

## Delivery Care Model Directed by Matrons Front Led by Midwives and Obstetricians Dr. Josep Trueta Hospital of Girona

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### Abstract

**Objective:** To analyze the model of care in the normal childbirth, Attended by midwives, Compared with a medicalized care model (Attended by midwives and Obstetricians) in vaginal, instrumental or caesarean delivery studying the health and wellbeing of mothers and newborns at delivery, birth ASSESS plan, the satisfaction of users and complications and readmissions of women and newborns post-discharge in the two models.

**Methods:** Prospective and longitudinal study Conducted at the Dr. Josep Trueta University Hospital of Girona from March to May 2010 of women going into labor. We Studied the Sociodemographic variables of women, the process of satisfaction with childbirth, health status of infants at birth, and hospital readmissions and complications of mothers and newborns During the first month post-discharge. Statistical analysis was performed using SPSS 15.0 for Windows.

**Results:** We Studied 99 women in labor with a mean age of 30.3 years. 31.3% of pregnant women had a birth naturally (non-medicalized), with a higher satisfaction score in this model. We do not observe Differences in biochemical variables and health status of newborns ACCORDING TO the type of delivery, Apgar score except That the 5 minutes of naturally at birth than newborns were higher in newborns That HAD medicalized deliveries. When There Were no Comparing Differences Between the two models complications of care in the mothers or the Either newborn babies.

**Conclusions:** There Were no significant Differences Between the two models of care in the mothers with regards to health and wellness, during the first month post discharge. Showed regular deliveries of newborns higher score on the variables absence of wellbeing and of fetal distress.

**Keywords:** Natural Childbirth; Delivery Obstetric/Methods; Quality of Health Care; Outcomes Assessment; Health Promotion

### Introduction

Normal delivery assistance is defined as a single physiological process by which the woman ends her pregnancy to term, and that involves psychological and sociocultural factors [1,2]. Its onset is spontaneous, evolving and concluded without complications with the birth of the baby and no interventions involves more comprehensive and respectful care delivery process [1,2].

By contrast, the labor involved is when carried out an intervention in the physiological process such as artificial amniorrhexis, perfusion of oxytocin, episiotomy and/or some type of analgesia. Scientific evidence shows that various forms of birth interveni do may influence perinatal mortality rates, as they may entail risks [3-5]. It is also known that maternal morbidity and mortality associated with elective cesarean section is greater than that associated with planning a vaginal delivery at term [6].

It is increasingly common that women opt for a delivery care that respects the physiological process with minimal obstetric intervention [7,8]. Labor and birth are events physiological transcendental in the lives of women and newborn and require actions that respect different cultures and allow sensitive health care to the needs of each woman [7]. The consideration that a lie was born is normal once it has occurred, has led in many developed countries is attention believe that normal delivery is similar to that of a complicated delivery. This approach has serious drawbacks because it equates a normal physiological process to a process involved, tending to treat all deliveries with the same degree of interventionism; This has negative consequences, such as increased cost and iatrogenic [8].

In relation to delivery care models subject of investigation of this study, there are differences depending primarily cultural, social and economic variables (depending on the level of economic development) [9]. In less industrialized countries the midwife is considered a vital figure for pregnant women, since it assumes full attention to women during pregnancy and childbirth, falling this responsibility on doctors when complications arise in birth moment [10]. In most industrialized countries coexist at least two models of care to couple to a first model in which the attention dispensed midwives, based on the premise that pregnancy and birth are normal life processes that are centered on women and another model of shared care by midwives and obstetricians, with different levels of implication that depend primarily on the characteristics of the health system, the type of school (public, private, university, etc.) and socio-cultural considerations to approach respective pregnancy and childbirth [8]. Moreover, in some countries midwifery practice is limited exclusively to the care of women who have an uncomplicated pregnancy, while in other countries midwives also attend, along with doctors, women who have complicated medical and obstetrical [8].

