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Obstetric psychoprophylaxis and duration of the active phase dilation period: A relational study

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Abstract

Objective: to identify the correlation between obstetric psychoprophylaxis and the duration of the active phase dilation period in pregnant women at the centro materno infantil daniel alcides carrión, lima - 2019.

Materials and methods: non-experimental cross-sectional study. a documentary review was carried out and was complemented with the application of two data collection forms as an instrument, considering as variables the clinical history, age, number of pregnancies, number of prenatal care, gestational age at the first obstetric psychoprophylaxis session and the number of psychoprophylaxis sessions recorded.

Results: the study included 165 medical records of pregnant women whose deliveries were attended at the daniel alcides carrión maternal and child center in lima during 2019, from which it was found that 69.09 % of the pregnant women ranged from 18 to 29 years of age; 77.58 % of them were multiparous, 69 % showed more than 3 prenatal care, 91 % started their first obstetric psychoprophylaxis session between 28 to 37 weeks, 55.76 % had 4 to 6 obstetric psychoprophylaxis sessions and 68 % had a duration of up to 6 hours in the dilation period - active phase.

Conclusions: obstetric psychoprophylaxis has shown a significant level of incidence with respect to the duration of the active phase dilation period, demonstrating the benefit obtained by the pregnant woman during labor.

Key words: Obstetric psychoprophylaxis; dilatation; active phase; pregnant women.

Introduction

Pregnancy and childbirth are transcendental processes in women's lives, which is why health professionals have been working to improve care proce-

dures during childbirth. However, these conditions are not always met due to different medical, social and economic factors, which ends up causing the death of both the pregnant woman and the baby¹. Every day around 830 women die worldwide due to complications related to pregnancy or childbirth, being one of the main causes of death in the female population, according to the World Health Organization (OMS)².

However, it is worth mentioning that most of these cases occur in developing countries, which leads us to discuss the development of this process in Latin America³. According to the different statistical data provided by the Regional Working Group, in recent years there has been a stagnation in the reduction of maternal mortality, with Bolivia, Brazil and Guatemala being the countries most affected by this problem, and Peru being ranked fifth in the region⁴. During 2020, Peru recorded a maternal mortality rate of 440 cases, 45.7% more than in 2019⁵. Likewise, the latest report issued by the Cochrane institution shows that most of the deliveries performed in this region have a medicalized and dehumanized model of care, especially in urban areas⁶.

In this context, Peñate et al. mention that most of the complications that occur during labor that cause maternal or fetal death are related to the lack of education and preparation of pregnant women, as well as the late identification of warning signs⁷. In this context, it is necessary to promote the implementation of obstetric psychoprophylaxis in the different health centers in the region. Obstetric psychoprophylaxis is an integral pedagogical procedure that helps the pregnant woman to learn different breathing techniques to promote relaxation and activities that help her physiological adaptation during gestation, part and puerperium⁸. The benefits of this process contribute to the reduction of perinatal complications, attenuating the labor process time and improving the oxygenation of the fetus and the mother⁹. In this sense, the aim was to identify the correlation between obstetric psychoprophylaxis and the duration of the active phase

dilation period in pregnant women at the Centro Materno Infantil Daniel Alcides Carrión, Lima - 2019.

Materials and methods

For this research, a correlational study with a cross-sectional non-experimental design was conducted at the Centro Materno Infantil Daniel Alcides Carrión in Lima, Peru, during 2019, with a sample of 165 medical records belonging to pregnant women.

Inclusion criteria: Psychoprophylaxis performed at the Centro Materno Infantil Daniel Alcides Carrión and delivery attended at the Centro Materno Infantil Daniel Alcides Carrión during 2019.

Exclusion criteria: Incomplete medical history, pregnant women without psychoprophylaxis, pregnant women with deliveries attended in other facilities.

A documentary review was carried out in order to have a broad background to support and sustain the present investigation, as well as an improvement of data collection in the review of clinical histories. Likewise, this was complemented with the application of two data collection forms, as an instrument, where the following variables were considered for the first variable: clinical history, age, number of pregnancies, number of prenatal care, gestational age at the first obstetric psychoprophylaxis session, number of psychoprophylaxis recorded. For the second variable, the clinical history and the duration of dilation from 4 cm to 10 cm were considered. For this purpose, Pearson's correlation coefficient statistic was used for the treatment of the variables.

Statistical analysis: The data collected were processed using Excel (2016) and consisted of two stages. The first was descriptive, consisting of the presentation of tables and frequency graphs of the general data. On the other hand, the second stage was inferential, using first, a normality test, to later make use of Pearson's correlation coefficient (parametric).

