Original Research Article

Birth Plan and Safety of the Pregnant Woman from the Nurse's Perspective

ABSTRACT

Background: The Birth Plan is an essential tool for obstetric care centered on the pregnant woman, reflecting her preferences and expectations during childbirth. This plan aims to personalize the experience, reduce unnecessary interventions and promote a safe and respectful environment.
Aims: To investigate the role of the nurse as an inducer of the implementation of the birth plan, identify the knowledge and professional practice of nurses regarding the birth plan and highlight the nurses' consideration of the relationship between the implementation of the birth plan and patient safety.
Methodology: descriptive exploratory research with a quantitative approach, carried out with nurses from the Family Health Program and maternal and childcare in the metropolitan region of Curitiba, using an online questionnaire with Likert-type answers and an open-ended question, statistical analysis via R cran software Version 4.1.0.
Results: Twenty-eight nurses participated, predominantly women (85.7%), with an average age between 42 and 50 years, and 39.3% with more than 15 years of experience. Among them, 33.3% had a specialization in Family Health and 22.2% in Gynecology and Obstetrics. The analysis showed that specialized training positively influences the perception of the importance of the Birth Plan in patient safety (P = .05).
Conclusion: The results highlight the importance of continuous training and a collaborative approach to ensure quality obstetric care, respecting the autonomy of the pregnant woman and based on scientific evidence. Although there are challenges in practical implementation, promoting ongoing education and effective communication is crucial for safer and more woman-centered care.

Keywords: birth plan, prenatal care, maternal mortality, patient safety, pregnant women.

1. INTRODUCTION

Maternal and child care has evolved over the years. In the 19th century, births were carried out at home by midwives, but increasing medicalization has transformed childbirth into a hospital-based, technical event, often marked by unnecessary practices (1).

Although Brazil has high prenatal care coverage (97.6%) and most births take place in hospitals (91.5%) with qualified teams (99.1%), it still faces significant challenges (2), as the country has not reached the Millennium Summit target of reducing the maternal mortality ratio (MMR) by 75% by 2015 (3). Currently, the MMR is around 60 deaths per 100,000 live births, double the value projected for 2030, with 92% of these deaths being preventable (4,5). Every

day, approximately 810 women and 6,700 newborns die from preventable causes, with hemorrhages, infections and eclampsia accounting for more than 70% of maternal deaths. More than 2 million stillbirths occur every year, with 40% during childbirth (6).

The high rate of caesarean sections and interventions such as episiotomy is evidence of shortcomings in health services. Approximately 26.4% of women have difficulties accessing prenatal care, 55.7% of births are caesarean sections, and 81% of infant deaths occur in the first month of life. In addition, around 49,000 cases of maternal syphilis and 25,377 cases of congenital syphilis were recorded, with 37.8% diagnosed late. This data highlights the urgent need to improve prenatal care and expand quality health services to reduce maternal and neonatal mortality (7-9).

To face these challenges, the *Rede Cegonha* program, created in 2011 in Brazil, aims to transform reality by ensuring access to reproductive planning and offering continuous care during pregnancy, childbirth and the puerperium. The programme seeks to improve the quality, safety and humanization of prenatal care and childbirth, in line with the practices recommended by the Word Health Organization (WHO) since 1996 (10).

Its main objective is to reduce maternal and infant mortality by strengthening Primary Health Care (PHC). By adopting personalized, evidence-based practices, the program aims to ensure that hospital interventions are carried out with caution and only when necessary (11).

In February 2017, the Ministry of Health published Ordinance nº353, which approved the National Guidelines for Normal Childbirth Care, systematizing evidence-based practices to guide health professionals (12). A review made in 2022 highlighted the importance of empowering women during childbirth, respecting their choices and ensuring humanized care (13). However, the technocratic model in Western medicine still does not adequately promote women's empowerment, often considering pregnancy as pathological and childbirth as a risky event (14-16).

The World Health Organization (WHO) recommends the development of a Birth Plan as an essential practice in labor and birth care. Since 2011, this approach has been incorporated into the *Rede Cegonha* guidelines and the National Childbirth Care Guidelines of 2017, revised in 2022, allowing for a personalized and less interventionist approach. This practice is in line with the principles of care centred on women's protagonism, valuing their choices and seeking dignified and respectful service (17,18). Proper use of the birth plan can avoid fragmented, impersonal and excessively technical care, promoting more humanized and integrated care (19).

In this context, primary care nurses play a crucial role in educating and preparing pregnant women for childbirth, promoting autonomy and knowledge, which improves the quality of care and the safety of childbirth. They also participate on the preparation of the birth plan, ensuring that the pregnant woman has a safer and more humanized experience (20-21).

This plan, developed together with primary care professional or a specialist, should reflect the preferences of the pregnant woman and discuss aspects such as type of birth, positions, companions and care for the newborn, promoting a more natural, respectful and less interventionist birth (16,22,23).

Despite concepts to humanize childbirth, the traditional hospital model still predominates, and the use of the Birth Plan remains limited. Although there is clear evidence of its benefits, the effective implementation has not yet been fully achieved (24-26). It is essential to carry out

more studies and provide additional support to managers to deepen knowledge about the Birth Plan, encourage the active participation of pregnant women and reduce complications.