In the Spanish state coexist both types of care models, applying one or the other depending on the obstetrical risk: usually non-operated births are attended by midwives, and the rest of deliveries application shared between midwives and obstetricians model. The differences between the model of care led by midwives and other health care models often include variations in approach, the relation with the professional and the use of interventions during childbirth. It is assumed that the basic philosophy of a model of care for high chairs ma is in the normal and natural ability of women to carry out delivery with minimal intervention, with the aim of providing delivery care to healthy women uncomplicated pregnancies or low risk [8]. Hatem, *et al.* in a systematic review it included 11 clinical trials and a total of 12,276 mu observed that women treated for matrons had fewer hospitalizations prenatal, less episiotomies and less instrumental delivery [8]. In addition, this revision also revealed that women attended by midwives were more likely delivery without analgesia or without anesthesia, spontaneous vaginal delivery and greater control during labor also be attended by a midwife known and initiate breastfeeding. Also, women who were randomly assigned to receive care from midwives were less likely to experience fetal loss before 24 weeks of gestation, and their children used to require a shorter hospital stay. Moreover, no statistically significant differences between groups with neonatal or perinatal death (fetal death of over 25 weeks) were found. The conclusion is ta review was that delivery care by a model nas matro is safe for both mother and child [8]. Later, the same authors came to similar conclusions in another review published in 2013, which found that women attended by midwives had a lower probability of regional analgesia, episiotomy and instrumental delivery [11].

## Objectives of the Study

The objectives of this study were to analyze and compare the model of attention to natural childbirth, led by midwives, and service model involved delivery (eutocic, instrumental or caesarean), assisted by midwives and obstetricians, and studying health and welfare of mothers and newborns at birth, evaluate the birth plan and describe user satisfaction and complications and readmissions during the first month of life of the newborn was born two types of care models present in our center. The hypothesis is that there are no differences in morbidity and results in the care model to normal or natural birth by midwives and model of care delivery intervened.

## Methodology

Observational, prospective and longitudinal study conducted at the University Hospital Dr. Josep Trueta Girona between March and May 2010 with women going into labor. During 2010, were treated in this center 1,500 births, with 56.49% of normal deliveries (21.52% of them were normal deliveries and deliveries rest surgery) and 43.51% of dystocia deliveries (one 25.21% were caesarean sections and 17.25% instrumental delivery). From 1 March to 31 ma, consecutively they included women in labor through a non-probability sampling. Inclusion criteria were: women aged between 17 and 42 years, with 37 - 42 weeks of gestation, low, medium or high-risk during childbirth and fetus in cephalic presentation. Were excluded from the sample 11 women who were undergoing delivery before 7 > 7 18 weeks gestation and childbirth women with very high risk (according to the criteria of pregnancy follow the Department of Health of Generalitat de Catalunya) [12,13].

## Study variables

sociodemographic, economic level perceived by the patient by visual analògica scale of 1 (worst valoration) to 10 (more positive assessment), obstetric formula (0-0-0-0), term pregnancies (from studied 7 > 7 and 42 weeks), preterm delivery (< 37 weeks), abortions (< 22 weeks gestation) and Nu number of living children. The evaluation of risk during pregnancy study differentiating between low-risk or no-risk, medium risk, high risk and very high risk, taking into account the necessary means of tectar the risk factor and minimum means to address the possible appearance of the most frequent complications associated with the presence of the risk factor. This classification is established protocol monitoring of pregnancy in Cataluna [12]. The evaluation of risk during delivery also assessed using the criteria of delivery assistance in Catalonia, distinguishing between risk births low or no risk, medium risk, high risk and very high risk [13]. In this sense, all users with normal birth were attended by midwives, and users with a spoken delivery (vaginal delivery, instrumented and cesarean) were bind did as by midwives and obstetricians (intervened model). The following aspects were studied: the couple plan to one, that is, options that women choose according to their preferences during labor, such as use of hydrotherapy, balls dilatation (esferodinamia), hammocks, etc., all with the goal of personalized attention; the type of delivery, birth nor evil differentiating or natural eutocic, instrumental delivery or caesarean; the type of analgesia, and the realization of episiotomies and/or the presence of tears.

In the newborn, biochemical variables (pH) and clinical variables (Apgar test) in the time of delivery they were studied. Normal values were considered pH equal to or greater than 7.20 and the normal Apgar scores of 8 or 9 one minute and five minutes; the scores below these values were considered pathological.

