

# The use of birthing facilities by women giving birth

## *Wykorzystanie udogodnień porodowych przez rodzącą*

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### Streszczenie

**Wstęp.** Prowadzenie porodu w sposób naturalny jest oparty na siłach natury, którymi została obdarzona kobieta. Wspieranie kobiety rodzącej i jej partnera, pomoc w doborze najdogodniejszych dla niej pozycji porodowych, zastosowanie udogodnień porodowych to dzisiejsze wyzwanie współczesnego położnictwa.

**Cel pracy.** Celem pracy było dokonanie analizy wykorzystania udogodnień porodowych przez rodzącą.

**Materiał i metody.** W badaniach uczestniczyło 180 kobiet po porodach drogami natury, jak i po cięciu cesarskim. Metodę zastosowaną w niniejszej pracy stanowił sondaż diagnostyczny, z wykorzystaniem kwestionariusza ankiety własnego autorstwa. Udział w badaniu był dobrowolny i anonimowy. Uzyskane wyniki badań poddano analizie statystycznej.

**Wnioski.** Piłka i łóżko wielofunkcyjne to najczęściej stosowane udogodnienia porodowe przez rodzącą. Natomiast najrzadziej kobiety podczas porodu korzystają z liny i drabinki.

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### Słowa kluczowe:

poród, udogodnienia porodowe, kobieta rodząca

Doświadczenia prokreacyjne nie mają istotnego wpływu na stosowanie udogodnień porodowych przez rodzące.

Personel medyczny powinien zachęcać rodzące do aktywności podczas porodu i wykorzystania różnych udogodnień porodowych.

## Abstract

**Introduction.** Keeping birth in a natural way, based on the forces of nature, which a woman has been endowed. Supporting the birth giving woman by her partner, helps in choosing the most favourable position for childbirth, the use of farrowing facilities is today's challenge of modern obstetrics.

**The aim of this study** was to analyze the usage of birthing facilities by women giving birth.

**Material and methods.** The study involved 180 women with spontaneous deliveries and after caesarean section. The method used in this study was a diagnostic survey, using a self prepared questionnaire survey. Participation in the study was voluntary and anonymous. The results were statistically analyzed.

**Conclusions.** Ball and multifunctional bed is usually used by the nascent birthing facilities. However, rarely, women in childbirth, use ropes and ladders. Reproductive experiences have no significant impact on the use of birthing facilities by giving birth. Healthcare professionals should encourage activity giving rise to the delivery and use of the various childbirth facilities.

## Key words:

deliver, birthing facilities, women giving birth

## Introduction

Keeping birth in a natural way, based on the forces of nature, which a woman has been endowed, were brought forth as the mission of the European Congress of Perinatal Medicine in Barcelona, in 1980. Since then, new techniques of childbirth were gradually introduced. Currently, it is recommended to use the vertical position, using the available facilities in the delivery room which allows budding to remain active, and thus allows it to be natural, they know the needs of the emerging body. Supporting the birth giving woman by her partner, helps in choosing the most favourable position for childbirth, the use of farrowing facilities is today's challenge of modern obstetrics [1,2,3].

## Aim of the study

The aim of this study was to analyze the usage of birthing facilities by women giving birth.

## Material and methods

The study was conducted in the Department of Obstetrics and Gynaecology, Medical Care Center in Jarosław. The study involved 180 women with spontaneous deliveries and after caesarean section. Analysis of the age of the women showed that 53 (29.4%) were aged 18-25 years, 86 (47.8%) aged 26-35 years, while 41 (22.8%) were 36 years and above. Among the respondent women in labour 169 (93.9%) of the women were married while 11 (6.1%) were unmarried. 61 (33.9%) of the respondent women came from the city, whereas 119 (66.1%) came from the rural areas. In the studied group of 92 women (51.1%) gave birth for the first time, 59 (32.8%) of the women gave birth for the second time and 29 (16.1%) gave three or more births. Pregnancy was completed with a physiological birth in 176 (97.8%) women, and caesarean section in 4 (2.2%) of the women. Analyzing the duration of birth resulted in conclusion that in 142 (78.9%) of the women giving birth time was

2-8 hours, 8-12 hours of birth continued in 27 (15%) patients, and over 12 hours gave rise to 11 (6, 1%) of the women.