In this context, the following research question arose: Is there knowledge about the Birth Plan and its correlation with patient safety from the point of view of nurses? The aim of this research was to investigate the role of nurses as inducers of the implementation of the birth plan, to identify nurses' knowledge and professional practice regarding birth plans and to highlight nurses' consideration of the correlation between the implementation of birth plans and patient safety.

2. METHODOLOGY

This is a descriptive exploratory study with a quantitative approach, carried out in a municipality in the metropolitan region of Curitiba, in the state of Paraná, Brazil, between February and April 2024. The participants were 28 nurses from two different areas of maternal and child health: those who played crucial roles in prenatal care in the Family Health Program, carrying out specific consultations during this period, and nurses who worked in maternal and child care in a hospital environment, directly involved in the birth process.

The survey was conducted online, using a questionnaire available at Google Forms, which included socio-demographic information and 13 closed questions. The answers were classified on a five-point Likert scale and presented separately and by dimension (knowledge, collective participation and professional practice). In addition to the closed questions, the questionnaire contained an open question, allowing for a single-word answer, which was quantified in the survey results.

The data was analyzed thoroughly and comprehensively using the R cran Version 4.1.0 software (27), ensuring a robust and transparent approach. In addition, a pilot test was carried out with four nurses specializing in maternal and child health to verify the effectiveness and applicability of the research instrument. The Ethics Committee approved this study under number 6565293 and all participants signed the Informed Consent Form.

3. RESULTS AND DISCUSSION

Of the 28 survey participants, 85.7% were women. The most common age group was 42 to 50 years old, representing 46.4% of the group, while 39.3% had more than 15 years' professional experience. The majority (53.6%) had between 1- and 5-years’ service. The most frequent specialties included Family Health Nursing (33.3%), followed by "Other" specialties (29.6%), Gynecology and Obstetrics Nursing (22.2%) and Urgency and Emergency Nursing (14.8%).

Table 1 shows the mean and standard deviation of each question according to the Likert scale (1 to 5). Among all the respondents, question 08 had the lowest mean (Q8 - 2.71, standard deviation - 1.33), indicating less agreement with the statement (Q8 - Are you familiar with the guidelines and best practices recommended for reviewing and updating a Birth Plan over the course of pregnancy?). On the other hand, questions 6 and 11 had the highest mean scores (Q6 - 4.64, standard deviation - 0.56), indicating greater agreement with the statements (Q6 - Do you consider the nurse's role in supporting the development and implementation of the Birth Plan during labor and birth to be important?) and (Q11 - Do you believe that the Birth Plan is an essential and effective tool for improving safe practices in maternal and child care?)

In addition, the questions were analyzed individually and by dimension: Knowledge (Q1, Q2, Q3, Q4, Q8), Collective Participation (Q5, Q6, Q7, Q9) and Professional Practice (Q10, Q11, Q12, Q13), categorized based on the approximation of the content of each question.

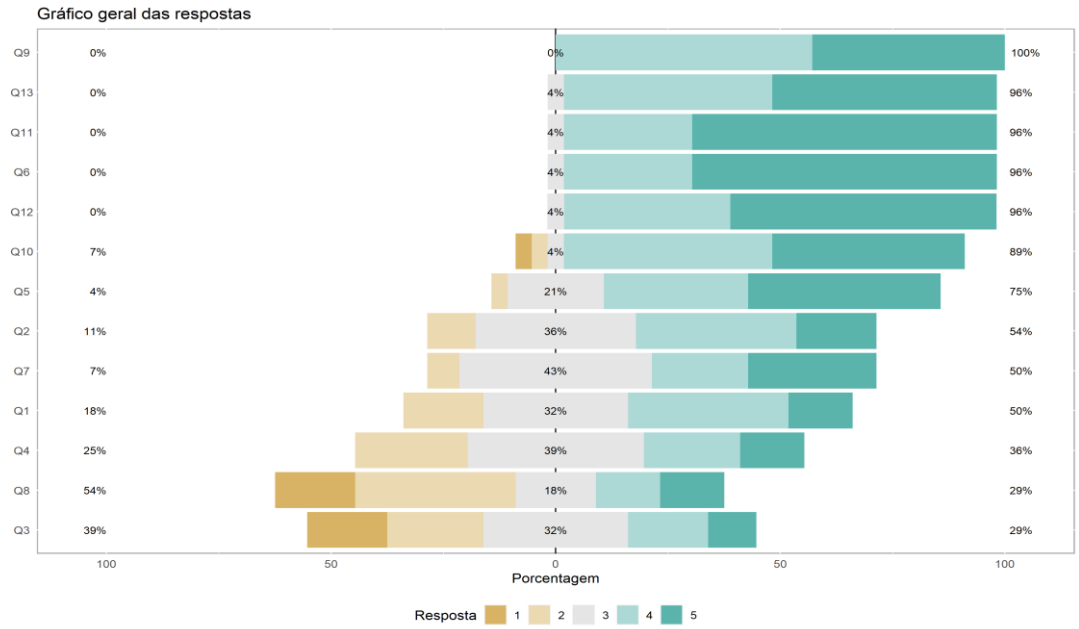
Table 1 - Likert scale questions

	N	Min	Max	Average	DP
Question 01	28	2	5	3.46	0.96
Question 02	28	2	5	3.61	0.92
Question 03	28	1	5	2.82	1.25
Question 04	28	2	5	3.25	1
Question 05	28	2	5	4.14	0.89
Question 06	28	3	5	4.64	0.56
Question 07	28	2	5	3.71	0.98
Question 08	28	1	5	2.71	1.33
Question 09	28	4	5	4.43	0.5
Question 10	28	1	5	4.21	0.96
Question 11	28	3	5	4.64	0.56
Question 12	27	3	5	4.56	0.58
Question 13	28	3	5	4.46	0.58
Knowledge	140	1	5	3.17	1.14
Collective Participation	112	2	5	4.23	0.83
Professional Practice	111	1	5	4.47	0.7