As outcome variables, are valued on the one hand, the complications of the mother (postpartum bleeding, postpartum infection related, thromboembolic events, hypertensive problems and depressive syndromes) [13] which required consultations in the emergency department and/or hospital readmissions, and on the other hand, complications of newborns during the post-high primer month (neonatal infections, hyperbilirubinemia, hypoxia) [13] that behave consultations and/or rein gresos. Mother satisfaction with the birthing process also study analyzing experience at prior, the information I had before giving birth, the process accompaniment by the matron of the meeting with his son, expectations about childbirth, respect for privacy and the perception of the effectiveness of professionals. Each variable was measured with a Likert scale of 4 items (very satisfactory, satisfactory, unsatisfactory, very unsatisfactory); satisfaction survey ended with a scale overall score (from 1 to 10) Convention on the satisfaction with childbirth and professionals. All data were collected in a questionnaire ad hoc wherein all the variables described included. Data collection began at the time of entry of the mother in the delivery area, considering the criteria of inclusion and acceptance to participate in is tudio. All data were collected by the team of midwives of the delivery room of University Hospital Dr. Josep Trueta.

The draft study was reviewed and approved by the Ethics Committee and Investigation Center. participants of the study objectives were informed. Women who met the inclusion criteria and agreed to participate signed an informed consent. During the realization of the study, strict compliance with Law 15/1999 of 13 December on the protection of personal data it is guaranteed.

All outcome variables between the two comparison groups (women with normal deliveries attended by model normal delivery care and women involved delivery) were analyzed. The demographic characteristics of the participants are expressed as mean, standard deviations and frequencies. For compare groups in the case of continuous variables test Student's t-test and ANOVA were used for categorical variables and test chi square was used. Statistical analysis was performed using SPSS 15.0 software.

## Results

The sample (n = 99) had an average age of 30.3 years (standard deviation [SD] 4.7), no differences according care model (normal delivery versus assisted delivery) (p > 0.05). There was a higher percentage of women with higher studies assisted delivery group (p = 0.003). Overall, 57 pregnant women (57.6%) had low risk gestational no differences as the attention model (Table 1). 99% of participants had term pregnancies; 40% of them were primiparous, 39% nulliparous, 14.5% and 5.5% secundiparas terciaras. Only 1% Prematurity present. 74.5% had not suffered any abortion in previous pregnancies; the others had had one or more abortions.

	Total sample n = 99	Care model directed by matrons: normal delivery n = 31 (31.3%)	Model of care led by midwives and obstetricians: labor involved n = 68 (68.7%)	P
Age	30.3 (4.7)	30 (4.6)	30.4 (4.7)	0,647
<b>Level studies</b>				
No education or primary studies	33 (33.3)	17 (51.5)	16 (48.5)	0,003
With secondary or higher education	66 (66.7)	14 (21.2)	52 (78.8)	
Assessment of the economic level	5.7 (1.8)	5.7 (1.8)	5.7 (1.9)	0,828
<b>Weeks of gestation</b>				
Between 38 and 41 weeks	90 (90.9)	90 (90.9)	62 (68.9)	
<b>Pregnancy risk</b>				
Low	57 (57.6)	17 (29.8)	40 (70.2)	
Medium	21 (21.2)	9 (42.9)	12 (57.1)	
High	21 (21.2)	5 (23.8)	16 (76.2)	
<b>Delivery risk</b>				
Low	70 (70.7)	25 (35.7)	45 (64.3)	
Medium	12 (12.1)	6 (50)	6 (50)	
High	17 (17.2)	0 (0)	17 (100)	
<b>Initio delivery</b>				
Spontaneous	88 (88.9)	31 (35.2)	57 (64.8)	
Induced	7 (7.1)	0 (0)	7 (100)	0,060
Programmed	4 (4)	0 (0)	4 (100)	
<b>Type of analgesia</b>				
None	22 (22.2)	20 (90)	2 (10)	
Local	13 (13.1)	11 (84.6)	2 (15.4)	
Epidural	58 (58.6)	0 (0)	58 (100)	
Spinal	6 (6.1)	0 (0)	6 (100)	

**Table 1:** Characteristics of the sample depending on the model of care delivery.

Quantitative variables were expressed as the mean and standard desviación (indicated in parentheses) and qualitative variables by frecuencia absoluta and percentage (indicated in parentheses).

