Original Article

Psychoprophylaxis, Labor Outcome and Breastfeeding

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Abstract

Background: Despite the widespread use of psychoprophylaxis, scientific assessment is rather scarce.
Aims: The purpose of this study was to assess the impact of psychoprophylaxis courses on childbirth outcome and its contribution to initiation of breastfeeding.
Methodology: This was a cross-sectional study. A representative sample of mothers who gave birth in two public and three private maternity hospitals in the city of Larissa, central Greece was used. The study population consisted of 200 mothers. Of them, 100 mothers (Sample 1) had attended psychoprophylaxis courses, while 100 mothers (Sample 2) had not attended any program relative to childbirth courses.
Results: The majority of the sample was aged 30-39 years old. Most women in the sample 1 were university graduates (66%), while in sample 2 most women were high school graduates (52%), a difference statistically significant ($p<0.001$). Most women in sample 1 (60%) gave birth naturally, while most women (52%) in sample 2 underwent caesarian section ($p=0.01$). A statistically significant association ($p<0.05$) is depicted between attendance of psychoprophylaxis sessions and the following outcomes: breastfeeding program attendance, breastfeeding and information on human milk banks.
Conclusions: Psychoprophylaxis exert positive effects on labor and breastfeeding.The findings highlight the contribution of psychoprophylaxis to the care of pregnant women and the newborn.

Key words: labor, psychoprophylaxis, breastfeeding

Introduction

The method of psychoprophylaxis became known to the public as “painless childbirth”. The concept of painless childbirth includes all those practices which can produce analgesia such as the use of spasmolytics and tranquillizers or general/ local anesthesia. Psychoprophylaxis holds a prominent position regarding the parturient. It integrates knowledge, exercise, meditation and relaxation to achieve a birth without fear and with the least possible pain. Attendance of psychoprophylaxis courses usually starts from the sixth month of pregnancy. Within the next four months the pregnant woman will attend 8-10 theoretical and practical orientation classes: anatomy-physiology courses, reproduction, menstruation, fertilization and techniques session (Scott & Rose 1976, Lamaze 1984, Simkin & Bolding 2004, Kitzinger 2008).

Regarding the effect of psychoprophylaxis on the outcome of childbirth, psychoprophylaxis seems to improve oxygenation and reduce muscle tension; it reduces fear and improves self - control.Women sensitized on the issue of their active participation in childbirth, the have confidence and capacity to withstand childbirth longer, being less willing to medical interventions. They also tend to have more support from their partner, while their breathing system and the relaxation are believed to increase the awareness and minimize the risk of ineffective contractions (Zwelling 2000, Michaels 2007). Despite the widespread use of psychoprophylaxis, scientific assessment is rather scarce. Reviews of using alternative methods of analgesia in childbirth are rare and are characterized by methodological flaws, while also the impact of psychoprophylaxis especially on the outcome of labor and future

implementation of breastfeeding has not been thoroughly investigated (Maimburg et al, 2010).

Breastfeeding is a public health priority because it is the natural diet of infant and young child. Exclusive breastfeeding during the first six months of life ensures optimal growth and health. Low rates and early cessation of breastfeeding have important adverse effects on health and social well-being of mothers and their children (Schack-Nielsen & Michaelsen 2006). The effects extend throughout society and the environment, result in greater expenditure on health services and increase health inequalities (WHO 1989). There is no design, objectives, programs for breastfeeding in any state or academic institution.Not any European program is implemented or funded which aim to improve breastfeeding rates in our country, while there is no official nationwide registration of breastfeeding rates. There are only fragmentary studies resulting in estimations of low breastfeeding rates (only 5% exclusive breastfeeding within the six months post partum) (Gaki et al 2009).

The purpose of this study was to assess the impact of psychoprophylaxis courses on childbirth outcome and its contribution to initiation of breastfeeding. At the same time, the frequency of natural childbirth and breastfeeding were recorded in the prefecture of Larissa.

Methods

Design and study type

This was a cross-sectional study.A representative sample of mothers who gave birth in two public and three private maternity hospitals in the city of Larissa. Four private and public maternity hospitals in Larissa were enrolled in the study. Of note, there was refusal of cooperation of one large private maternity hospital (data available to whom it may concerns).

The questionnaire comprised 26 closed -type questions (with some sub-questions) (multiple choice, dichotomous questions). The study population consisted of 200 mothers. Of them, 100 mothers (Sample 1) had attended psychoprophylaxis courses, while 100 mothers (Sample 2) had not attended any program relative to childbirth courses. The inclusion criteria were as follows:

a)births to live children within the previous semester

b) neonates at least the three month years old.information was obtained by a personal interview with each of the 200 women who participated in the study.

Statistics

Data crosstabulation and relative risk (RR) estimation was performed. The statistical package EpiData Entry was used to process the data. Statistical significance was set at $p=0.05$

Results

The majority of the sample (131/200 women) was aged 30-39 years old, while 102/193 women were university graduates. Most of them (165/200) lived in the city of Larissa.(Table 1). Most women in sample 1 (60%) gave birth naturally, while most women (52%) in sample 2 underwent caesarian section ($p=0.01$)(Fig.1.) When the 60 women who had a normal labor were asked if they implemented what they were taught during psychoprophylaxis sessions, 51 (85%) gave positive answer (data not shown).

In table 2, a statistically significant association ($p<0.05$) is depicted between attendance of psychoprophylaxis sessions and the following outcomes: breastfeeding program attendance, breastfeeding and information on human milk banks It is of interest, the protective effect of psychoprophylaxis on medication during pregnancy and reducing caesarian section rates, although differences were not statistically significant.

