The impact of pre- and post-natal psycho-educational intervention on the construction of parenthood

Chantal Razurel¹ · Jean-Philippe Antonietti² · Françoise Rulfi³ · Nadia Pasquier³ · Sophie Domingues-Montanari⁴ · Joëlle Darwiche²

Received: 1 June 2016 / Accepted: 22 March 2017
© Springer-Verlag Wien 2017

Abstract A pilot study was conducted to assess the merits and feasibility of a standardized postnatal psycho-educational interview on mothers’ mental wellbeing, self-efficacy, and mother–child and couple relationships. A comparison of prenatal psycho-educational interview (n = 23) vs. pre- and post-natal psycho-educational interviews (n = 26) was carried out. Parental self-efficacy and the mother–child relationship were significantly improved for the group who received a post-natal interview at 2 and 3 months postpartum in addition to a prenatal interview. Pre- and post-natal interviews improve the construction of parenthood.

Keywords Midwifery · Pre- and post-natal education care · Depression · Perceived perinatal stress · Parental self-efficacy

Introduction

In Western societies, the birth of a child is generally seen as a joyous and natural event. Yet becoming a parent is a delicate period of transition and adaptation. While for the most part this adaptation to becoming a parent takes place smoothly, some births can lead to significant mental health issues such as depression (Gavin et al. 2005), anxiety disorders (Grant et al. 2008), and problems with mother and child bonding (McGrath et al. 2008), as well as relationship problems for the couple (McHale and Lindahl 2011) without there being specific risk factors (Razurel et al. 2016). Furthermore, birth can be perceived as stressful (Razurel et al. 2016) and this stress can affect the sense of maternal self-efficacy (Razurel et al. 2016).

Meta-analyses show that supportive interventions can improve parental processes (Gagnon and Sandall 2007; Bryanton et al. 2013). However, the conclusions of these meta-analyses do not lead to specific guidelines and recommendations due to the fact that the interventions are poorly described and not standardized.

Most of these interventions occur either pre- or postnatally, while a study suggests that both prenatal and postnatal intervention is more successful (Gao et al. 2012).

Since this type of intervention has not been carried out in a Western country to date, we conducted a pilot study to assess its feasibility in terms of acceptance by mothers and dispensation of the interview by midwives.

The main objective was to assess the added value of standardized psycho-educational prenatal and postnatal interviews on the mental health of the mother, her sense of self-efficacy, as well as the mother-and-child relationship, and the quality of the couple at 2 months (T2) and 3 months (T3) postpartum.

Without precedent in a Swiss context, this pilot study investigated the feasibility of a wider study.

Methods

This study took place between November 2014 and July 2015 at a Swiss PROFA center (perinatal counseling), which provides prenatal interviews to expectant parents.
Participants

Pregnant women included in the study were ≥ 18 years, nulliparous, and spoke/understood French. Women undergoing psychiatric treatment were excluded. Potential participants meeting inclusion criteria were given an information leaflet (before the prenatal interview) and all of the participants provided informed consent.

Group I (n = 26) received a prenatal and postnatal interview; group II (n = 23) received standard practice (prenatal interview only).

Intervention

The prenatal interview was conducted at 30 weeks of gestation and the postnatal interview at 6 weeks post partum. Interviews (1 h) were conducted by one of four midwives trained in the use of a questionnaire-guided manualised psycho-educational perinatal interview (PEPI) (Razurel 2015).

The aim of the PEPI was to help mothers find solutions corresponding to their needs, and to decrease perceptions of adaptation-associated stress while promoting personal resources and increasing the sense of self-efficacy. This semi-directive PEPI had four stages:

- The first stage was to identify the source(s) of women’s stress. The women assessed whether the events presented surpassed their resources and would cause stress.
- The second stage was to change perceptions of stressful events through education. By considering stressors/ perceptions of stressors identified in T1, women were guided to deconstruct these links by considering less daunting angles.
- The third stage helped mothers to optimize coping strategies by assessing existing coping abilities and envisioning more functional strategies.
- The fourth stage aimed to increase satisfaction with social support by mothers expressing their needs to those around them and professionals.

Procedure

All participants completed the T1 questionnaire before the prenatal interview. The T2 questionnaire was completed at ~2 months postpartum (for group I, ~10 days after the postnatal interview). Both groups completed the postnatal T3 questionnaire 3 months after giving birth. Women returned the T2 and T3 questionnaires by postal mail and they were reminded by phone.

Measures

At T1, ‘state’ and ‘trait’ anxiety were measured using the State-Trait Anxiety Index Form Y (STA I), a self-reported 20-item questionnaire on a 4-point Likert scale. At T2 and T3, mothers’ anxiety levels were assessed by ‘state’ (Cronbach’s alpha = 0.95).