As for the evaluation of risk during childbirth, there were 70 women (70.7%) low risk. In relation to the delivery plan 76 participants used ambulation, 62 esferodinamia, hydrotherapy 17, 13 and 19 other hammocks (massage, local heat, etc.). The 88.9% (n = 88) women began the birthing process spontaneously and 7.1% (n = 7) ra mane induced, and only 4% (n = 4) had a birth programmed; there was a higher percentage of participants with initio spontaneous delivery in the delivery in tervenido group (p > 0.05). 22.2% (n = 22) women not required analgesia; 90% of them were normal delivery group (n = 20) and 10% (n = 2) group assisted delivery (p = 0.000) (Table 1). In relation with the birth plan, it is noteworthy that 17 women and 51 women applied hydrotherapy balls dilatation (esferodinamia), with no difference between the group led by midwives and the mixed group, di rigid by midwives and obstetricians (p > 0.05). 23.2% (n = 23) of all women underwent an episiotomy, 34.3% (n = 34) suffered a tear first grade and 9.1% (n = 9) tearing of second grade. There was no tearing third or fourth grade, and 10.1% (n = 10) participants underwent suture Pfannenstiel (woman undergoing cesarean delivery). 23.2% (n = 23) of the sample did not require any suturing. Comparing the two models depending on the type of sutures, DIFF observe significant between the two groups, with a higher percentage of sutures in women with childbirth interveni do. Specifically, in the normal delivery group 48.4% were not performed any type of suture, and was 6.5% of episiotomies,29% First degree tears and 16.1% of tears second grade; however, in the group of selected parts only 11.8% of jeres mu they are not practical no suture, and was 30.8% of episiotomies, 36.8% of First degree tears, 5, 9% of second degree tears and 14.7% of sutures Pfannenstiel (p = 0.00). As for the variables studied in infants (49 girls and 50 boys), the minimum weight was 2,500g and 4,290g maximum with a mean of 3342.2 g (DE 367.8) and 3330 g of medium. PH analysis in the umbilical artery, the average score was 7.3. In the test minute Apgar score was the average of 8.7 (SD 0.6), with a minimum of 5 and a maximum of 9 and a median of 9; in Ap gar test at 5 minutes, the average score was 9.9 (SD 0.3), with a minimum of 8 and a maximum of 10 and a median of 9, no differences between these biochemical res Valo based on gender.

We observed no differences in biochemical variables of the newly-acids according to the type of delivery. Of the 31 infants with normal birth, only 2 had a pH of umbilical artery disease; Diante born in a bugged me childbirth (vaginal delivery, instrumented or caesarean) this alteration occurred in 6 cases (p > 0.05). The minute Apgar test was higher in babies born to normal delivery, prone to statistical signification (p = 0.05), and so was the Apgar at 5 minutes (p = 0.03) (Table 2). The percentage of complications in mothers and their children, was very low in both study groups, with no difference between the two models of care, neither for mothers nor for newborns (Table 3). Regarding the complications in children, 88.9% of them did not present at the time born; As for the other 9 went to the emergency room during the first month of life (9.1%), duration of data collection study, 1 (1%) entered premature birth and 1 (1%) entered after discharge from the mother during the first month of life. As regards the degree of satisfaction of women with the birthing process, 88.9% (n = 88) of them rated their previous experience as satisfactory or very satisfactory and 89.9% (n = 89) they felt that they had informed before delivery was enough or too much information.

	Managed care model by matrons: normal birth n = 31 (31.3%)	Model of care led by midwives and obstetricians: labor involved n = 68 (68.7%)	P
pH of the umbilical < 7.20 artery disease	2 (6.5)	6 (8.8)	> 0.05
Umbilical pH > 7.20 artery: Normal	29 (93.5)	62 (91.2)	
Test-minute Apgar	8.9 (0.3)	8.71 (0.71)	0.05
Apgar score at 5 minutes	10 (0)	9.9 (0.39)	0.03

**Table 2:** Biochemical variables and evaluation of health status in newborns according to the model of care delivery.

Quantitative variables were expressed as the mean and standard deviation (indicated in parentheses).

