STUDY CONCERNING THE COSTS OF BIRTH BY CAESAREAN SECTION COMPARED TO NATURAL BIRTH

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Abstract: *The birth by caesarean section has become an expanding phenomenon in the recent years, natural births being more and more rare in Romania. The increasing incidence of these operations has been observed in the recent years, in the conditions of more effective fetal monitoring, modification of the malpractice law and increasing degree of information of the women. In Romania, depending on the hospital, the percentage of births by caesarean section ranges between 20-80%, even 90% (these latter percentage being valid especially in private clinics). The percentage of the operations is higher in big cities, and in Bucharest about 70% of the births are done by C-section. The World Health Organization recommends a maximum percentage surgical intervention of 10-15%. Fearing the labor pain, more and more women are choosing to bring their children into the world by Caesarean section. Also the number of doctors who claim that cesarean section is a better option is increasing. Both persons involved in the birth process have the responsibility of that decision - meaning both mother and doctor. The option of the mother is very important, but the recommendation of the doctor can make the difference. The decision is not only of the doctor, he just presents the information that the mother does not know, mother's wish being the most important. In this paper we conducted a study to determine the comparative costs of the vaginal births with those by Caesarean section. The retrospective study was conducted between 01.01.2015 - 31.12.2015, on 3607 births registered in the Obstetrics and Gynecology Clinics of Clinical Emergency County Hospital Oradea. Gemellary births were excluded from the study. We analyzed the comparative costs of a vaginal birth and of a birth by caesarean section in order to highlight the share of cesarean births compared to vaginal births.*

Keywords: vaginal birth; cesarean birth; surgery; woman; pregnancy.

JEL classification: I10; I11; I13; I18; G23

Introduction

The birth of a child is a major event in the life of any family. This happy event should begin with a general education on sexuality, pregnancy and birth so that all these events would be perceived as being very important in the life of a couple. Informing the future mothers on the birth and physiological phenomena that occur during delivery, will reduce or even cancel, the fear of the unknown that occurs in

such situations.
An important role has the obstetrician who must convince the expectant mother that all medical decisions that are taken are for the benefit of mother and child and the relationship between them must be based on complete trust and communication. The gynecologist role is not that of compelling the woman to give birth naturally, but to convince her that birth is a happy phenomenon that must be lived with joy and intensity. (Current concepts in obstetrics and gynecology,2010).
However there are situations when natural birth is uncertain, reason for which the doctor recommends Caesarean section. From the medical point of view there are many factors that contraindicate natural birth, among them are: a narrow pelvis or large fetus, the fetus in breech position, placenta blocking the pelvis, a chronic disease of the mother.

Material and methods

The study was conducted with the purpose of analyzing the costs of caesarean births compared to natural births, as well as the share of caesarean birth compared to vaginal birth.

Results

Of the total of 3607 cases, 1739 were vaginal births (48.21%) and 1,868 births were by caesarean section (51,79%).

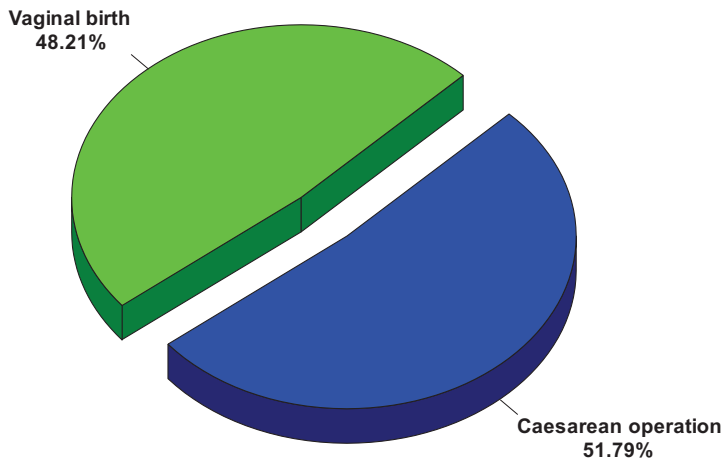

Fig.no.1. The share of cesarean operations of the total births

Table 1: The characteristics of the lots

	Vaginal birth	Cesarean birth
Average age	26,87±4,22 years	28,53±6,37 years
Area of origin (rural / urban)	67.22%/32.78%	50.75%/49.25%
The average hospitalization period	4.34 days	7.73 days

Patients undergoing caesarean sections had an average age slightly higher than that of patients with vaginal birth (28.53 years vs. 26.87 years) (p=0.049).
The rural / urban ratio was of 2: 1 in the case of vaginal births and of 1: 1 in the case of caesarean (p=0.001).
The average hospitalization period was 1.78 times higher in patients with cesarean section than for those with vaginal delivery (7.73 days vs. 4.34 days) (p<0.001).

