



Science

STRESS MOTHER EXPERIENCE FOR PREMATURE BIRTH

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DOI: <https://doi.org/10.29121/granthaalayah.v4.i6.2016.2653>

ABSTRACT

The main objective of this study is to approach the experience of these mothers in our Moroccan context by focusing on the analysis of the socio-cultural impact. The secondary objective is to determine the risk factors associated with feelings of psychological difficulties. This study was conducted at the Souissi Maternity Hospital in Rabat over the six months. We chose to conduct a survey of Moroccan women who gave birth to premature alive. Preterm birth was defined as any birth prior to 37 weeks of amenorrhea (SA). This is a prospective, descriptive and analytical study. 100 parturients were included in our study.

The collection of information has been on the second day of delivery. Two groups of women were subsequently identified:

- *group A with one or two light feelings (absent or mild psychological difficulty)*
 - *group B with 3 or 4 medium or strong feelings (medium to strong psychological difficulty).*
- We analyzed two groups to determine the risk factors associated with psychological difficulties.*

In univariate analysis, we examined the association of each of maternal and neonatal characteristics with both groups A and B.

Nine factors were significantly associated with moderate or intense psychological difficulty. A high level of instruction, well-monitored pregnancy, presence of a pathological obstetrical history and cesarean delivery, all these factors accentuate the intensity of the feelings experienced.

In parallel, a weight greater than or equal to 1500 g birth of the child, transfer the baby in neonatal medicine lessen these feelings.

In multivariate analysis and after adjusting for factors studied, only the presence of pathological factors obstetrical history and the place of the child in the parental project are significant and therefore correlated with average or intense psychological difficulty.

We have indeed found that prematurity inscribed the child and his mother in a difficult context. This would affect preterm rupture of the mother / child bond. After that other questions have emerged. Given that self-efficacy is rooted in the failures and successes encountered previously, it would have been interesting to consider primiparity of the mother, and the support of the father at birth and after, when returning home because it would play a leading role and would have a positive impact on the mother's psyche.

Keywords:

prematurity; psychological difficulties; mothers.

Cite This Article: N. Chahid, MA. Radouani, Y. H. Benkirane, M. Mrabet, H. Aguentaou, and A. Barkat, "STRESS MOTHER EXPERIENCE FOR PREMATURE BIRTH" International Journal of Research – Granthaalayah, Vol. 4, No. 6 (2016): 211-221.

1. INTRODUCTION

Pregnancy is a physio-psychological turning point important in the life of a woman and her psycho-emotional development. The psychological development of the pregnancy layer medical progress in terms of quarters.

In the case of a premature birth, the mother is brutally cut in his psychic evolution. She is facing a "real child" previously imagined. She is overwhelmed by many feelings may sound later on the mother-child relationship, especially since a separation occurs early because of the child's hospitalization [1, 2].

The first Parent / child interactions thus establish in a very different context of a full-term birth. Most authors agree to consider that there are differences in the style of interactive dyads mother / child born prematurely and mother / child born at term: premature child is described as less alert, less attentive and active as newborn to term it is less responsive to maternal stress. Mothers, meanwhile, is described as more active, more stimulating or intrusive [3]. However, studies differ in their interpretation of the observed differences, especially regarding maternal interactive behaviors, considered either as the result of an adjustment to the specific needs of these babies, either as a problematic behavior, harmful to the further development of good the child. Some authors note that communication difficulties may become apparent only later, from the sixth month of life around[4]. Mothers also been described as sometimes the contrary, more inhibited, down in relation to the child [5]. The key however is to consider the dynamics of interactions, parents and baby are indeed influencing each other in a continuous process of transactional spiral [6].

The main objective of this study is to approach the experience of these mothers in our Moroccan context by focusing on the analysis of the socio-cultural impact. The secondary objective is to determine the risk factors associated with feelings of psychological difficulty. The ultimate goal is to best support these mothers throughout the hospitalization of their child.

