	0.3
I am worried about whether I will be able to raise my baby well	79 (60)	55 (61)	24 (58)	0.5
I cannot motivate myself to think about my birth plan	52 (40)	34 (38)	18 (44)	0.3
I am worried that my baby will die during pregnancy	58 (44)	34 (38)	24 (59)	0.021
I am anxious that my baby may die during delivery	50 (38)	32 (36)	18 (44)	0.2
I have no desire to talk to my partner about how we will raise our child	89 (68)	61 (68)	28 (68)	0.6
Right now, I cannot even think about raising my baby	16 (12)	11 (12)	5 (12)	0.6
I cannot motivate myself to purchase supplies for raising my baby	5 (4)	2 (2)	3 (7)	0.2

nificantly more often than participants in the control group ($p = 0.02$).

In addition, 16 participants (39%) in the RPL group and 14 participants (16%) in the control group responded that they consulted most often with their doctors; the proportion of RPL participants who selected "my doctor" was significantly higher than that in the control group ($p = 0.004$).

The STAI anxiety scale from pregnancy to the postpartum period.   Viewed longitudinally, no significant differences were observed at any point in time between the participants of the 2 groups in relation to either state or trait anxiety scores from late pregnancy until hospitalization for childbirth, or at 1 month or 3 months postpartum (Table 5).

Analysis of inter-group differences from late pregnancy to 3 months postpartum showed that the control group's state anxiety scores showed a significant decline from the hospitalization stage onward ($p < 0.001$), while the same scores for the RPL group showed a decline at 3 months postpartum ($p < 0.05$). However, trait anxiety showed a significant decline from the hospitalization

stage for both groups.

Period when participants felt the most stress regarding their baby.   Participants at the 3 months postpartum stage were asked to reflect on their experiences from pregnancy until data collection. They were questioned regarding the period at which they had felt the most stress regarding their baby. The control group picked 1 month after discharge as their period of greatest stress, while the RPL group answered that their highest stress occurred during their pregnancy (Table 6). The response "during pregnancy" was chosen by 20 (49%) women with RPL and 28 women (31%) in the control group; this difference was statistically significant ($p = 0.041$).

Supportive behavior of partners of RPL participants.   Among the RPL participants, the most commonly reported supportive behavior from partners was "He listened to what I had to say," as reported by 39 participants (95%) and the least frequently reported behavior was "He ensured that I did not have any financial worries or problems," which was reported by 29 participants (71%). The survey found that all of the supportive behaviors were experienced by approximately 70-90% of the participants, a relatively high frequency.

Supportive behavior by partners and the resultant level of satisfaction experienced by women with RPL. A high percentage (74%) of participants with RPL reported a high level of satisfaction with the supportive behavior of their partners (8-10 points); of these, 44% reported a satisfaction level of 10 points, while 26% of participants gave a score of 7 points or fewer. We compared the proportion of high-satisfaction participants

Table 4   Confidant in late-term pregnancy

n (%)

Confidant	Total (n = 131)	Control (n = 90)	RPL (n = 41)	p value
husband	84 (64)	56 (62)	28 (68)	0.3
own mother	78 (59)	51 (57)	27 (66)	0.2
friend	56 (43)	37 (41)	19 (46)	0.4
nurse/midwife	34 (26)	18 (20)	16 (39)	0.02
doctor	30 (23)	14 (16)	16 (39)	0.004

Table 5   Passage of STAI: (State Trait Anxiety Inventory)

median [interquartile range]

	State anxiety			Trait anxiety		
Period	Control (n = 90)	RPL (n = 41)	p value	Control (n = 90)	RPL (n = 41)	p value
late pregnancy	38.0 [31.5, 45.5]	37.0 [30.0, 42.0]	0.3 [a]	42.0 [35.5, 47.0]	40.0 [34.0, 46.5]	0.3 [a]
hospitalization for childbirth	34.0 [28.0, 42.0]	33.0 [27.0, 38.5]	0.3 [a]	38.0 [32.0, 44.0]	35.0 [28.5, 42.5]	0.2 [a]
1 month after discharge	33.0 [27.5, 42.0]	34.0 [26.5, 40.0]	0.6 [a]	36.0 [30.0, 42.5]	35.0 [28.5, 39.5]	0.8 [a]
3 months after discharge	34.0 [27.0, 38.0]	31.0 [24.0, 39.5]	0.1 [a]	37.0 [30.0, 43.0]	34.0 [27.0, 41.5]	0.2 [a]

a: Mann-Whitney U-test, Friedman test, b: Wilcoxon signed rank test *: ＜0.05, **: ＜0.01, ***: ＜0.001.