Student's t-test
Source: Author 2024

Below is a graph of the distribution of responses (Figure 1), where the value 1 represents the lowest level of acceptance (No Knowledge) and the value 5 represents the highest level of acceptance (Broad Knowledge). When grouping the answers into three categories, question 3 (How familiar are you with the moment during pregnancy when a birth plan is usually discussed and drawn up with pregnant women?) showed great diversity in the answers, with a percentage distribution of 39%, 32% and 29% (39%: "answer-1" - 17.9% + "answer-2" - 21.4%; 32%: "answer-3" - 32.1%; and 29%: "answer-4" - 17.9% + "answer-5" - 10.7%). The other questions are analyzed in a similar way, ensuring consistency and detail throughout the study.

Figure 1- General Graph of Responses



Source: Author 2024

Comparison of averages by variable (Considering the dimensions)

The study revealed differences in perceptions between genders. The sample of 4 male participants had higher averages than the 24 female participants, which may have influenced the results. As for age, participants aged up to 34 had higher averages in Knowledge and Collective Participation, while those over 34 stood out in Professional Practice. Regarding length of service, nurses with more than 5 years had better averages in Knowledge and Professional Practice, while those with less than 5 years excelled in Collective Participation. In Professional Experience 1, professionals with up to 10 years' experience performed better in Knowledge and Collective Participation, while those with more than 10 years stood out in Professional Practice. In Professional Experience 2, which covers specialties, Gynecology and Obstetrics/FHS nurses had lower mean scores compared to "Other" specialties; however, no statistically significant differences ($P \geq .05$) were found between these variables.

Table 2 - Averages of the questions in Dimensions: Gender, Age, Length of Service, Professional Experience 1 and Professional Experience 2 – SD Standard Deviation

Gender

Study	**Male**	**SD**	**Female**	**SD**	**value**
Knowledge	3.3	(1.26)	3.15	(1.13)	0.29
Collective Participation	4.38	(0.81)	4.21	(0.83)	0.23
Professional Practice	4.62	(0.5)	4.44	(0.73)	0.17

Age

Study	**Up to 34y**	**SD**	**Over 34y**	**SD**	**value**
Knowledge	3.2	(0.92)	3.16	(1.24)	0.42

Study	Up to 34y	SD	Over 34y	SD	value
Collective Participation	4.31	(0.79)	4.2	(0.85)	0.26
Professional Practice	4.33	(0.53)	4.53	(0.76)	0.92
Length of service					
Study	**Up to 5y**	**SD**	**Over 5y**	**SD**	**value**
Knowledge	3.13	(0.96)	3.24	(1.39)	0.7
Collective Participation	4.31	(0.76)	4.11	(0.92)	0.11
Professional Practice	4.43	(0.55)	4.53	(0.88)	0.79
Professional Experience 1					
Study	**Up to 10y**	**SD**	**Over 10y**	**SD**	**value**
Knowledge	3.2	(0.9)	3.16	(1.26)	0.41
Collective Participation	4.32	(0.76)	4.18	(0.86)	0.19
Professional Practice	4.35	(0.53)	4.54	(0.77)	0.91
Professional Experience 2					
Study	**Gynecology, Obstetrics and Family**	**SD**	**Other**	**SD**	**value**
Knowledge	3.08	(1.17)	3.28	(1.14)	0.16
Collective Participation	4.18	(0.83)	4.29	(0.82)	0.25
Professional Practice	4.44	(0.7)	4.52	(0.71)	0.28

Teste t Student
Source: Author, 2024.

Considering Individual Issues

In Table 3, the individual analysis of the variables revealed a significant difference (*P* = .05) in the perception of the Birth Plan, specifically in question 13. Specialists in Gynecology, Obstetrics and Family Health gave a lower average (4.27) to the importance of the Birth Plan for patient safety, compared to "Other" specialties, who gave an average of 4.67. This highlights the need for more effective alignment of the Birth Plan in the practices and training of all specialties, with a view to improving the safety and quality of obstetric care. The other variables showed no significant differences.