2. MATERIALS AND METHODS

This study was conducted at the Maternity Souissi Rabat University Hospital over a period of six months. We chose to conduct a survey of Moroccan women who delivered preterm neonates. Prematurity was defined as any birth before 37 weeks of amenorrhea (WA).

This is a prospective, descriptive and analytical study. 100 women in labor were included in our study. The collection of information was realized on the second day of delivery after consent.

Were excluded from the study multiple pregnancies , mothers hospitalized in intensive care, those whose newborn died at birth or before interrogation, and those with their newborn was delivered in puerperium. The study design was as follows:

The first phase included the collection, from the medical records of motherhood, information relating to:

- Socio-economic profile of the mothers,
- Features and pregnancy care,
- Characteristics of newborns.

The 2nd step:

It was interested in the description of:

- Investment mother vis-à-vis the baby during pregnancy,
- knowledge of prematurity,
- perception of prematurity.
- His feelings experienced.

A first validation of the questionnaire was conducted with 10 women. It focused on four variables mentioned above. It included multiple choice answers or open.

We selected four feelings to explore: unreality, frustration, guilt and fear of the future. The intensity of feelings was rated from 1 to 3, the number 1 corresponds to an absent or slight feeling, 2 at an average sense, and 3 in a strong sense. The figure evaluating the feeling of intensity is assigned by the mother herself. A single pediatrician interviewed all mothers.

Two groups of women were subsequently identified:

A group with one or two light feelings (absent or mild psychological difficulties)→
a group B with 3 or 4 medium or strong feelings (medium to strong psychological difficulty).→

We analyzed two groups to determine the risk factors associated with psychological difficulties. Data were entered and analyzed using SPSS software. P significance level was set at 0.05.

3. RESULTS

The age of our parturients ranged from 17 to 44 years with a mean of 29.1 years (6.1).

We have defined three age groups: the less than or equal to 24 age group represents 22.5%, the 25-34 age group: 58.2%, the greater than or equal to 35 age group: 19.4%.

The majority of women (91%) is married. 61.2% are from a rural area. 37.3% are in the home. This is 76.1% in first-time mothers (Table 1).

Table 1: Sociodemographical data

	Number	Percentages (%)
Age		
≤ 24 years	15	22,4%
25 - 34 years	39	58,2%
≥ 35 years	13	19,4%
Status		
Married	61	91,0%
Divorced/widow	4	6,0%
Lonely	2	3,0%
Area		
Rural	41	61,2%
Urban	26	38,8%
Level of instruction		
Illetracy	26	38,8%
Primary	16	23,9%
Secondary	14	20,9%
High	11	16,4%
Profession		
No working	25	37,3%
Working	42	62,7%

Pregnancy was followed in 61.2% of cases. Monitoring of pregnancy took place in a public structure in 81% of cases, and only 24% received a sufficient number of prenatal visits (greater than 4).

Sixteen women (23.9%) had a pathological obstetrical history, this variable is defined by fetal death in utero history, perinatal death, premature birth or low birth weight. 22 women (32.8%) had complications during pregnancy: 23 of premature birth, 20 toxemia of pregnancy, 10 urinary tract infections requiring hospitalization motherhood. 47.8% of deliveries were performed by cesarean (Table2).

Table 2: Gyneco-obstetrical data

	Number	Percentages (%)
Parity		
Primipare	51	76,1%
Multipare	16	23,9%
Followed pregnancy		
Yes	41	61,2%
No	26	38,8%
Obstetrical history		
Yes	16	23,9%
No	51	76,1%
Complications		
Yes	22	32,8%
No	45	67,2%
MDelivery		
Vaginally	35	52,2%
Ceazarian	32	47,8%

55.2% of births were male. Gestational age ranged from 28-36 SA with an average of 32.8 SA (+1.6). The range 32-34 SA represented 76.1%. Birth weight ranged from 850-1900 g with an average of 1611,8g (435.6), 59.7% of newborns have a weight greater than 1500g birth. The Apgar was rated less than or equal to 5 in the 5th minute, in 19.4% of cases between 6 and 7 in 47.8% and greater than or equal to 8 in 32.8% of cases. 44.8% were hospitalized in neonatal resuscitation (Table3).