(8-10 points) and low-satisfaction participants (7 or fewer points) for each type of supportive behavior experienced by the participants. We observed a significant difference between the participant groups with respect to the following 4 behaviors:

(1) Nearly all of the participants in the high-satisfaction group (28 out of the 29 participants; 97%) gave high scores for the item "He listened to what I had to say," but only 7 out of 10 participants (70%) in the low-satisfaction group did so ($p = 0.045$) (Table 7).

(2) Similarly, 28 of the 29 participants (97%) in the high-satisfaction group gave high scores for the item "He tried to understand my feelings," but only 5 of the 10 participants (50%) in the low-satisfaction group did so ($p = 0.002$).

(3) Twenty-seven out of 29 participants (93%) in the high-satisfaction group gave high scores for the item "He encouraged me," while only 3 out of the 10 participants (30%) did so in the low-satisfaction group ($p < 0.001$).

(4) Twenty-seven out of the 29 participants (93%) in the high-satisfaction group gave high scores for the item "He made it possible for us to enjoy time together as a couple," but only 4 out of the 10 (40%) in the low-satisfaction group did so ($p = 0.001$).

Discussion

Psychology of women who experienced RPL during late pregnancy. Women with RPL exhibited the same level of maternal anxiety as the control group late in their pregnancies, but they mentioned fewer concerns about changes in their own appearance. However, their fears for the survival of the baby were strong; such anxieties were also prevalent among participants who had successfully given birth in the past. It was found that participants experienced the most stress during their pregnancies, and frequently consulted their nurses, midwives, and doctors. Women in the control group reported that state anxiety decreased when they were hospitalized, but for the RPL group a long duration of 3 months postpartum was necessary to

Table 6   Period when subjects felt the most stress regarding their baby

n (%)

Time point	Total (n = 131)	Control (n = 90)	RPL (n = 41)	p value
during pregnancy	48/131 (37)	28/90 (31)	20/41 (49)	0.041
postpartum hospitalization	20/131 (15)	13/90 (14)	7/41 (17)	0.4
3 days after discharge	24/103 (23)	14/72 (19)	10/31 (32)	0.1
2 weeks after discharge	41/102 (40)	30/71 (42)	11/31 (36)	0.3
1 month after discharge	47/103 (46)	32/72 (44)	15/31 (48)	0.4
2 months after discharge	31/103 (30)	22/72 (31)	9/31 (29)	0.5
3 months after discharge	15/103 (15)	12/72 (17)	3/31 (10)	0.3

Table 7   Supportive behavior of partners of women with RPL

n (%)

Items	Total (n = 39)	Low-satisfaction group (n = 10)	High-satisfaction group (n = 29)	p value
He listened to what I had to say	35/39 (89)	7/10 (70)	28/29 (97)	0.045
He tried to understand my feelings	33/39 (84)	5/10 (50)	28/29 (97)	0.002
He encouraged me	30/39 (77)	3/10 (30)	27/29 (93)	< 0.001
He made it possible for us to enjoy time together as a couple	31/39 (80)	4/10 (40)	27/29 (93)	0.001
He helped with housework	32/39 (82)	6/10 (60)	26/29 (90)	0.6
He cooperated with me as the child developed	32/39 (82)	7/10 (70)	25/29 (86)	0.2
He encouraged me to rest and take it easy	32/39 (82)	7/10 (70)	25/29 (86)	0.2
He allowed me time to spend as I wished	32/39 (82)	7/10 (70)	25/29 (86)	0.2
He ensured that I did not have any financial worries or problems	27/39 (69)	5/10 (50)	22/29 (76)	0.1
He helped with the upbringing of our child (multiparous)	12/14 (86)	3/5 (60)	9/9 (100)	0.6

see the results of STAI from late pregnancy to the puerperal period.

Items in the group, "Change in one's own appearance" included "I do not want to be seen with a big pregnant stomach," "I am worried I will lose my figure after giving birth," "I am worried that some trace of pregnancy will remain in my body," and "I sometimes think about how I really do not like the way I look with a big stomach." A woman's abdomen is at its largest during the third trimester and is consequently most conspicuous during this period. The median score (2.0 [1.0, 3.0]) in the control group of this study was lower than the means for the primiparous (3.4 ± 2.1) and multiparous groups (2.9 ± 1.9) in Hanazawa [5].