Table 3 - Averages of the individual questions: Gender, Age, Length of Service, Professional Experience 1 and Professional Experience 2 - SD - Standard Deviation

Gender					
Study	**Male**	**SD**	**Female**	**SD**	**value**
Q1	3.25	(0.96)	3.5	(0.98)	0.68
Q2	3.5	(1.29)	3.62	(0.88)	0.6
Q3	3	(1.83)	2.79	(1.18)	0.38
Q4	3.5	(1.29)	3.21	(0.98)	0.3
Q5	4.25	(0.96)	4.12	(0.9)	0.4
Q6	4.75	(0.5)	4.62	(0.58)	0.34

Study	Male	SD	Female	SD	value
Q7	3.75	(0.96)	3.71	(1)	0.47
Q8	3.25	(1.5)	2.62	(1.31)	0.2
Q9	4.75	(0.5)	4.38	(0.49)	0.09
Q10	4.5	(0.58)	4.17	(1.01)	0.26
Q11	4.5	(0.58)	4.67	(0.56)	0.7
Q12	4.75	(0.5)	4.52	(0.59)	0.24
Q13	4.75	(0.5)	4.42	(0.58)	0.15

Age

Study	Up to 34y	SD	Over 34y	SD	value
Q1	3.67	(0.71)	3.37	(1.07)	0.23
Q2	3.78	(0.44)	3.53	(1.07)	0.25
Q3	2.89	(0.93)	2.79	(1.4)	0.42
Q4	3.11	(0.78)	3.32	(1.11)	0.69
Q5	4.22	(0.67)	4.11	(0.99)	0.38
Q6	4.78	(0.44)	4.58	(0.61)	0.19
Q7	3.78	(1.09)	3.68	(0.95)	0.41
Q8	2.56	(1.13)	2.79	(1.44)	0.66
Q9	4.44	(0.53)	4.42	(0.51)	0.46
Q10	4.33	(0.5)	4.16	(1.12)	0.33
Q11	4.56	(0.53)	4.68	(0.58)	0.71
Q12	4.33	(0.5)	4.67	(0.59)	0.92
Q13	4.11	(0.6)	4.63	(0.5)	0.99

Length of service

Study	Up to 5 years	SD	Over 5 years old	SD	value
Q1	3.47	(0.8)	3.45	(1.21)	0.48
Q2	3.59	(0.71)	3.64	(1.21)	0.55
Q3	2.82	(1.01)	2.82	(1.6)	0.5
Q4	3.12	(0.86)	3.45	(1.21)	0.8
Q5	4.29	(0.69)	3.91	(1.14)	0.14
Q6	4.76	(0.44)	4.45	(0.69)	0.08
Q7	3.76	(0.97)	3.64	(1.03)	0.37
Q8	2.65	(1.11)	2.82	(1.66)	0.63
Q9	4.41	(0.51)	4.45	(0.52)	0.58
Q10	4.35	(0.61)	4	(1.34)	0.18
Q11	4.59	(0.51)	4.73	(0.65)	0.73
Q12	4.47	(0.51)	4.7	(0.67)	0.84
Q13	4.29	(0.59)	4.73	(0.47)	0.97

Professional Experience 1

Study	Up to 10 years	SD	Over 10 years old	SD	value
Q1	3.7	(0.67)	3.33	(1.08)	0.17
Q2	3.8	(0.42)	3.5	(1.1)	0.21
Q3	2.9	(0.88)	2.78	(1.44)	0.4
Q4	3.1	(0.74)	3.33	(1.14)	0.72
Q5	4.2	(0.63)	4.11	(1.02)	0.4
Q6	4.8	(0.42)	4.56	(0.62)	0.14
Q7	3.8	(1.03)	3.67	(0.97)	0.37
Q8	2.5	(1.08)	2.83	(1.47)	0.73
Q9	4.5	(0.53)	4.39	(0.5)	0.29
Q10	4.4	(0.52)	4.11	(1.13)	0.23
Q11	4.6	(0.52)	4.67	(0.59)	0.62
Q12	4.3	(0.48)	4.71	(0.59)	0.96
Q13	4.1	(0.57)	4.67	(0.49)	1

Professional Experience 2

Study	Gynecology, Obstetrics and Family	SD	Other	SD	value
Q1	3.4	(0.83)	3.5	(1.17)	0.4
Q2	3.53	(0.92)	3.67	(0.98)	0.36
Q3	2.67	(1.4)	3	(1.13)	0.25
Q4	3.2	(1.01)	3.33	(1.07)	0.37
Q5	4.07	(0.88)	4.25	(0.97)	0.31
Q6	4.67	(0.49)	4.58	(0.67)	0.64
Q7	3.67	(1.05)	3.83	(0.94)	0.34
Q8	2.6	(1.4)	2.92	(1.31)	0.28
Q9	4.33	(0.49)	4.5	(0.52)	0.2
Q10	4.2	(1.01)	4.25	(0.97)	0.45
Q11	4.73	(0.46)	4.58	(0.67)	0.75
Q12	4.57	(0.51)	4.58	(0.67)	0.48
Q13	4.27	(0.59)	4.67	(0.49)	< 0.05

Student's t-test
Source: Author, 2024.

Figure 2 illustrates the word cloud resulting from the participants' answers to the open question, in which they were asked to describe, in a single word, their opinions on the Birth Plan and patient safety.

Figure 2 - Word Cloud

Source: Author, 2024

The Word Cloud presents a basis for discussion on the Birth Plan and the safety of pregnant women. It evidences a wide range of terms related to Professional Practice, Knowledge and

Collective Participation, providing a comprehensive overview of the topic. Words such as "safety", "respect", "humanization", "empowerment" and "information" stand out, highlighting the key concepts that permeate the discussion on the Birth Plan, and can identify the role of nurses in implementing this plan.