The method used in this study was a diagnostic survey, using a self prepared questionnaire survey. Participation in the study was voluntary and anonymous. The results were statistically analyzed. The significance level was  $p < 0.05$  indicating the existence of significant differences or relationships. Database and statistical research was based on 10.0 STATISTICA software (StatSoft, Poland).

## Results

Table 1 presents a list of features, all of which benefit the female respondents. In the group of 180 women using birthing facilities all enjoyed the multifunctional bed – used by 164 (91.1%) of all women. 107 (59.4%) birth giving women were using balls, 38 (21.1%) from the mattress, 36 (20.0%) out of the

sacco bag, 22 (12.2%) from the pressure stool, 26 (14.4%) the birthing chair, 5 (2.8%) the ladders, and 2 (1.1%), giving birth with a rope.

Table 2 shows the correlation between the usage of ladders and mattress by the respondents and the procreation experiences. Only five of the women (2.8%) used the ladder during the birth. In the case of 4 (4.3%) women gave first birth, 5 (2.8%) pregnant women completed the physiological birth, 4 patients (2.8%) the duration of delivery varied from 2-8 hours. 175 (97.2%) of the women did not use the ladder during the birth. Among the respondents, 38 (21.1%) used mattress during the birth. In this group were 20 (21.7%) women, who gave first birth, 16 (27.1%) who gave birth for the second time. 36 (20.5%) women completed with the physiological birth and 2 (50%) with the caesarean section, moreover 28 (19.7%) the childbirth lasted from 2 to 8 hours. A group of 142 women (78.9%) did not use the mattress. No statistical correlation was found between the usage of the

**Table 1.**

The use of childbirth facilities by women giving birth

Usage of childbirth facilities by women giving birth	Yes		No		Total	
	n	%	n	%	n	%
Ladders	5	2.8	175	97.2	180	100.0
Mattress	38	21.1	142	78.9	180	100.0
Balls	107	59.4	73	40.6	180	100.0
Sacco bag	36	20.0	144	80.0	180	100.0
Rope	2	1.1	178	98.9	180	100.0
Pressure stool	22	12.2	158	87.8	180	100.0
Birth stool	26	14.4	154	85.6	180	100.0
Multifunction bed	164	91.1	16	8.9	180	100.0

n – number of women

**Table 2.**

Usage of ladders and mattress by giving birth and procreation experiences

<b>USAGE OF LADDERS BY GIVING BIRTH</b>						
<b>PREGNANCY</b>	<b>Yes</b>		<b>No</b>		<b>Total</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
First	4	4.3	88	95.7	92	51.1
Second	1	1.7	58	98.3	59	32.8
Third and more	0	0.0	29	100.0	29	16.1
Significance of differences	$\chi^2=1,92$ $p=0.38$ $p>0.05$					
<b>THE WAY OF ENDING PREGNANCY</b>						
Physiological birth	5	2.8	171	97.2	176	97.8
Caesarian Cut	0	0.0	4	100.0	4	2.2
<b>TOTAL</b>	5	2.8	175	97.2	180	100.0
Significance of differences	$\chi^2=0.11$ $p=0.73$ $p>0.05$					
<b>LASTING OF BIRTH</b>						
2-8 hours	4	2.8	138	97.2	142	78.9
8-12 hours	0	0.0	27	100.0	27	15.0
More than 12 hours	1	9.1	10	90.9	11	6.1
Significance of differences	$\chi^2=2,39$ $p=0,30$ $p>0,05$					
<b>USAGE OF MATTRESS BY GIVING BIRTH</b>						
<b>PREGNANCY</b>	<b>Yes</b>		<b>No</b>		<b>Total</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
First	20	21.7	72	78.3	92	51.1
Second	16	27.1	43	72.9	59	32.8
Third and more	2	6.9	27	93.1	29	16.1
Significance of differences	$\chi^2=4.81$ $p=0.08$ $p>0.05$					
<b>THE WAY OF ENDING PREGNANCY</b>						
Physiological birth	36	20.5	140	79.5	176	97.8
Caesarian cut	2	50.0	2	50.0	4	2.2
Significance of differences	$\chi^2=2.05$ $p=0.15$ $p>0.05$					
<b>LASTING OF BIRTH</b>						
2-8 hours	28	19.7	114	80.3	142	78.9
8-12 hours	6	22.2	21	77.8	27	15.0
More than 12 hours	4	36.4	7	63.6	11	6.1
Significance of differences	$\chi^2 =1.72$ $p=0.42$ $p>0.05$					

mattress and the number of pregnancy, and the way of ending the birth and the time of it ( $p>0.05$ ).