Table 3: Neonatal data

	Number
Sex	
Male	57
Female	43
Age	
28-31 WA	17
32 - 34 WA	63
35-36 WA	20
Weight birth	
< 1 000 g	13
1 000 - 1 500 g	34
> 1 500 g	53
Apgar	
□□□	23
5-6	42

≥ 7	35
Transfer	
Resuscitation	57
Medicine	43

The degree of investment vis-à-vis parturiente her baby during pregnancy is based on three items identified from a validation questionnaire to 10 women.

Place the child in the parental project is defined by a wanted pregnancy or not, whatever the gynecologic obstetric history of the woman. 43.8% of the women were desired child.

83.6% were curious to know the sex, and 79.1% were invested in preparing for childbirth and the birth or after the announcement of the baby's sex (baptismal formalities, clothes, toys, bedroom) (Table 4).

Table 4: Level of investment and knowledge of prematurity -related mothers

	Number
Child 's place in the family project	
Wanted	46
Not wanted	54
Desire to know the sex	
Yes	85
No	15
Preparations	
Yes	86
No	14
Informations about prematurity	
Yes	80
No	20
Definition about prematurity	
Yes	40
No	60
Causes	
Fatality	65
Medical	15
Evil eye	20

The definition of prematurity is not well known for 56.7% of women. The terms "small", "puny", "not viable and viable to 8 months to 7 months" is commonly used to define prematurity.

67.2% of women had information about prematurity by medical staff: 43% upon arrival at the maternity, no woman has seen the pediatrician before giving birth, and only 33% saw a pediatrician after childbirth and before our questionnaire.

The fatality is the first cause of prematurity evoked by women (47.8%). 35.8% of mothers retain the medical cause, and 16.4% speak of bad luck, evil eye cast by the neighborhood or in-laws (Table 4).

One of found feelings is the unreality of the event. It is felt with moderate intensity in 73.1% of cases. These mothers feel "drained" brutally. Even 48 hours after delivery, they have not yet achieved this premature birth.

Another feeling experienced by mothers with the same average intensity 2 is frustration (73.1%). These moms feel alone, not pampered by relatives, "the entourage dare not come because they are worried about the child." In addition, they are separated from their children and feel "useless".

The guilt was found in 50.7% of women, they say guilty of failing to take until the end and not having been able to prevent this premature birth. They believe that it has not done enough to carry her pregnancy to term. This feeling is probably mitigated by the cultural impact and their explanations specific to each of prematurity.

The latter sentiment is retained apprehension for the future of the child. This feeling is absent in 50.7% of cases. Their main concern is the viability of the child and not the future. Only 47.8% had questions about the possible complications of prematurity (table 5).

Table 5: Intensity of feelings

	Absent / Light = 1	Medium = 2	Fort = 3
	Number	Number	Number
Unreality	17	65	20
Frustration	15	70	30
Guilt	20	44	25
Apprehension	54	35	5

We separated all mothers into two groups. A group with one or two light feelings (absent or mild psychological difficulties)
a group B with 3 or 4 medium or strong feelings (medium to strong psychological difficulty).→

We analyzed two groups to determine the risk factors associated with psychological difficulties. In univariate analysis, we examined the association of each of maternal and neonatal characteristics with both groups A and B.

Nine factors were significantly associated with moderate or severe psychological problems (Table 6).