The image presents a clear and concise message about the importance of humanization in women's health. Through a set of carefully selected and repeated words, the image highlights the main aspects of humanization, such as respect, the right to information, safety, empowerment and the preparation of health professionals. The image also emphasizes the importance of practical evaluation as a tool to promote the quality of humanized healthcare. It emphasizes the importance of human-centered care, considering the individuality and subjectivity of each patient, addresses women's health in a comprehensive way, and suggests a continuous process of learning and improvement in the evaluation of care practice.

The survey of 28 nurses investigated the knowledge and application of the Birth Plan in maternal and child care, revealing significant variations in the professionals' understanding. While some showed a superficial understanding, others had a more in-depth understanding, especially in the Knowledge dimension. The results corroborate previous research that points to a lack of knowledge about the Birth Plan, despite WHO recommendations since 1996 and the introduction of the first model in 2012 (18,22,26,28).

The diversity of professionals' familiarity with the Birth Plan guidelines is worrying, as evidenced by the low average of 2.71 in question 8 (Table 1). The National Guidelines for Normal Childbirth Care, published in 2017 and revised in 2022, aim to improve the approach to childbirth in Brazil. However, nurses' lack of knowledge can compromise their implementation and the quality of care. The 2022 revision does not sufficiently emphasize the Birth Plan, indicating the need for more attention in future updates.

Studies in various regions of Brazil show similar gaps, with low participation in dissemination initiatives (15,25). Globally, many pregnant women did not receive adequate guidance on childbirth, highlighting the need to raise awareness and promote the dissemination of the document (24).

The survey also revealed disparities in responses regarding the essential elements that should be included in the Birth Plan, as well as the appropriate time to discuss and draw it up. In Catanduva-SP (2020), only 14% correctly identified the ideal time before the educational sessions, but this number has increased to 97% after the education, highlighting its positive impact (25).

There is a consensus on the importance of nurses in the development and implementation of the Birth Plan, as evidenced by the high averages in questions 6 and 11 (4.64 - Table 1). The survey highlighted the possibility of balancing patient safety and preferences, with broad acceptance in the Professional Practice dimension. However, more analysis is needed to ensure practical application.

According to the literature, primary care nurses play a crucial role in educational activities that empower pregnant women, promoting their autonomy and health during prenatal care, as well as promoting a safe and patient centered experience during childbirth (14,20,21).

Multidisciplinary discussions about the birth plan are valuable for identifying and addressing the challenges faced by patients, as highlighted in the Collective Participation dimension. This is in line with the literature which emphasizes the importance of the nursing team in the search for parturient satisfaction and the humanization of care (29-34).

Promoting women's autonomy and implementing a birth plan are essential for improving communication and reducing unnecessary interventions. The plan allows the pregnant woman to express her preferences, such as skin-to-skin contact, birth position, freedom of movement, the presence of a companion and fluid intake, resulting in fewer caesarean sections and greater safety for mother and baby (17,23,32,35).

In addition, the Birth Plan respects the patient's needs, promoting adherence to treatment. However, questions about its isolated effectiveness highlight the importance of a collaborative approach that balances patient preferences with safety protocols (22,36,37).

The survey identified a statistically significant difference (P = .05) in opinions on the relationship between the Birth Plan and patient safety. While Gynecology, Obstetrics and Family Health professionals rated its importance at an average of 4.27, "Other" specialties gave it an average of 4.67 (Table 3). These differences highlight the need to promote interdisciplinary discussions and improve the training of professionals around maternal and child care.

The assessment of patient safety culture in healthcare institutions, especially in obstetrics, is urgent due to the scarcity of available data. This analysis is essential for identifying positive points and areas requiring improvement, as well as guiding effective interventions (38,39).

Adopting a systematic and collaborative approach is fundamental to ensuring safety during childbirth. Continuous education of health professionals improves understanding and application of the birth plan, promoting quality care (26,28,33). Integrating this plan into the practices of all specialties strengthens women's autonomy (40-41). In addition, the implementation of evidence-based protocols and specialized training are crucial to providing for the well-being of mothers and newborns, creating a safe environment during childbirth (42-44)

The survey revealed that most participants identified barriers to implementing the Birth Plan during labor. Although the benefits are clear, obstacles still compromise its effectiveness. It is essential to raise awareness among health professionals and promote acceptance of the Plan among pregnant women, integrating it into obstetric services (19). Flexible plans, adapted to the unpredictability of childbirth, are essential to meet individual needs, providing a safe and satisfying birth experience (16,28).

In summary, although there is recognition of the possibility of harmonizing safety and patient preferences, effective implementation still represents a challenge. The debate on the role of the Birth Plan in safety highlights the continuing need for research and discussion to develop patient centered approaches to obstetric care, promoting care that considers not only physical safety, but also the emotional and individual needs of patients.

4. CONCLUSION

When investigating the role of nurses as inducers of birth plan implementation in the dimensions of Knowledge, Collective Participation and Professional Practice, the analysis revealed a range of perspectives, from a basic understanding to more in-depth analysis, highlighting the need for continuous and comprehensive training. Despite variations in familiarity with the topic and the gaps identified, there was consensus on the crucial importance of the role of nurses, particularly in the Collective Participation dimension.

However, questions have arisen about the extent to which the Birth Plan can ensure patient safety in isolation, underlining the need for a more holistic and collaborative approach. This balance is essential to promote not only safety, but also respect for patients' autonomy and choices during childbirth, reflecting the diversity of opinions on the effectiveness of the Birth Plan as a complete approach.