Table 3 presents the correlation between the usage of ball and sacco bag by birth giving women and their procreation experiences. Among the researched women, 107 (59.4%) used balls as a birth convenience. 58 women (63%) gave their first birth. For 104 women (59.1%) the pregnancy ended with a physiological delivery, 80 women (56.3%) the birth lasted from 2 to 8 hours. A group of 73 women (40.6%) did not use the birth convenience in the form of balls. There was no statistical relationship between the use of the mattress and the number of pregnancies, pregnancy termination method and duration of delivery ( $p>0.05$ ). The study group of 36 women (20.0%) used sacco bag during the birth. 19 women (20.7%) had a first birth, with 35 (19.9%) pregnancy was completed with physiological birth, 26 (18.3%) of the women estimated duration of 2-8 hours of birth, 144 (80.0%) women did not use the sacco bag during the birth. Statistically significant correlation between the use of the bag by the emerging sacco and the duration of delivery ( $p<0.05$ ). There was no statistical relationship between the use of the sacco bag by emerging and the number of pregnancies and the method of pregnancy ( $p>0.05$ ).

Table 4 shows the correlation between the use of ropes and procreation experiences. Among the study group, only 2 women (1.1%) used the rope emerging as obstetric facilities. In both pregnancies ended in physiological childbirth and birth itself duration ranged from 2-8 hours. 178 (98.9%) of the women did not use the rope as a birthing facilities. Among the study group 22 women (12.2%) benefited from the pressure stool. In 16 cases (17.4%) it was the first child's birth, in all of their obligations was completed physiological birth, and in 15 (10.6%), birth lasted form 2-8 hours. On the other hand, among 158 women (87.8%) did not use the pressure stool. No statistically significant correlation was found between the use of rope, and to urge the stool and the number of pregnancies, pregnancy termination method and duration of delivery ( $p>0.05$ ).

Table 5 shows the correlation between the use of chairs and childbirth by procreation experience.

Among the study group of 26 women (14.4%) used a birthing chair. 14 (15.2%) gave birth for the first time, 26 (14.8%) of the women were born through vaginal roads and, in 20 cases (14.1%) birth lasted from 2-8 hours. 154 (85.6%) of the women did not use chairs childbirth during the birth. Among the study group: 164 women (91.1%) used a multi-bed, 85 (92.4%) of the women gave birth for the first time, 53 (89.8%) of the women gave birth for the second time, 26 (89.7%) women gave birth for three or more times. Among 160 (90.9%) pregnant women completed a physiological birth, 129 (90.8%) of the women the birth last from between 2-8 hours, 16 women (8.9%) did not use the multifunctional bed. No statistically significant correlation was found between the use of chairs and multifunctional birth and the number of pregnancies, pregnancy termination method and duration of birth ( $p>0.05$ ).

## Discussion

Childbirth is an event in which the family should behave according to their own feelings and needs, while maintaining the natural rhythm of birth. Intuition, which gave them life let them choose the right body position for itself and for the newborn child. Female activity and awareness of their abilities and control over their body, looking for the best techniques makes childbirth less painful, faster and safer [1,2].

