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Demographic and clinical characteristics in postpartum women with postpartum hemorrhage at Hospital José Félix Valdiviezo

Características demográficas y clínicas en puérperas con hemorragia posparto en el Hospital José Félix Valdiviezo

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Abstract: Postpartum hemorrhage is one of the main causes of maternal mortality. The aim of this study was to describe the demographic and clinical characteristics of postpartum women with postpartum hemorrhage in the first 24 hours in a second level hospital at the José Félix Valdivieso Hospital in Santa Isabel, Azuay, Ecuador; a descriptive, retrospective, cross-sectional, retrospective study was conducted with a sample of 105 medical records of gynecological patients attended at the José Félix Valdivieso hospital in Santa Isabel canton In the period between 2016-2020; the results obtained showed that the prevalence is in women between 20 to 30 years of age 49.35% , in free union 49.35 %, housewives 48.3%, of secondary education 80.85%, residing in urban area 48.57%. The main comorbidity is uterine atony 48.57%. In conclusion, it could be demonstrated that postpartum hemorrhage is one of the main problems in this health center, its main cause being uterine atony, and it occurs in the middle age of the patients and it is recommended to carry out prevention and promotion programs for all health professionals and to apply prevention protocols.

Keywords ─ Postpartum hemorrhage, puerperal, mortality.

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Resumen: La hemorragia posparto es una de las principales causas de mortalidad materna. Este estudio tiene como objetivo describir las características demográficos y clínicas en puérperas con hemorragia postparto en las primeras 24 horas en hospital de segundo nivel en el Hospital José Félix Valdivieso de Santa Isabel- Azuay-Ecuador; se realizó un estudio, descriptivo, retrospectivo de corte transversal, con una muestra de 105 historias clínicas de pacientes ginecológicas atendidas en el Hospital José Félix Valdivieso del cantón Santa Isabel en el periodo comprendido entre el 2016-2020; los resultados obtenidos demostró que la prevalencia es en mujeres entre los 20 a 30 años de edad 49,35%, en unión libre 49,35 %, amas de casa 48,3%, de instrucción secundaria 80,85%, que residen en área urbana 48,57%. La principal comorbilidad es la atonía uterina 48,57%. En conclusión, se pudo demostrar que la hemorragia posparto es uno de los principales problemas en esta Casa de salud, siendo su principal causa la atonía uterina, y se presenta en edad media de los pacientes y se recomienda realizar programas de prevención y promoción a todos los profesionales sanitarios y aplicar los protocolos de prevención.

Palabras clave ─ Hemorragia posparto, puérpera, mortalidad.

Introduction

Postpartum obstetric hemorrhage (PPH) is one of the leading causes of maternal death in the world. Its incidence worldwide is 25% (1). In Ecuador, maternal deaths due to obstetric hemorrhage correspond to 9.67% (2); in this sense, the prevention and management of PPH is essential to reduce maternal mortality (2,3).

The risk factors that lead to postpartum hemorrhage have become a serious problem and it is necessary to be aware of them (3,4,5). The majority of maternal deaths occur in rural areas compared to urban areas, since the limitations in the former are more marked, due to the high percentage of ignorance of the care of the gestational state, this is due to the population of less economic resources, less access to education, malnutrition, etc. (6.7.8).

At present, obstetric hemorrhage and its complications are one of the leading causes of maternal death in Ecuador (5). In this sense, it is necessary to establish the minimum parameters that guarantee quality treatment for the development of activities, procedures and interventions during the labor and postpartum process, in order to respond to this social problem that occurs in women treated at the José Félix Valdivieso Hospital; In this health unit, it is observed that there is no precise statistical analysis on the frequency of these cases, therefore it is necessary to determine the demographic and clinical characteristics associated with this complication so that these data can be used for further research or interventions to establish measures for the prevention of these cases. (6,7).

There are multiple definitions used for the diagnosis of postpartum hemorrhage, today the most accepted according to the FASGO PPH 2019 Consensus is the loss of any amount of blood that causes signs of hypovolemia and/or hemodynamic instability in the patient. (7,8,9) However, there are still international guidelines and protocols that propose other definitions, such as loss of >500ml of blood per vaginal delivery and more than 1000ml per cesarean section, 10% decrease in the patient's baseline hematocrit. (10,11, 17) The clinical picture of postpartum hemorrhage is characterized by heavy vaginal bleeding, tachycardia, arterial hypotension and tachypnea. (10,11,12,15) However, there are diagnostic criteria according to its etiology. It is considered primary if it occurs within the first 24 hours after birth (16).