	Managed care model by matrons: normal delivery	Model of care led by midwives and obstetricians: intervened birth	P
Complications in the mother (n = 6)	1 (16.7)	5 (83.3)	> 0.05
Complications in newborns (n = 11)	2 (18.2)	9 (81.8)	> 0.05

**Table 3:** Complications in the mother and newborn on the model of care delivery.

Qualitative variables are expressed by the absolute frequency and the percentage (indicated in parentheses).

90.9% (n = 90) described the process accompaniment highly satisfactory and 93% (n = 92) they estimated that the encounter with her son had been satisfactory or very satisfactory. 61.6% (n = 61) of women said their expectations about childbirth had been met and 93.9% (n = 93) rated respect to privacy of satisfactory or very satisfactory. No significant differences were observed in the perception of overall satisfaction depending on the type of delivery (p > 0.05).

### Discussion

In this study, a third of women who for Mabank sample were treated following the model of care by midwives (normal delivery), compared with two-thirds who were a mixed model of care led by midwives and obstetricians (childbirth intervened). In the literature normal deliveries are not classified by the same terminology, but generally the terminology of spontaneous deliveries or eutocic is used, without specifying whether they are operated or not, as describe in dicadores maternal and child health in Catalonia in the years 2003 and 2009 [14,15]. It shows that a large majority of low-risk births and a quarter of medium-risk births ended in vaginal delivery. Several authors consider that pregnant women are healthy, they do not need excessive medicalization [16,17]. In this regard, it has been observed that the higher the higher economic level, is the acceptance and the number of cough par with epidural anesthesia [18]. According to Le Breton, the attitude towards pain is greatly influenced by the culture ‘of prevention’, in which the middle and upper classes have more care of your body and reject the pain, while low more classes maintain an attitude more resigned to the pain and suffering [19]. Other authors existence of a growing concern worldwide about the continuing increase in intervention in births, showing a certain generalized increase in the number nu cesareans practiced, a loss of confidence in the process of childbirth as a natural process and, and the presence of moderate or high levels of fear during pregnancy [20]. Among the most cited for adoption of a normal delivery and humanized in hospitals high technification delivery, obstacles include poor communication among professionals, the desire for specialization stakeholders rather than the desire for humanization, and environment of formation of hospital, leading to the existence of many professionals salud and, consequently, lack of privacy and discontinuity of care [21].

By studying the variables related to health and well-being of the newborn, it shows that those born to normal deliveries had equal or higher scores on the variables being and absence of the fetal fermented (pH of the umbilical artery and test Apgar). No similar assessments in bliografia bi found, since studies on normal birth evaluate variables different outcome, which did the comparison, although the scoring system of Apgar is still relevant for assessing the physical condition and prediction of neo natal survival since the mid-twentieth century [22].

Perceived satisfaction was very high in the various variables evaluated participants. No significant differences were observation in satisfaction precibal.

It is given by type of birth nor by the professional who treated women. Similarly, we have found studies comparing the attention of matro nas [8] and satisfaction with their care [2,3] where midwives were also highly valued professionals to meet and provide comprehensive care [8,23]. Despite the high degree of satisfaction with the care provided by midwives, some authors also point out some



areas for improvement, such as Convenience strengthen the quantity and quality of information provided to the woman and the couple, the participation of the user in decision-making, and aid in the early in unclue of breastfeeding [2,3]. No complications have been observed in normal childbirth compared to surgery deliveries or cesarean deliveries. Our study has some limitations due to sample size and the type of sampling nonrandomized may be a bias in the results. Moreover, there is little literature on Evaluation and results of normal delivery, and diversity in the methodologies used and the variables studied difficult to compare some of our results both. However, several studies and practice guidelines recommend Clinical care teams to encourage hospital birth delivery care low risk lies with the matrons, wherever this is possible [24].

In normal delivery, quality and safety of care provided by midwives is considerable [25].

## Conclusions

In this study, no significant differences were observed in the variables studied in the comparer women care model directed by matrons (normal delivery) with mixed model care led by midwives and obstetricians (labor involved). As for the children, who were born normal deliveries had equal or higher scores on the variables being and absence of fetal distress.