The multiplicity of perspectives provides an environment conducive to learning, underlining the constant need for education and discussion among health professionals to improve understanding and implementation of the birth plan. After all, it is through dialog, collective participation and the sharing of knowledge that new approaches and solutions to the challenges encountered in maternal and child care can emerge.

A more detailed analysis revealed significant differences in opinions about the importance of the birth plan between different specialties. These discrepancies highlight the urgent need to improve the education and training of professionals, especially in postgraduate courses focused on maternal and child care. Implementing training and continuing education programs is crucial to ensure that all professionals involved in this care properly recognize and value the Birth Plan.

Although the sample size did not have a significant impact on the results and the statistical analysis did not reveal any marked differences, a more balanced sample between the genders could provide a more robust understanding of the studies. This reinforces the need for future research to explore these complexities deeper, regardless of geographical location.

In short, the Birth Plan stands out as a valuable tool for promoting safety and humanizing obstetric care globally. Training health professionals and promoting an educational and collaborative approach are essential for high-quality maternal and child care, based on respect for women's autonomy and scientific evidence. Continuous improvement in training and recognition of the crucial role of nurses are fundamental to promoting clinical practice that meets patients' needs and provides comprehensive, respectful care.

CONSENT

All authors declare that 'written informed consent was obtained from the patient (or other approved parties) for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal.

REFERENCES

1. Oliveira O.S., Couto T.M., Gomes N.P., Campos L.M., Lima K.T.R.S., Barral F.E. (2019). Best practices in the delivery process: conceptions from nurse midwives. Rev Bras Enferm, 72(2), 455-62. https://doi.org/10.1590/0034-7167-2018-0477

2. Bittencourt S.D.A., Vilela M.E.A., Marques M.C.O., Santos A.M.D., Silva C.K.R.T.D., Domingues R.M.S.M., et al. (2021). Labor and childbirth care in maternities participating in the "Rede Cegonha/Brazil": an evaluation of the degree of implementation of the activities. Ciência & Saúde Coletiva, 26(3), 801-21. https://pubmed.ncbi.nlm.nih.gov/33729338/#:~:text=10.1590/1413%2D81232021263.08102020.

3. Paraná. Health Department. (2022). Women's Health Care Division. Guideline - Maternal and Child Care: Pregnancy. Curitiba: SESA, 8, 1-81. https://www.saude.pr.gov.br/sites/default/arquivos_restritos/files/documento/2022-03/linha_guia_mi-_gestacao_8a_ed_em_28.03.22.pdf

4. Keunecke A.L., Polido C.A., Neto D.L.R., Rattner D., Silva J.A., Horta J.C.A., et al. (2021). Labor and birth care: an agenda for the 21st century. Unicef:ReHuNa. 1st edition. Brasília, 1, 177. https://docs.bvsalud.org/biblioref/2021/11/1348126/assistencia-ao-parto-e-nascimento-uma-agenda-para-o-seculo-21.pdf

5. Ferreira M.E.S., Coutinho R.Z., Queiroz B.L. (2023). Maternal morbidity and mortality in Brazil and the urgency of a national surveillance system for maternal near miss. Cadernos de saúde pública, 39(8), 1-13. https://doi.org/10.1590/0102-311XPT013923

6. Fiocruz. (2022). Fernandes Figueira National Institute of Women's, Children's and Adolescents' Health. Portal of Good Practices in Women's, Children's and Adolescents' Health. Posts: Safety in Childbirth Care: from Theory to Practice. Rio de Janeiro, https://www.arca.fiocruz.br/bitstream/handle/icict/56047/segatencaopartonascimento-220121213338-1.pdf?sequence=2&isAllowed=y

7.Ministry of Health. (2019). Health Surveillance Secretariat. Department of Health Analysis and Surveillance of Non-Communicable Diseases. Saúde Brasil, an analysis of the health situation with a focus on vaccine-preventable diseases and immunization. Brasília: Ministry of Health, 1st edition, 15-71. https://bvsms.saude.gov.br/bvs/publicacoes/saude_brasil_2019_analise_situacao.pd

8. Brazilian Israelite Beneficent Society Albert Einstein (SBIBAE). (2019). Technical Note for the Organization of the Health Care Network with a Focus on Primary Health Care and Specialized Outpatient Care - Women's Health in Pregnancy, Childbirth and the Puerperium. São Paulo: Hospital Israelita Albert Einstein: Ministry of Health, 1-56. https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1223374#:~:text=Nota%20t%C3%A9cnica%20para%20organiza%C3%A7%C3%A3o%20da%20rede%20de%20aten%C3%A7%C3%A3o,women's%20health%20during%20pregnancy%2C%20childbirth%20and%20the%20puerperium

9. Motta C.T., Moreira M.R. (2021). Will Brazil comply with the SDG 3.1 of the 2030 Agenda? An analysis of maternal mortality, from 1996 to 2018. Ciência & Saúde Coletiva, 26(10), 4397-4409. https://doi.org/10.1590/1413-812320212610.10752021

10. Federal University of Maranhão. (2016). UNA-SUS/UFMA. Health Care Networks: the Stork Network. São Luís,1-64. https://ares.unasus.gov.br/acervo/handle/ARES/7564