Discussion

According to the findings of the present study, the main differences between the psychoprophylaxis group and the controls are found in the lactation field (breastfeeding monitoring program, breastfeeding and information about milk bank), in favor of the psychoprophylaxis group, which also had less medication during pregnancy and fewer caesarean sections.The rate of breastfeeding and the practices followed by mothers and the childbirth outcome show the effect of psychoprophylaxis, since it is possible to modify the tolerance to pain, to empower faith and persistence and alleviate the discomfort in difficult childbirth or breastfeeding situations. While almost all women of psychoprophylaxis group attended the breastfeeding program, almost no women in the control group did so.

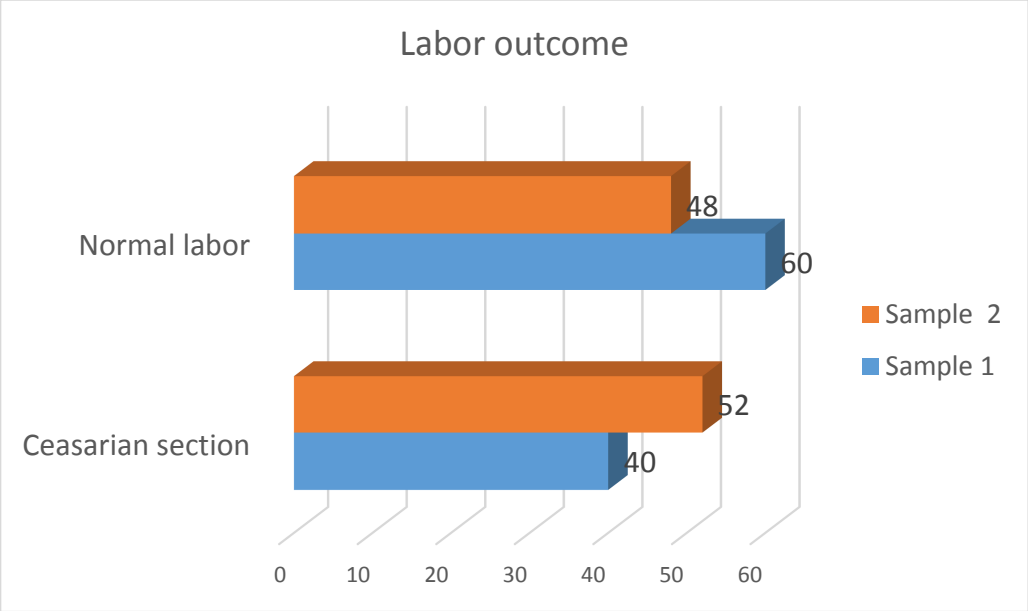
Table 1. Demographic characteristics of the sample

	Sample 1	Sample 2	Total	p
	N(%)	N(%)		
Age of mother				
1-19 years old	0	4	4	0.200
20-29 years old	33	29	62	
30-39 years old	64	66	131	
≥ 40 years old	2	1	3	
Total	100	100	200	
Mother educational level				
Junior High School	0	10	10	<0.001
High School	29	52	81	
University graduate	69	33	102	
Total	98	85	193	
Place of residence				
Larissa	95	70	165	<0.001
Other	5	30	35	
Total	100	100	200	

Table 2. Selected outcomes association with attendance of psychoprophylaxis sessions

Outcome	ATTENDANCE						
	N Total	Psychoprophylaxis sessions					
		Yes		No		RR (95% CI)	p-value
		Outcome+	N Sessions +	Outcome+	N Sessions -		
Medication during pregnancy (+: yes)	197	22	100	27	97	0.79 (0.48-1.29)	0.344
Normal or CS (+: CS)	200	40	100	52	100	0.78 (0.57-1.05)	0.102
Breastfeeding sessions (+:yes)	200	99	100	2	100	50 (12.68-197.20)	<0.001
Infant at bedside (+: yes)	200	49	100	46	100	1.07 (0.80-1.43)	0.671
Breastfeeding (+:yes)	200	97	100	89	100	1.09 (1.01-1.18)	0.027
Breastfeeding within the first hour after birth (+: NAI)	186	13	97	9	89	1.33 (0.60-2.95)	0.488
Human milk bank information (+:yes)	199	93	100	63	99	1.54 (1.32-1.79)	<0.001

Figure 1. Labor outcome in the two groups



So even if the influence of psychoprophylaxis on purely biological parameters of labor might be disputed, one could hardly challenge the indirect beneficial effects, since women become familiarized with the idea of childbirth and lactation and dissolve fears and prejudices.

The findings highlight the contribution of psychoprophylaxis to the care of pregnant women and the newborn, but at the same time to avoid late complications.

The good mental state of the mother in the difficult period of labor and childbirth is a guarantee for the smooth development of the newborn and the adaptation of the mother to a new a chapter of her life (Goodman et al 2004).The percentage of women (about 20%) who ultimately failed to incorporate the teachings of psychoprophylaxis during childbirth should trouble about understanding the technical and the effectiveness of conventional methods.

This finding is in accordance with previous studies and often troubles midwives (Spiby et al 1999)Perhaps a revision of some methods would help even more women to apply in practice, during the critical time of birth, what they have been taught.

Of note, the lack of cooperation of one large private maternity hospital. Some women may have been informed about psychoprophylaxis at home by different sources and were familiarized with the progress of labor.

If this actually happened, it does not negate the value of organized courses of psychoprophylaxis, but instead shows that even sessions by non-experts, despite the risk of errors involved, can positively affect the woman.

A higher educational level, as more women in the psychoprophylaxis groups were universities graduates and a better access to services and information (almost all women in psychoprophylaxis group were urban residents) might have also affect the results. Studies with larger and more representative sample of the Greek population are necessary for sound conclusions to be drawn, while socio-economic status and other confounding factors should be taken into account.

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