Our results showed that women with RPL exhibited lower levels for this area than did the control group. Therefore, it is clear that the survival of the fetus is more important to them than are the physical changes, such as an enlarged figure or lasting changes from pregnancy. This is because women with RPL, having experienced repeated miscarriages and stillbirths, tend to place greater emphasis on successfully carrying a pregnancy to term and the survival of the fetus, rather than worrying about the loss of their figures or any lingering cosmetic effects of pregnancy.

Women with RPL experience multiple kinds of loss, including loss of hope, loss of future childbirth potential, loss of health, and loss of self-esteem, in addition to the loss of the child itself; the recurrence and accumulation of these losses results in a complex grieving process [8]. For women with RPL, the fear of future events and dread of the possible loss of their fetus makes each pregnancy painful. These fears become stronger as the point in their pregnancy corresponding to the prior miscarriage or stillbirth approaches [5]. The results of our study indicate that this fear remains strong even after women with RPL pass this point, and even if they have previously experienced successful childbirth, implying that the fear for the child's survival persists. Therefore, we found that baby-related stress was extremely strong throughout the entire period of gestation.

Our longitudinal investigation of STAI indicated that the women in the RPL group were slow to overcome their state of anxiety compared to the women of the control group. Women in the control group, who had experienced the normal fears of pregnancy, recovered quickly from their anxiety once they had delivered healthy babies. However, the women in the RPL group still feared the loss of their child even after the baby was born and they took a long time to overcome their justified fears.

Trait anxiety is defined as anxiety pertaining to the individual–some individuals are more prone to anxiety attacks than are others, and their triggers are activated by stressful conditions of varying intensity. One important discovery made by our study is that there was no significant difference in trait anxiety between the control group and the RPL group. The points in time where changes in trait anxiety were not observed were similar to the results observed by Oga (1 month after delivery) [9].

Women with RPL frequently consult nurses, midwives, and doctors. Women with RPL also take aspirin orally and often receive frequent heparin injections during their pregnancies. The very nature of their complaint puts them in frequent contact with professional caregivers due to the tests and treatments that they undergo with greater frequency than pregnant women without RPL. Indeed, it should be considered natural for them to have various misgivings and consult their doctors more frequently than pregnant women without RPL. They thus build a relationship with their caregivers based on trust, and indeed such a relationship may even have been established prior to pregnancy, during the course of RPL treatments. Our study suggests that healthcare professionals should get to know their patients with RPL well, so that they can serve as close confidants and provide support throughout their pregnancies, addressing both psychological and physical concerns while also dispensing medical information. Such relationships with medical professionals are invaluable for women with RPL.

Supportive behavior of partners toward women experiencing RPL. Participants with RPL reported a high degree of satisfaction with their partners' supportive behavior (70-90%) for all survey questions in this category. These data came from women who responded to our survey in a longitudinal manner after completing successful delivery with RPL treatment. Although it is possible that our cohort was disproportionately weighted with women who enjoy positive marital relationships, we found that the partners of our participants fully supported them—e.g., by helping them with the housework or listening to their concerns.

For their part, the partners of women with RPL

reported that they were able to show their support by "listening to what she said." "trying to understand her feelings," "encouraging her," and "making it possible to enjoy time together as a couple." These women felt highly satisfied psychologically when their partners exhibited any kind of supportive behavior. Healthcare professionals should inform the partners of women with RPL that their supportive behavior will improve the mental state and satisfaction of their partners, and should encourage partners to spend time with their pregnant wife or girlfriend and empathize with their anxieties, even if only for short periods of time. It is important for healthcare professionals to support both individuals in the partnership as a couple.

Women with RPL never lose their fear of mishaps even into late pregnancy. Healthcare professionals should endeavor to mitigate this anxiety by actively encouraging a feeling of trust in the expectant mothers and providing them with the appropriate medical information. Instead of just focusing on the women, they should focus on both partners as a couple and encourage them to share their hopes and fears with each other.

Future research will be needed to gather more data, since this study was conducted with a small number of participants. Our findings would have greater impact if complemented by a qualitative assessment of additional criteria in additional RPL cases.

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