Balaskas [4], the founder of the Movement for Active Lamaze, in her works extensively highlights the impact of the use of farrowing facilities to improve the physical condition of the nascent, leisure opportunities, shorten the duration of birth and oxygenation of the newborn child. To encourage the adoption of the emerging vertical position, in the delivery room should be all kinds of amenities such as:

- sacco bags – including a small Styrofoam balls, so that it is possible to adapt its shape to the adoptive position during birth, an additional advantage is the heating aching body parts, thereby reducing the pain;
- mattresses – to adopt any position of the body;
- ladder – strain the back muscles and spine in the lumbar region, decreases the sensation of pain;

**Table 3.**

The usage of balls and sacco bag by the birth giving and procreation experiences

<b>USAGE OF THE BALLS BY BIRTH GIVING</b>						
<b>PREGNANCY</b>	<b>Yes</b>		<b>No</b>		<b>Total</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
First	58	63.0	34	37.0	92	51.1
Second	36	61.0	23	39.0	59	32.8
Third and more	13	44.8	16	55.2	29	16.1
Significance of differences	$\chi^2=3.12$ $p=0.20$ $p>0.05$					
<b>THE WAY OF ENDING PREGNANCY</b>						
Physiological birth	104	59.1	72	40.9	176	97.8
Caesarean cut	3	75.0	1	25.0	4	2.2
Significance of differences	$\chi^2=0.41$ $p=0.52$ $p>0.05$					
<b>LASTING OF BIRTH</b>						
2-8 hours	80	56.3	62	43.7	142	78.9
8-12 hours	19	70.4	8	29.6	27	15.0
More than 12 hours	8	72.7	3	27.3	11	6.1
Significance of differences	$\chi^2=2.71$ $p=0.25$ $p>0.05$					
<b>THE USAGE OF SACCO BAG BY BIRTH GIVING</b>						
<b>PREGNANCY</b>	<b>Yes</b>		<b>No</b>		<b>Total</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
First	19	20.7	73	79.3	92	51.1
Second	10	16.9	49	83.1	59	32.8
Third and more	7	24.1	22	75.9	29	16.1
Significance of differences	$\chi^2=0.67$ $p=0.71$ $p>0.05$					
<b>THE WAY OF ENDING PREGNANCY</b>						
Physiological birth	35	19.9	141	80.1	176	97.8
Caesarean cut	1	25.0	3	75.0	4	2.2
Significance of differences	$\chi^2=0.06$ $p=0.80$ $p>0.05$					
<b>LASTING OF BIRTH</b>						
2-8 hours	26	18.3	116	81.7	142	78.9
8-12 hours	4	14.8	23	85.2	27	15.0
More than 12 hours	6	54.5	5	45.5	11	6.1
Significance of differences	$\chi^2=8.91$ $p=0.01$ $p<0.05$					

**Table 4.**

The usage of rope and pressure stool by birth giving women and procreation experiences

<b>THE USAGE OF THE ROPE BY BIRTH GIVING WOMEN</b>						
<b>PREGNANCY</b>	<b>Yes</b>		<b>No</b>		<b>Total</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
First	1	1.1	91	98.9	92	51.1
Second	1	1.7	58	98.3	59	32.8
Third and more	0	0.0	29	100.0	29	16.1
Significance of differences	$\chi^2=0.50$ $p=0.77$ $p>0.05$					
<b>THE WAY OF ENDING PREGNANCY</b>						
Physiological birth	2	1.1	174	98.9	176	97.8
Caesarian cut	0	0.0	4	100.0	4	2.2
Significance of differences	$\chi^2=0.04$ $p=0.83$ $p>0.05$					
<b>LASTING OF BIRTH</b>						
2-8 hours	2	1.4	140	98.6	142	78.9
8-12 hours	0	0.0	27	100.0	27	15.0
More than 12 hours	0	0.0	11	100.0	11	6.1
Significance of differences	$\chi^2=0.54$ $p=0.76$ $p>0.05$					

<b>THE USAGE OF PRESSURE STOOL BY BIRTH GIVING WOMEN</b>						
<b>PREGNANCY</b>	<b>Yes</b>		<b>No</b>		<b>Total</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
First	16	17.4	76	82.6	92	51.1
Second	5	8.5	54	91.5	59	32.8
Third and more	1	3.4	28	96.6	29	16.1
Significance of differences	$\chi^2=5.14$ $p=0.07$ $p>0.05$					
<b>THE WAY OF ENDING PREGNANCY</b>						
Physiological birth	22	12.5	154	87.5	176	97.8
Caesarian cut	0	0.0	4	100.0	4	2.2
Significance of differences	$\chi^2=0.56$ $p=0.45$ $p>0.05$					
<b>LASTING OF BIRTH</b>						
2-8 hours	15	10.6	127	89,4	142	78,9
8-12 hours	5	18.5	22	81,5	27	15,0
More than 12 hours	2	18.2	9	81,8	11	6,1
Significance of differences	$\chi^2=1.72$ $p=0.42$ $p>0.05$					