Table 6: Analytical study of risk factors associated with psychological difficulties

	GROUPE A □ 2 feelings	GROUPE B ≥ 3 feelings	Univariate analyse	Multivariate analyse
Instruction				
Illetrate	16	21		
Primary	16	20	$p=0,02$	$p=0,15$
Secondary	0	14		
High	2	11		
Following				
Yes	14	44	$p=0,01$	$p=0,3$
No	16	26		
Obstetrical history				
Yes	19	17	$p=0,006$	$p=0,03$
No	15	49		
Delivery				
Vaginally	15	40	$p=0,01$	$p=0,7$
Cesarian	19	26		
Weight birth				
< 1 000 g	11	12	$p=0,04$	$p=0,3$
1 000 - 1 500 g	7	30		
> 1 500 g	16	24		
Transfer				
Resuscitation	15	42	$p=0,004$	$p=0,3$
Medicine	19	24		
Place of the child in the parental project				
Wanted	12	39	$p=0,001$	$p=0,005$
Not wanted	22	27		
Informations about prematurity				
Yes	19	46	$p=0,03$	$p=0,07$
No	15	20		
Causes				
Fatality	16	36	$p=0,03$	$p=0,17$
Medical	12	25		
Evil eye	6	5		

A highly educated, well followed pregnancy, the presence of a pathological obstetrical history and cesarean section as mode of delivery, these factors accentuate the intensity of the feelings experienced.

In parallel, a weight of greater than or equal to 1500 g birth of the child, transfer the baby in neonatal medicine alleviate these feelings.

A wanted child, a mother informed about the risks of prematurity during pregnancy, medical explanations cited as a cause of preterm birth are risk factors also associated with psychological distress.

In multivariate analysis adjusted for factors studied, only the presence of antecedent factors pathological and place of children in obstetric parental project are significant and therefore correlated with average or intense psychological difficulty (Table 6).

4. DISCUSSION

Indeed, and perhaps for reasons of statistical power, the association between maternal stress, including fatality, and prematurity is significant only for studies in the United States. We do not observe the same result for studies in Europe. Aside from the differences in the number of studies in each region, it is possible to consider the socio-political contexts as being at the root of these differences. European studies have mainly been done in countries such as Sweden, Norway and Denmark, countries in which the quality of health care and social measures to support the family are recognized worldwide. It is possible that the context of life in the United States may be less favorable for pregnant women, the samples include more people living below the poverty line or that medical care may be less well distributed all factors that can contribute this difference [7-9].

In our study, we actually found that prematurity engendered feelings of psychological difficulty. This would affect preterm rupture of the mother / child bond. Following this other questions have emerged. Given that self-efficacy is rooted in the failures and successes encountered previously, it would have been interesting to consider primiparity mother and the support of the father at birth and after, when returning home because it would play a leading role and have a positive impact on maternal psyche [9-11]. Our results then confirm the specifics of individual interactive behavior of mothers and their premature babies mentioned in the literature [12, 13].

The representations of attachment parenting - evidenced, for example, through the semi-structured interview and the encoding method developed by Zeanah) [14] to our knowledge remain little explored in premature children born parents. In some children at-risk groups, it was found that they were less than optimal with more insecure representations characterized by difficulty from parent to raise the child in all its individuality, as well as its need for emotional and relational terms. Then noted over representations characterized by a certain emotional distance (say disengaged representations or Disengaged) or an anxious concern in the relationship with the child (or distorted representations called Distorted) [15] studied these representations in mothers of premature born children when they reach 6 and 18 months corrected age. This author found that only 20% of premature infants of mothers have Secures attachment representations, against 53% among mothers of term infants.

5. CONCLUSION

Given the complexity of the processes, traumatic dimensions, the risk of over-investment or disinvestment of the child, prematurity can be considered a risky situation for the mother / child relationship and child development. Preventive interventions for parents, especially during of premature birth in hospital, are crucial to enable them to find a word space or development, to prevent traumatic representations child remain fixed, disrupting interactions and, in the longer term, the mother / baby relationship. Psychological counseling pre and postpartum moms adapted to risk of preterm birth in pre and post-partum is currently being implemented in our structure to watch the psychological complications of prematurity for the mother and child.

6. COMPETING INTERESTS

Authors have declared that no competing interests exist.

7. ACKNOWLEDGMENTS

To all people who participate to this study.

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