Table 1. Age of pregnant women

Age	Frequency	%
18 to 29 years old	114	69.09 %
30 to 59 years ols	51	30.31 %
Total	165	100.00 %

Note: Data obtained from the medical records of the Centro Materno Infantil Daniel Alcides Carrión.

Results

With respect to the age of the pregnant women, Table 1 shows that 69.09% of the pregnant women were between 18 and 29 years of age, as opposed to 30.91% of the pregnant women between 30 and 59 years of age.

In the case of parity of pregnant women, Table 2 shows a notable difference between multiparous with 77.58 % and nulliparous with 22.42 %.

Table 2. Parity of pregnant women with obstetric psychoprophylaxis.

Parity	Frequency	%
Nulliparous	37	22.42 %
Multiparous	128	77.58 %
Total	165	100.00 %

Note: Data obtained from the medical records of the Centro Materno Infantil Daniel Alcides Carrión.

Table 3 shows that the number of prenatal cares received by pregnant women with obstetric psychoprophylaxis showed a group of 69% who received more than 3 visits, while 31% only received up to 3 visits.

On the other hand, Table 4 shows that 91% of pregnant women presented their first session of obstetric

Table 3. Number of prenatal cares in pregnant women undergoing obstetric psychoprophylaxis

No of prenatal care	Frequency	%
Up to 3	51	31 %
Greater than 3	114	69 %
Total	165	100.00 %

Note: Data obtained from the medical records of the Centro Materno Infantil Daniel Alcides Carrión.

Table 4. Gestational age at the first obstetric psychoprophylaxis session.

Gestational age at first session	Frequency	%
28 to 37 weeks	150	91 %
> 37 weeks	15	9 %
Total	165	100.00 %

Note: Data obtained from the medical records of the Centro Materno Infantil Daniel Alcides Carrión.

psychoprophylaxis between 28 and 37 weeks of gestation, and 9% of them began their first session until after 37 weeks of gestation.

With respect to Table 5, the data collected show that 55.76 % of the pregnant women had 4 to 6 obstetric psychoprophylaxis sessions, while 44.24 % had up to 3 obstetric psychoprophylaxis sessions during their gestation period.

Table 6 shows that pregnant women with 3 ses-

Table 5 Number of Obstetric Psychoprophylaxis Sessions

Number of Obstetric Psychoprophylaxis sessions	Frequency	%
Up to 3 sessions	73	44.24 %
4 to 6 sessions	92	55.76 %
Total	165	100.00 %

Note: Data obtained from the medical records of the Centro Materno Infantil Daniel Alcides Carrión.

sions of obstetric psychoprophylaxis had an active phase dilation period with a response time of up to 6 hours and 14% had a response time of less than 6 hours. Likewise, the pregnant women who had 4 to 6 sessions showed that 38% of the pregnant women had a response time of up to 6 hours, and 18% had a response time of less than 6 hours.

On the other hand, in the present table it can also be observed that the Pearson correlation coefficient is $r=0.855$, with a very high positive correlation between the duration of the dilation period - active phase and obstetric psychoprophylaxis; while, the P-value is $0.016 < 0.05$ (significance level), indicating that the null hypothesis was discarded, so the relationship between

Table 6. Degree of correlation between the duration of the dilation period - Active phase and obstetric psychoprophylaxis.

		Duration of the dilation period – active phase				Total	
		Up to 6 hours		> 6 hours		N.º	%
		N.º	%	N.º	%		
Number of obstetric psychoprophylaxis sessions	Up to 3 sessions	50	30 %	23	14 %	73	44 %
	4 to 6 sessions	63	38 %	29	18 %	92	56 %
Total		113	68 %	52	32 %	165	100 %

Note: Data obtained from the medical records of the Centro Materno Infantil Daniel Alcides Carrión.

the duration of the dilation period - active phase and obstetric psychoprophylaxis is highly significant.

Discussion

This research made it possible to identify the correlation between obstetric psychoprophylaxis and the duration of the active phase dilatation period. In this regard, the different studies agree in exposing the level of incidence that this procedure has on the labor of pregnant women. In this context, Narea et al. carried out a descriptive study, where they concluded that psychoprophylaxis had a positive influence on dilation time, reducing this interval to 40% and 35% in nulliparous and multiparous pregnant women, with a total average of 6 hours; a result that coincides with the data observed in the clinical records, in which 32% of women who attended the psychoprophylaxis classes presented a dilation of less than 6 hours, highlighting a multiparity level of 77.58%¹⁰. Along these lines, the research by Déctor et al. and Massiel et al. discuss the benefits of psychoprophylactic programs for women, in which they express an optimization of labor in young mothers, with a decrease in the cesarean section rate, developing a correlation level of (0.365), which in turn resulted in better preparation conditions for the pregnant women, less use of medication and active dilation^{11,12}. A proposal that is related to the topic developed in this research is that observed in pregnant women who received therapy during the first 37

weeks (91 %) and obtained a better outcome in labor.