PPH is a multifactorial entity, the risk is associated with demographic factors (maternal age over 35 years and under 19 years), multiparity, diabetes mellitus, arterial hypertension, post-term gestation, preeclampsia, fetal macrosomia, polyhydramnios, dysfunctional labor, oxytocin induction, retro placental hematoma, chorioamnionitis. (13,18,19) On the other hand, there are the management failures called triple delay: delay in diagnosis, delay in seeking appropriate assistance and delay in applying the appropriate treatment. (17,18,20) Therefore, the etiology of PPH can be classified into 4 major groups, known internationally as "the 4 Ts". Tone: uterine contractility disorders; Tissue: placental debris and adhesions; genital tract trauma and coagulation disorders. (21,22)

The main objective was to determine the demographic and clinical characteristics of postpartum women with postpartum hemorrhage at the José Félix Valdivieso Hospital in Santa Isabel between 2016 and 2020. In relation to the specific objectives, we set out.

To describe the demographic factors and clinical characteristics in patients who presented hemorrhage as second objective is to analyze the relationship of demographic factors and clinical characteristics in patients who presented postpartum hemorrhage. Also, to describe the intervention and management of postpartum hemorrhage in the hospital.

The purpose of this research is to determine the different characteristics associated with postpartum hemorrhage in postpartum patients, and to serve as a source of information for health personnel in order to improve the monitoring of compliance with standards and protocols, updating of knowledge and practices to ensure a birth with minimal risks through excellent care.

In order to carry out this article, the following specific objectives were proposed: to determine the clinical demographic characteristics of patients who presented postpartum hemorrhage at the José Félix Valdivieso Hospital in Santa Isabel. Also, to analyze the relationships of clinical characteristics in puerperal women with postpartum hemorrhage with demographic factors: age, origin, degree of education and occupation. To conclude this research was based on identifying parity and causes of postpartum hemorrhage based on the years 2016-2020.

The following hypothesis was raised, taking into account a relationship between demographic factors (age, origin, marital status, occupation, education) and clinical factors (weeks of gestation, termination of pregnancy, causes of PPH, complications) influencing PPH.

Methodology

Type of research

For the development of this study, a descriptive-correlational, retrospective, cross-sectional, descriptive-correlational research with a quantitative approach and a positivist framework was carried out.

Population

For the following study there was a population of 143 postpartum maternal women between adolescents and adult women who were attended at the José Félix Valdivieso Hospital of Santa Isabel, with an age range 15-42 years between the periods 2016-2020.

Sample

A non-probabilistic convenience sampling was carried out, the sample consisted of 105 according to Sierra Bravo's formula of 1988, the error corresponds (5%) that we made in estimating the sample size; based on a confidence level of 95%, taking into account the postpartum women to whom it was necessary to administer treatment for presenting PPH and who met the inclusion criteria of the research.

Inclusion criteria

All postpartum patients with postpartum hemorrhage attended at the Hospital in the hospitalization, emergency and operating room areas were included. Ages from 15 to 42 years, periods 2016 to 2020.

Exclusion criteria

With respect to the exclusion criteria, the exclusion criteria were: postpartum women who did not present postpartum hemorrhage and patients younger than 15 and older than 42 years of age.

Instruments

Database collected from the medical records of postpartum maternal patients at the José Félix Valdivieso Hospital during the period 2016- 2020 using demographic variables such as age, origin, educational level and occupation; in the clinical variables Weeks of gestation, Termination of pregnancy, Parity, Cause of Early Postpartum Hemorrhage, Duration of Labor, Diseases Complicating Pregnancy.

Procedure

This research was carried out at the José Félix Valdivieso Hospital in the city of Santa Isabel in the province of Azuay. Authorization was requested from the medical director of the hospital to access the medical records in order to analyze the information and proceed to collect demographic data (age, origin, level of education and occupation) on the clinical variables: weeks of gestation, termination of pregnancy, parity, cause of early postpartum hemorrhage, duration of labor, and diseases that complicate pregnancy. These data were obtained from the clinical history and the data collection form prepared by the author. The data were processed and analyzed by means of a database initially developed in Excel, and Info Stat and Excel graphics were used for data analysis.

Ethical considerations

In the present study, the informed consent form was completed according to the Helsinki protocol; the present research was carried out in accordance with the international ethical guidelines for health-related research in humans, which are developed by the Council of International Organizations of Medical Sciences (CIOMS). The ethical justification for developing this health-related research in humans lies in its social and scientific value; with the perspective of forging knowledge and the necessary means to promote and protect the health of mothers. Patients, health professionals, researchers, public health employees, large pharmaceutical companies and others rely on the results of different research to be able to make decisions and carry out activities that will impact on the health of people individually, which can be physical and psychological also seeks social welfare and the use of the necessary resources. Therefore, researchers were obliged to ensure that the proposed studies are scientifically sound, have adequate prior knowledge and can generate valuable information for society.