## Bibliography

1. Department of Health of the Generalitat de Catalunya. "Natural protocol for normal delivery assistance". Barcelona: Generalitat de Catalunya (2007).
2. Federation of Midwives of Spain (FAME). Normal Childbirth Initiative. Consensus document. Barcelona: FAME, (2007).
3. Duarte G., et al. "Tendency das forms Resolução da sua influence pregnancy and perinatal taxas as Mortalidade". *Revista de Saúde Pública* 38.3 (2004): 379-384.
4. Anim-Somuah M., et al. "Epidural versus non-epidural or no analgesia for labor". *Cochrane Database of Systematic Reviews* 5 (2018): CD000331.
5. Bonet Manso MP. "Role of the midwife: natural childbirth versus hospital birth". *Index de Enfermeria* 12.43 (2003): 14-17.
6. Liu S., et al. "Maternal mortality and severe morbidity associated with low-risk planned cesarean delivery versus planned vaginal delivery at term". *Canadian Medical Association Journal* 176.4 (2007): 475-476.
7. Luque MA and ML Oliver. "Cultural differences in the perception and experience of childbirth. The case of immigrant women". *Index de Enfermeria* 14.48-49 (2005): 9-13.
8. Hatem M., et al. "Midwife-led versus other models of care for women childbearing". *Cochrane Database of Systematic Reviews* 4 (2008): CD004667.
9. Waldenstrom U. "Normal childbirth and evidence based practice". *Women Birth* 20.4 (2007): 175-180.
10. Chintu MK and Susu B. "Role of the midwife in maternal health care". In: Nasah BT, Mati JKG, Kasonde JM, eds. *Contemporary Issues in Maternal Health Care in Africa*. Luxembourg: Harwood Academic Publishers (1994).
11. Sandall J., et al. "Midwife-led versus other models continuity of care for women childbearing". *Cochrane Database of Systematic Reviews* 8 (2013): CD004667.
12. Department of Health of the Catalan. "Pregnancy monitoring protocol in Catalonia". Barcelona: Directorate General of Public, Health (2005).
13. Department of Health of the Generalitat de Catalunya. "Protocol assistance in childbirth and postpartum and newborn care". Barcelona: Directorate General of Public, Health (2003).
14. Department of Health of the Generalitat de Catalunya. "Indicators of maternal and child health in the foreign population of Catalonia". Barcelona: Generalitat de Catalunya (2003).

15. Department of Health of the Catalan. Executive document. Maternal and child health indicators. Barcelona: Generalitat de Catalunya (2009).
16. Fernandez I del Castillo. Revolution birth. childbirths respected, mässeguros births. Madrid: Vertical Editions (2008).
17. Smith R. "In search of "non-disease"". *British Medical Journal* 324.7342 (2002): 883-885.
18. L Biedma. "No choice analysis of epidural analgesia during labor in Andalusian women: the good suffering". *Revista de la Sociedad Española del Dolor* 17.1 (2010): 3-15.
19. Le Breton D. "Antropologia pain". Barcelona: Seix Barral (1999).
20. Normal M. "Promoting normal birth the easy way". *Practising Midwife* 15.10 (2012): 23-25.
21. Behruzi R., *et al.* "The Facilitating factors and barriers Encountered in the adoption of a humanized birth care approach in a highly specialized university hospital Affiliated". *BMC Women's Health* 11 (2011): 53.
22. Casey BM., *et al.* "The Continuing value of the Apgar score for the assessment of newborn infants". *New England Journal of Medicine* 344.7 (2001): 467-471.
23. Garcia A., *et al.* "iEstàn women satisfied with the care provided by the midwife during childbirth?" *Magazine Nursing Role* 24.4 (2001): 290-299.
24. Working Group of the Clinical Practice Guideline for Normal Birth Care. Clinical Practice Guideline on care at childbirth. Quality Plan for the National Health System Ministry of Health and Social Policy. Agency for Health Technology Assessment of the Basque Country (OSTEBA). Agency for Health Technology Assessment Galicia (Avalia-t). Clinical Practice Guidelines in the NHS: OSTEBA No. 2009/0 (2010).
25. Sandall J., *et al.* "Improving quality and safety in maternity care: the contribution of midwife-led care". *Journal of Midwifery and Women's Health* 55.3 (2010): 255-261.

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