The Edinburgh Postnatal Depression Scale (EPDS) was used to measure depression, a self-administered 10-item questionnaire on a 4-point Likert scale. The EPDS was completed at T1, T2, and T3, and evaluated depression risk (Cronbach’s alpha = 0.87).

The Parenting Expectations Survey (PES) measured parental self-efficacy, as applied to parenthood. Measured at T2 and T3, PES comprises 25 items on a 1–10 scale, reflecting behaviors associated with parental roles (Cronbach’s alpha = 0.92).

Measured at T1, the Antenatal Perceived Stress Inventory (APSI) is a 12-item questionnaire rated on a 1–5 scale measuring perceived prenatal stress (Cronbach’s alpha = 0.77). Measured at T2 and T3, the Postnatal Perceived Stress Inventory (PNPSI) comprised 19 items rated 1–5 to measure postpartum stress (Cronbach’s alpha = 0.87).

The Maternal Attachment Scale (MAS) measured the mother–child relationship at T2 and T3. MAS is a 19-item questionnaire scoring 19–95 (Cronbach’s alpha = 0.82).

The Parenting Alliance Inventory (PAI) measured shared parenting at T2 and T3. PAI is a 20-item questionnaire on a Likert scale of 1–5 (Cronbach’s alpha = 0.95).

Statistical analysis

Data were analyzed using SPSS (version 21, Chicago, IL, USA), and R (Fox 2006). Groups I and II were compared at time T1 on the basis of \( \chi^2 \) on two proportions or Student’s \( t \) test on two independent groups. At T2 and T3, groups I and II were compared by linear mixed models, controlling for measurements made at T1.

Ethical standards

An informed consent form was filled out by each study participant. This research was approved by the ethics committee for Swiss research N° CER-VD 216/14. The authors have no conflicts of interests to declare.

Results

Population

No significant differences were noted between the demographic variables of participants for nationality or native language, but a significant difference was observed for age, with an average age of 28.9 for group I and 31.7 for group II.
(P = 0.03). Ninety-six percent of participants were in a couple, and 35% of spouses were present during the interview for both groups. There were no significant differences in terms of the birth method, use of epidural, or proportion of mothers that chose to breastfeed between the two groups.

Neither was significant differences observed at T1 in regard to STAI, EPDS, or APSI; hence, the groups appear to be similar.

Intergroup comparison

A significant difference between groups was noted for sense of parental self-efficacy (t(42) = −2.2; P < 0.05, Cohen d = 0.58), and mother–child relationship (t(43) = −2.06; P < 0.05, Cohen d = 0.43) at T2 and at T3. Levels were higher in group I than group II (Table 1).

On the other hand, no significant differences in anxiety level, depression, stress, or shared parenting were observed between groups at T2 and T3. However, average anxiety, depression, and stress levels were higher in group I at T1, especially in the EPDS and stress measures, although at T2 these levels were lower in group I (M(SD): STAI group I = 32.68 (10.45) vs. STAI group II = 32.94 (11.09); EPDS group I = 6.26 (3.71) vs. EPDS group II = 7.29 (5.52); PNPSI group I = 37.16 (10.88) vs. PNPSI group II = 40.14 (12.91)) and at T3 (M(SD): STAI group I = 30.8 (11.6) vs. STAI group II = 31.8 (9.6); EPDS group I = 4.7 (4.1) vs EPDS group II = 4.7 (4.02); PNPSI group I = 32.6 (9.9) vs. PNPSI group II = 34.2 (7.7)). No differences were seen in regard to shared parenting.

Discussion

The sense of parental self-efficacy was greater in group I, both at T2 and at T3. In our study, the mother–child relationship was improved in group I, and significantly so at T2 and T3. Few other studies have demonstrated this outcome (Gagnon et al. 2012). The sense of parental self-efficacy was greater in group I, both at T2 and at T3. In our study, the mother–child relationship was improved in group I, and significantly so at T2 and T3. Few other studies have demonstrated this outcome (Gagnon et al. 2012).

Conclusions

Postnatal interviews provide significant added value for the mother–child relationship and a sense of parental self-efficacy, and have yielded encouraging results regarding a reduction in the mothers’ depression, stress, and anxiety. A randomized study with a larger sample is needed to confirm these results and to test the added value of a postnatal intervention on the mental wellbeing of mothers.

Acknowledgements

We would like to thank Ms. L. Henin, Ms. M. Cittadini, and Ms. B. Bohy (midwives at the PROFA Foundation Perinatal counseling service) for their contributions to this study and Sabrina Galley (HEDS Geneva).

References