Statistical analysis

For the distribution of the prevalence of demographic and clinical characteristics in postpartum women with postpartum hemorrhage in the study population, a descriptive invariant analysis was performed using absolute and relative frequencies for qualitative variables (nominal and ordinal), and for quantitative variables (discrete and continuous) summary measures such as central tendency, position and dispersion were presented, depending on the normality of the variables using the Shapiro Wilks or France test.

Subsequently, to identify the differences in clinical characteristics in postpartum women with postpartum hemorrhage as a function of demographic factors, a bivariate analysis was performed, firstly, the normality and homoscedasticity of the dependent variable was established by partitioning the independent variables; and in the second step, an analysis of differences in means was performed

using Student's t-test for independent samples of two groups and the Anova test for groups of three or more. The aforementioned statistical analyses were performed by means of the Info Stat program.

Results

Table 1. Demographic and clinical characteristics of the study population in patients with postpartum hemorrhage according to age and weeks of gestation

	MEAN	MINIMUN	MAXIMUM
EGE	23,92	15,00	42,00
GESTATIONAL AGE	38,34	36,00	41,00

Prepared by the Authors

For the present work, a total of 105 postpartum maternal women among adolescents and adult women who were attended at the José Félix Valdivieso Hospital of Santa Isabel for presenting postpartum hemorrhage were included, with the median age of 23.92 years, with the minimum age range 15 years and maximum 42 years between the periods 2016-2020. Likewise, the median gestational age corresponds to 38.34 weeks of gestation; according to the history and review of the normal gestational age corresponds from the 37 to 42 weeks, as a minimum that has been represented the 36 weeks which is a risk for the mother and the newborn, and the maximum is 41 weeks which is exists relation to the range of normal gestational age.

Table 2. Demographic characteristics of the study population in patients with postpartum hemorrhage according to age and weeks of gestation

Demographic Characteristics		
Age	***f***	**%**
≤ 15 years	3	3,15
16 - 19 years	34	35,7
20 - 30 years	47	49,35
31- 39 years	18	18,9
≥ 40 years	3	3,15
Marital status	***f***	**%**
Free Union	47	49,35
Single	19	19,95
married	39	40,95
Level of Instruction	***f***	**%**
Primary school	19	19,95
High school	77	80,85
University	9	9,45
Occupation	***f***	**%**
Agriculture	20	21
Housewife	46	48,3
Private Employee	8	8,4
Public Employee	7	7,35
Student	24	25,2

Prepared by the Authors

In this table the demographic characteristics are determined presenting PPH in patients with the highest prevalence of 49.35% ages 20-30 years, with marital status 49.35% in free union = 47; mostly with 80.85% of secondary education degree of 77 of maternal; in relation to occupation with 48.3% are housewives with 46 cases represented in this study.

Table 3. Clinical characteristics of the study population in patients with postpartum hemorrhage according to age and weeks of gestation

Clinical Characteristics		
PARIDAD	***f***	**%**
Primiparous	58	55,23
Multiparous	47	44,76
Causes of postpartum hemorrhage	***f***	**%**
Atonía	51	48,57
Placental Remnant Retention	21	20,00
Cervical tear	20	19,04
Vaginal tear	2	1,90
Perineal tear	11	10,47
Termination of pregnancy	***f***	**%**
Birth	88	83,80
Caesarean section	17	16,19
Duration of labor	***f***	**%**
Adequate	88	83,80
Prolonged	9	8,57
Precipitated	8	7,61
Complications	***f***	**%**
Anemia	100	95,23
Preeclampsia	4	3,80
Hypovolemic shock	1	0,95

Prepared by the Authors

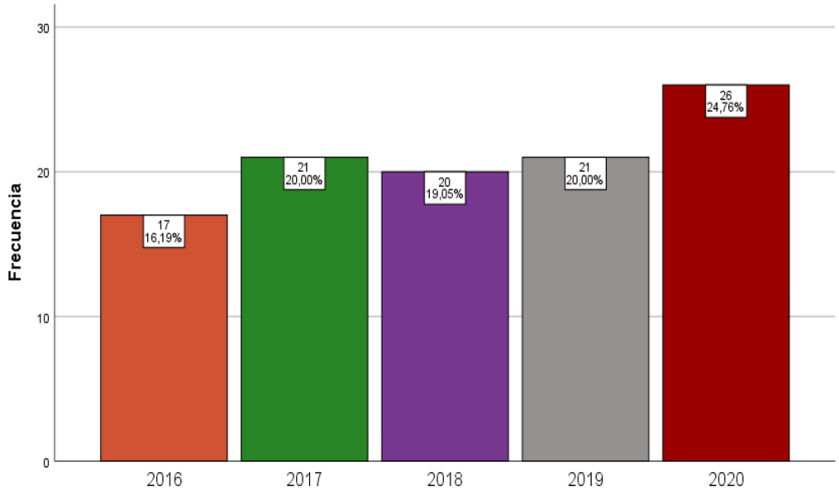
Regarding the clinical characteristics, 55.23% of the patients were primiparous with 58 cases; the main cause of PPH was 48.57% due to uterine atony with 51 cases; 83.80% represented normal or euthyroid deliveries; with an adequate duration of labor 83.80% of which are 88 patients of the study, determining as a complication of immediate postpartum hemorrhage with 95.23% presented anemia in 100 patients.