**Table 5.**

The usage of birth chair and multifunctional bed by birth giving women and procreation experiences

<b>THE USAGE OF BIRTH CHAIR BY BIRTH GIVING WOMEN</b>						
<b>PREGNANCY</b>	<b>Yes</b>		<b>No</b>		<b>Total</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
First	14	15.2	78	84.8	92	51.1
Second	10	16.9	49	83.1	59	32.8
Third and more	2	6.9	27	93.1	29	16.1
Significance of differences	$\chi^2=1.68$ $p=0.43$ $p>0.05$					
<b>THE WAY OF ENDING PREGNANCY</b>						
Physiological birth	26	14.8	150	85.2	176	97.8
Caesarean cut	0	0.0	4	100.0	4	2.2
Significance of differences	$\chi^2=0.69$ $p=0.40$ $p>0.05$					
<b>THE LASTING OF THE BIRTH</b>						
2-8 hours	20	14.1	122	85.9	142	78.9
8-12 hours	5	18.5	22	81.5	27	15.0
More than 12 hours	1	9.1	10	90.9	11	6.1
Significance of differences	$\chi^2=0,63$ $p=0,72$ $p>0,05$					
<b>THE USAGE OF THE MULTIFUNCTIONAL BED BY BIRTH GIVING WOMEN</b>						
<b>PREGNANCY</b>	<b>Yes</b>		<b>No</b>		<b>Total</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
First	85	92.4	7	7.6	92	51.1
Second	53	89.8	6	10.2	59	32.8
Third and more	26	89.7	3	10.3	29	16.1
Significance of differences	$\chi^2=0.38$ $p=0.82$ $p>0.05$					
<b>THE WAY OF ENDING PREGNANCY</b>						
Physiological birth	160	90.9	16	9.1	176	97.8
Caesarean cut	4	100.0	0	0.0	4	2.2
Significance of differences	$\chi^2=0.39$ $p=0.52$ $p>0.05$					
<b>LASTING OF BIRTH</b>						
2-8 hours	129	90.8	13	9.2	142	78.9
8-12 hours	25	92.6	2	7.4	27	15.0
More than 12 hours	10	90.9	1	9.1	11	6.1
Significance of differences	$\chi^2=0.08$ $p=0.95$ $p>0.05$					



- football bean – with circular movements of the pelvis performed on the ball it is possible to quickly insert a child's head through the birth canal, reducing the sensation of pain, and better oxygenation of the child;

- cushion – like sacco bag helps to adjust particular body position;

- birthing chair – allows you to be born in a vertical position [1,5,6,7].

Among the new techniques of childbirth a growing interest in childbirth has a wheel designed by Paul Degen. It allows to adopt any position: sitting, reclining, kneeling, standing and intermediate positions. The advantage of obstetric wheel is also true that it gives the possibility to adopt with different vertical positions the pregnant as well as her companion. The ergonomic design allows the wheel to accept a relaxed posture during birth, which is provided by the system pads, rollers and supporting belts. [8] Facilities available at birthing rooms have not only physical but also psychological impact on the nascent state. Through the use of facilities giving birth can control her body and, consequently, the course of the delivery. A woman who survived an active birth is aware of its value, feels fulfilled and happy. She knows that everything was done to help her and her child [9].

The results showed that apart from ball and multifunction-bed, pregnant women did not want to choose any other birth facilities.

## Conclusions

1. Ball and multifunctional bed is usually used by the nascent birthing facilities. However, rarely, women in childbirth, use ropes and ladders.
2. Reproductive experiences have no significant impact on the use of birthing facilities by giving birth.
3. Healthcare professionals should encourage activity giving rise to the delivery and use of the various childbirth facilities.

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