Prenatal factors negatively influencing the childbirth experience Proposal for a screening tool: a Delphi study

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Background

- The prevalence of the negative childbirth experience (**NCE**) varies widely across studies, ranging **from 6.8%** for the lowest rate **to 44%** for the highest rate [1].
- The NCE can have **serious consequence**s for the mental and physical health of women, as well as for their relationship with their partner and child and also have an **impact on the healthcare system** as a whole. It is therefore important that healthcare professionals work to minimize the trauma associated with childbirth and provide appropriate support to women who have had negative experiences [2 3].
- There is **no screening tool for risk of NCE** identified in the current literature [4]

Aims

Two aims based on the consensus of a panel of experts:

1. **Validate the predictive value** of prenatal risk factors (**RF**) for a NCE in women from the literature

2. **Weight the selected RF in a matrix** to propose a screening tool for the risk of NCE in women during the prenatal period.

Methods

23 RF initially identified by literature review but with lack of consensus about their predictive value for a NCE. Use of the Delphi Method with 3 successive rounds to reach the consensus [5] :

- Round 1 and 2: seek consensus from the expert panel on the predictive value of the RF and cut-offs
- Round 3: weighting of the final matrix with the Analytic Hierarchy Process (AHP) [6]
- Feedback of results to the panel after each round

Definition of consensus: Mean ≥ 4 (on a 5-point Likert scale) and Coefficient of Variation ≤25%.

Results

- The initial panel consisted of **21 international experts** (13 midwives, 6 psychologist, 2 obstetricians, 1 psychiatrist and 1 social scientist) in the field of childbirth experience with a **high authority coefficient** (0.86 out of a maximum of 1). They come from 9 countries. The panel was composed of researchers **representing clinicians involved with pregnant women** (Table 1.) The iterative process of the Delphi method is represented by the Figure 1

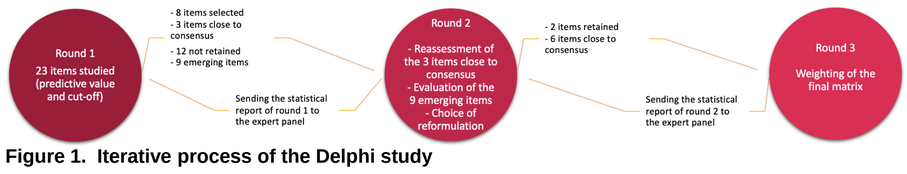

Figure 1. Iterative process of the Delphi study

- The response rates for the three rounds were 74, 86 and 78% respectively..
- At the end of the first two rounds, **10 items distributed in three dimensions** reach the consensus of the panels. In the third round, the panel was asked to weight this material using the AHP method.
- The average consensus of the matrix was 65.6% (Table 1.).
- **Three items each represent more than 10%** of the total weight of the matrix, these are "Fear of childbirth" (17.5%), "Lack of information related to childbirth" (14.%) and "Anxiety" (10.7%) (Table 1).

	Dimenson (weight in%)		Item (weight in %)		Overall weight (in %)
Negative Childbirth Experience	**Vulnerabilities based on history**	31.6	Previous childbirth trauma	29.1	9.2
			Previous trauma	20.4	6.4
			History of psychiatric disorder	22.5	7.1
			History of sexual abuse	28.1	8.9
	Vulnerabilities based on current status	36.9	Depression	26.9	9.9
			Anxiety	29.1	**10.7**
			Lack of partner's support	25.7	9.5
			Lack of informal social support	18.3	6.7
	Childbirth Expectations & planning	31.5	Fear of childbirth	55.5	**17.5**
			Lack of information related to childbirth	44.5	**14.0**

Table 1. Final weighted matrix

Strengths

- A **primary prevention tool** for the risk of NCE, which was lacking for healthcare professionals
- **Appropriate knowledge and expertise of the panel**, the level of agreement was reliable
- Use of a **combination of evidence-based practice and expert opinion** to reach a consensus on the questionnaire
- **High response at each round** (74%, 86%, 78%)

Limits

- Difficult to assess both wording and predictive value
- Some items were not re-assessed due to the limitation of the research protocol.
- Some risk factors for NCE, such as personality traits and attachment styles, were not included in the screening tool

Implications for research and clinical practice

For research:
- Reassess the factors close to consensus after the second round
- Create a user guide of the tool
- Investigate the validity of the tool and its acceptability to pregnant women and health professionals.
- Validate the translation of the tool into French

For clinical practice:
- Solid basis for specific training for health professionals
- Complement the range of tools already available in the framework of a public health plan
- Implementation of validated and targeted interventions before delivery with multidisciplinary management

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