11. Brazil. Ministry of Health. (2023). Primer for submitting proposals to the Ministry of Health Ministry of Health, National Health Fund. - Brasília: Ministry of Health. 1st edition, 55-176. https://bvsms.saude.gov.br/bvs/publicacoes/cartilha_propostas_ministerio_saude_2023.pdf

12. Brazil. Ministry of Health. (2017). Department of Science, Technology and Strategic Inputs. Department of Health Technology Management and Incorporation. National guidelines for normal childbirth care. Brasília: Ministry of Health,1-51. https://bvsms.saude.gov.br/bvs/publicacoes/diretrizes_nacionais_assistencia_parto_normal.pdf

13. Brazil. Ministry of Health. (2022). National Guidelines for Assistance to Normal Childbirth. Preliminary Version. Ministry of Health, 1-117. https://www.febrasgo.org.br/images/pec/vitamina-d/diretriz_assistencia_parto_normal.pdf

14. Góes F.G.B., Ledo B.C., Santos A.S.T., Bastos M.P.C., Silva A.C.S.S., Pereira-Ávila F.M.V. (2021). Good practices in caring for a newborn with good vitality in the delivery room: integrative review. Revista de Pesquisa Cuidado é Fundamental Online. Jan/Dec, 13, 899-906. https://docs.bvsalud.org/biblioref/2021/07/1281535/23270-132948-1-pb.pdf

15. Barros A.P.Z., Lipinski J.M., Sehnem G.D., Rodrigues A.N., Zambiazi E.S. (2017). Nurses' knowledge about birth plans. Revista de Enfermagem da UFSM, 7(1), 69-79. https://docs.bvsalud.org/biblioref/2021/07/1281535/23270-132948-1-pb.pdf

16. Medeiros R.M.K., Figueiredo G., Correa A.C.P., Barbieri M. (2019). Repercussions of using the birth plan in the parturition process. Revista Gaúcha de Enfermagem, 40, 1-12. https://docs.bvsalud.org/biblioref/2021/07/1281535/23270-132948-1-pb.pdf

17. Pasqualotto V.P., Riffel M.J., Moretto V.L. (2020). Suggested social media practices for birth plans. Rev Bras Enferm, 73(5), e20180847. https://doi.org/10.1590/0034-7167-2018-0847

18. Boff N.K., Sehnem G.D., Barros A.P.Z., Cogo S.B., Wilhelm L.A., Pilger C.H. (2023). Experience of professionals and residents working in the obstetric center on birth plan use. Anna Nery School, 27, 1-8. https://doi.org/10.1590/2177-9465-EAN-2022-0104pt

19. Narchi N.Z., Venâncio K.C.M.P., Ferreira F.M., Vieira J.R. (2019). Individual birth planning as a teaching-learning strategy for good practices in obstetric care. Rev Esc Enferm USP, 53, e03518. *(DOI NÃO ENCONTRADO) DOI: 10.1590/S1980-220X2018009103518

20. Ferreira C.T.A., Tobias G.C., Teixeira C.C. (2019). Prenatal care carried out by nurses in basic health units: a narrative review of the literature. Revista Uningá, 56(S2), 194-203. https://revista.uninga.br/uninga/article/view/2410

21. Procópio K., Alves C.G.L. (2023). Health education in the preparation of pregnant women for delivery in Primary Care: Integrative review. Research, Society and Development, 12(4), 1-13. https://rsdjournal.org/index.php/rsd/article/view/40854

22. Cortés M.S., Barranco D.A., Jordana M.C., Roche M.E.M. (2015). Use and influence of Delivery and Birth Plans in the humanizing delivery process. Revista Latino-Americana de Enfermagem, 23(3), 520-26. https://doi.org/10.1590/0104-1169.0067.2583

23. Rodrigues C.A.O., Vogt S.E., Versiani C.C., Pereira L.B., Silva D.M., Lacerda T.M.P. (2023). Compliance with articulated demands in the childbirth plan among users of the public health system. Rev Enferm Atenção Saúde, 12(1), e202356. https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1435066?lang=pt

24. Trigueiro T.H., Arruda K.A., Santos S.D., Wall M.L., Souza S.R.R.K., Lima L.S. (2022) Pregnant women's experiences on the nurse consultation for the construction of a delivery plan. Anna Nery School, 26, 1-9. https://doi.org/10.1590/2177-9465-EAN-2021-0036

25. Feltrin A.F.S., Manzano J.P., Freitas T.J.A. (2022). Birth plan in prenatal care: knowledge of primary health care nurses. CuidArte, Enferm, 16(1), 65-73.

https://docs.fundacaopadrealbino.com.br/media/documentos/a3577bdc34c9e01fcb70ab6aeb7ab0ed.pdf

26. Catissi G., Ribeiro F.S., Bastos S.H., Lucena F.S. (2021). Strategies in the implementation of the Birth Plan: strengths and weaknesses raised in the experience of the municipality of Franco da Rocha.BIS, Bol. Inst. Saúde (Impr.), 22(2), 29-40. https://periodicos.saude.sp.gov.br/bis/article/view/38630

27. R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL. https://www.r-project.org/

28. Barhart J.B.L., Caldeira S., Reis A.C.E., Goes H.P., Conde O.L.M. (2022). Ignorance and a lack of access of pregnant women to the Birth Plan. Research, Society and Development, 11(10), 1-10. https://rsdjournal.org/index.php/rsd/article/view/32506

29. National Health Surveillance Agency (Brazil). (2014). Maternal and neonatal care services: safety and quality. Brasília: ANVISA, 1-103. https://portaldeboaspraticas.iff.fiocruz.br/wp-content/uploads/2017/10/Servi%C3%A7os-de-Aten%C3%A7%C3%A3o-Materna-e-Neonatal-Seguran%C3%A7a-e-Qualidade.pdf.