Likewise, with respect to the sessions, another study shows that this practice significantly improved active dilation time by 46.43 % with an expulsion period of 25 minutes in pregnant women who attended 70 % of their sessions¹³. In this sense, this research also shows a variance between women who received late psychoprophylactic care and those who had continuous attendance, where the latter group (69%) matched the estimated delivery time.

Conclusions

Based on this research, it can be affirmed that there is a correlation between the duration of the dilation period - active phase and obstetric psychoprophylaxis ($r = 0.855$, $p = 0.016 < 0.05$), in which it was found that, out of a total of 165 pregnant women, 68 % presented a duration of less than 6 hours and 32 % of pregnant women had a longer duration, a result that varied according to the number and time of psychoprophylaxis sessions of the evaluated pregnant women, which is why it is recommended to continue working on promoting and strengthening this practice in the different health centers.

References

1. Castrillo B. Delivering babies: representations, practices and disputes in the professional ob-

- stetric field of La Plata. In Pagmento L. Health, illness, attention and care: Perspectives from the social sciences. the social sciences. La Plata: Universidad Nacional de La Plata; 2021:187-237 [online]. URL address: <https://bit.ly/3xPtCqp>
2. World Health Organization Maternal Mortality [online]. URL address: <https://www.who.int/es/news-room/fact-sheets/detail/maternal-mortality> (Accessed: July 2022)
 3. Regional Working Group for the Reduction of Maternal Mortality. Maternal Morbidity and Mortality Situation Overview: Latin America and the Caribbean [online]. 2017 (Accessed: July 2022). URL address: <https://bit.ly/2OLM7oc>
 4. Menéndez C, Lucas A. Analyzing maternal mortality from an equity approach: the importance of quality data. Global Health Institute [online]. 2016 (Accessed: July 2022). URL address: <https://bit.ly/3k4ifYj>
 5. Mesa de Concentración para la Lucha contra la Pobreza. Peru: Maternal mortality continues to rise in the context of covid-19. A call to action [online]. Peru, 2021 (Accessed: July 2022). URL address: <https://www.mesadeconcertacion.org.pe/storage/documentos/2021-05-07/mclcp-alerta-sobre-muertes-maternas-abril-2021-vp4.pdf>
 6. Cochrane. Continuous support for women during childbirth [online]. URL address: <https://bit.ly/3KkK7Sz> (Accessed: July 2022).
 7. Peñate J, Estrada A, Rodríguez M, Sánchez A. Considerations on family obstetric psychoprophylaxis. Rev Méd. Elect. 2020;42(6):1-15, <https://bit.ly/417DTeI>
 8. García M., Peñate J., Sánchez A., Mella A., Estrada A. Considerations on the obstetric psychoprophylaxis in the adolescence. Rev. Med. Electron. 2019;41(6):1550-1563. <https://bit.ly/3lMsVuS>
 9. Zambrano K, Torres M, Brito A, Pazmino Y. Obstetric psychoprophylaxis and its benefits for the pregnant woman. Recimundo, Rev. Cient. Inv. 2018;2(3):242-259. doi: 10.26820/recimundo/2. (3). jul.2018.242-259.
 10. Narea V, Rodríguez K, Jiménez G, Castro M. Benefits of Obstetric Psychoprophylaxis in the labor process in pregnant women attended at the University Hospital. Pro Sciences. 2020;4(32):72-80 <https://doi.org/10.29018/issn.2588-1000vol4iss32.2020pp72-80>
 11. Déctor C, Mera C, Valencia E, Tejada C, Gonzales P. Evaluation of psychoprophylaxis and continuous emotional support to decrease the cesarean section rate. Rev. Sanidad Militar Mex. 2019;73(5):303-307. <https://dx.doi.org/10.35366/93330>
 12. Machado M, Gómez I, Ramírez N, López N. Obstetric psychoprophylaxis program during COVID-19 pandemic confinement. Rev. Sci. Med. 2020;24(6):1-8. <https://bit.ly/418Tzyj>
 13. Narea V, Requena A, Rodríguez A, Jiménez G. Benefits and difficulties of obstetric psychoprophylaxis in pregnant women in the community of Progress. Guayas. Pro Ciencias. 2020;4(33):30-40. <https://doi.org/10.29018/issn.2588-1000vol4iss33.2020pp30-40>

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