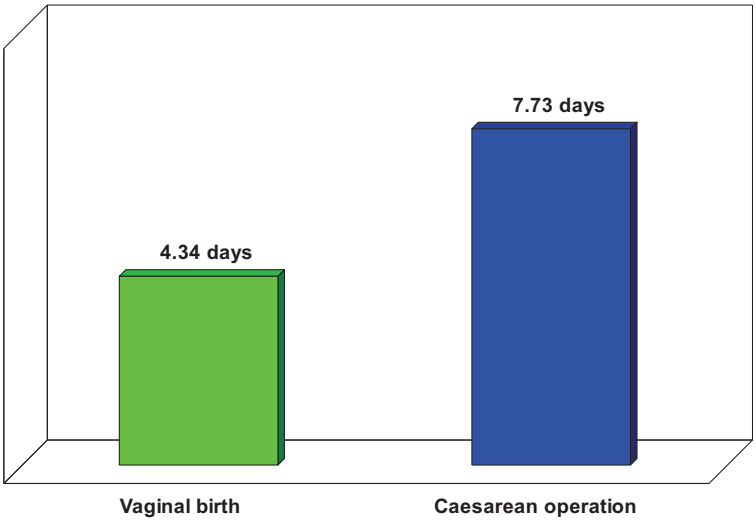

Fig.no.1. Average length of stay

Table 2: The average cost (lei)

The average cost (lei)	**Vaginal birth**	**Cesarean birth**
Medicines and sanitary materials	73.39	320.34
Medical analysis	140.94	177.32
Other investigations and procedures	21.51	73.71
Hotel costs	956.52	2,265.46
Total	**1,192.36**	**2,836.83**

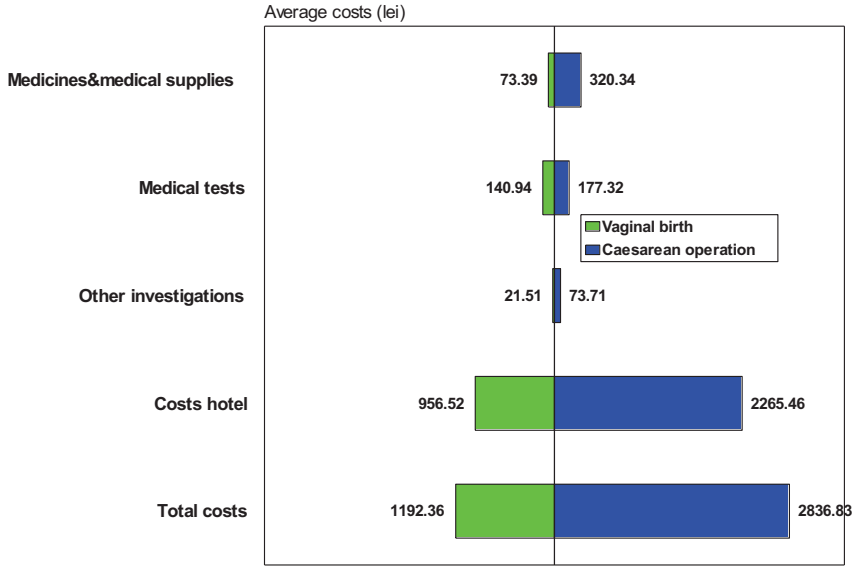

Fig.no.3. Costuri medii

The cost of medicines and sanitary materials is 4.4 times higher for cesarean versus vaginal birth, of medical analyzes 1.3 times higher, and of other investigations 3.4 times higher.
Hotel costs, which include in addition to accommodation and meals, personal expenses, utilities and other direct costs per sector (consumables, service equipment, etc.) are 2.4 times higher for patients with cesarean birth compared to those with vaginal birth. It should be specified that in the case cesarean births the patients are transferred to ICU (intensive care unit) section, where they are hospitalized 1-2 days, and the cost per day of hospitalization in ICU is over 2.5 times higher than in obstetrics and gynecology. Also, hotel costs increase due to the greater length of hospitalization in the case of cesareans.

Conclusion

Natural births represented 48.21% of the total births studied, while cesarean birth 51.79%.
The average age of patients who have undergone caesarean section was slightly higher than of the patients with natural birth.
The duration of hospitalization was greater for patients with cesarean section and the costs of medicines and sanitary materials is 4.4 times higher than for natural birth.
We may say that the costs of a cesarean birth are higher than of a natural birth, also the share of cesarean births is higher than that of the natural birth. However cesarean birth is not an alternative to natural birth, it represents a surgical solution designed to correct the errors of nature.

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