30. Brazilian Society of Pediatrics (SBP). (2018). Safe Birth, 3, 1-16. Scientific Document. BRAZIL. https://www.sbp.com.br/fileadmin/user_upload/Neonatologia_-_20880b-DC_-_Nascimento_seguro__003_.pdf

31. Silva W.N.S., Azevedo J.A.F., Holanda V.R., Gomes A.L.V., Albuquerque G.P.M. (2019). Birth plan as an instrument of good practices in delivery and birth: an integrative review. Rev baiana enferm, 33, e32894, p.1-10. https://www.revenf.bvs.br/pdf/rbaen/v33/en_1984-0446-rbaen-33-e32894.pdf

32. Ribeiro G.L., Costa C.C., Damasceno A.K.C., Vasconcelos C.T.M., Souza M.R.T., Esteche C.M.G.C.E., et al. (2023). Using good delivery practices and maternal experience and satisfaction. Rev. enferm. UFPI, 12, e4148. https://periodicos.ufpi.br/index.php/reufpi/article/view/4148

33. Cereja R.A., Silva L.S.R., Nascimento M.F.S., Soares L.M., Cândido da Silva L., Teixeira da Silva R. (2021). Patient safety: the importance of safe surgery in the obstetric center. Revista Nursing, 24(279), 6087-100. https://doi.org/10.36489/nursing.2021v24i279p6087-6100

34. Nascimento D.E.M., Barbosa J.C., Isaías B.B., Nascimento R.B.H., Fernandes E.M., Neto R.T.L., et al. (2022). Experiences in obstetric violence: Good nursing practices in birth assistance. Revista Nursing, 5(291), 8242-47. https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1391859

35. Macedo J., Antonio I., Macedo E., Lopes M.F. (2023). The birth plan as a safeguard mechanism the right to self-determination of women in obstetric context in Portugal. Revista de Bioética y Derecho, 58, 223-42. https://revistes.ub.edu/index.php/RBD/article/view/39814

36. Gomes R.P.C., Silva R.S., Oliveira D.C.C., Manzo B.F., Guimarães G.L., Souza K.V. (2017). Delivery plan in conversation circles: women's choices. REME - Rev Min Enferm, 21, 1-8. https://periodicos.ufmg.br/index.php/reme/article/view/49874/40552

37. Santos F.S.R., Souza P.A., Lansky S., Oliveira B.J., Matozinhos F.P., Abreu A.L.N., et al. (2019). Meanings of the childbirth plan for women that participated in the Meanings of Childbirth Exhibit. Cadernos de Saúde Pública, 35(6), 1-7. https://periodicos.ufmg.br/index.php/reme/article/view/49874

38. Carmo J.M.A., Mendoza I.Y.Q., Goveia V.R., Souza K.V., Manzo B.F., Guimarães G.L. (2020). Culture of patient safety in hospital units of gynecology and obstetrics: a cross-sectional study. Rev Bras Enferm, 73(5), e20190576. http://dx.doi.org/10.1590/0034-7167-2019-0576

39. Pedroni V.S., Gouveia H.G., Vieira L.B., Wegner W., Oliveira A.C.S., Santos M.C., et al. (2020). Patient safety culture in the maternal-child area of a university hospital. Rev Gaúcha Enferm, 41, e20190171. https://doi.org/10.1590/1983-1447.2020.20190171

40. Santana D.P., Moreira R.S., Mueller P.S., Moura K.M.B., Pinheiro M.D.G., Oliveira F.F., et al. (2023). The role of the nurse in humanized birth: The view of pregnant women. Revista Nursing. 26(296), 9312-18. https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1412715?lang=pt

41. Villar V.C.F.L., Rodrigues J.L.S.Q., Martins M., Rabello E.T. (2022). Patient safety in childbirth care: what is discussed in Facebook groups? Cadernos de Saúde Pública, 38(7). https://doi.org/10.1590/0102-311XPT277421

42. Veiga A.C., Medeiros L.S., Backes D.S., Sousa F.G.M., Hämel K., Kruel C.S., et al. (2023). Interprofessional qualification of prenatal care in the context of primary health care. Ciência & Saúde Coletiva, 28(4), 993-1002. https://doi.org/10.1590/1413-81232023284.14402022EN

43. Silva A.C., Santos K.A., Passos S.G. (2022). Nurse's Performance in Assisting Humanized Children: Literary Review. Revista JRG de Estudos Acadêmicos, Year 5 V (10), 113-23. https://doi.org/10.55892/jrg.v5i10.349

44. Silva P.L., Gouveia M.T.O., Magalhães R.L.B., Borges B.V.S., Rocha R.C., Guimarães T.M.M. (2020). Cultura de seguridad del paciente en la perspectiva del equipo de enfermería en una maternidad pública. Enferm glob, 19(60), 427-39. https://doi.org/10.6018/eglobal.386951