Table 4. Identify parity and causes of postpartum hemorrhage as a function of years (2016 - 2020)

LEADING CAUSE OF POSTPARTUM HEMORRHAGE 2016-2020			
Year	**N**	**Parity**	**Early Postpartum Hemorrhage**
2016	17	Primiparous	Atony
2017	21	Multiparous	Atony and Retention of Placenta Remains
2018	20	Primiparous	Atony
2019	21	Multiparous	Atony
2020	26	Primiparous	Cervical Tearing

Prepared by the Authors

The main causes of postpartum hemorrhage in the years (2016 - 2020). In the year 2016 and 2018 there is a relationship and the main cause of postpartum hemorrhage was uterine atony in primiparous patients, the difference in the year 2019 corresponds for the same cause, but presented in multiparous women; with relation in 2017 the cause was uterine atony associated with retention of placental debris. It should be noted that in the last year of study 2020 the relevant cause of the complication occurred in primigravid patients with a serious complication, which is cervical tearing, unlike in previous years.



Graph 1. Graphical representation of the frequency and percentage of postpartum hemorrhage cases in the years 2016-2020

Prepared by the Authors

According to the graph in the year 2020 there were 24.78 % cases of women with postpartum hemorrhage being the year with the highest representative incidence, and the year 2016 is the year with the least cases of bleeding complication has been presented 16.19%; in the years 2017, 2018 and 2019 postpartum hemorrhage are the percentage of 19 and 20% of cases with PPH.

Table 5. Relationship of the clinical characteristic of Termination of Pregnancy with the demographic data of education, precedence, marital status and occupation of the study population

		Termination of Pregnancy			
		Deliveries f (%)	**Cesarean sections f (%)**	**chi-squared**	**P**
Instruction	Primary education	17(16,19)	2(1,90)	11,84	0,00
	High school	63(60)	14(13,33)	31,18	0,00
	University	8(7,61)	1(0,95)	5,44	0,00
Origin	Rural	47 (44,76)	9(8,57)	25,74	0,00
	Urban	41(39,04)	8(7,61)	22,22	0,00
Civil status	Married	33(31,42)	6(7,71)	18,69	0,00
	single	18(17.14)	1(0,95)	15,21	0,00
	Free union	37(35,23)	10(9,52)	15,51	0,00
Occupation	Agriculture	17(16,19)	3(2,85)	9,8	0,00
	Housewife	39(37,14)	7(6,66)	22,26	0,00
	Teacher	1(0,95)	----	----	0,00
	Private employee	5(4,46)	2(1,90)	1,29	0,25
	Public employee	5(4,46)	1(0,95)	2,67	0,01
	Student	21(20)	3(2,85)	13,5	0,00
	Hairdresser	----	1(0,95)	----	0,00

Prepared by the Authors

In this table there is a correlation in the termination of pregnancy in childbirth and cesarean section with a percentage of 60% in normal childbirth, in women with secondary education = 47 deliveries which corresponds to 44.36% in percentage were women from the rural sector, 37 deliveries with 35.23% of the deliveries were in women with marital status of free union and most of their occupation is as housewives 37.14%, likewise their termination of pregnancy is in normal childbirth. The non-parametric Chi-square test was applied since both variables are nominal, obtaining a p value = 0.000, which indicates that there is a relationship between both variables since the significance value < 0.05.

Table 6. Demographic and clinical characteristics of the study population in patients with postpartum hemorrhage in relation of clinical characteristic parity with demographic data instruction, precedence, marital status and occupation

		Party			
		Primiparous f (%)	**Multiparous f (%)**	**chi-squared**	**P**
Instruction	Primary education	8(7,61)	11(10,47)	0,47	0,49
	High school	47(44,76)	30(28,57)	3,75	0,05
	University	2(1,90)	7(6,66)	2,78	0,09
Origin	Rural	27(25,71)	29(27,61)	0,7	0,00
	Urban	30(28,57)	19(18,09)	2,47	0,10
Civil status	Married	12(11,42)	27(27,71)	5,77	0,01
	single	18(17,14)	1(0,95)	15,21	0,00
	Free union	27(25,71)	20(19,04)	1,04	0,30
Occupation	Agriculture	8(7,61)	12(11,42)	0,8	0,37
	Housewife	20(19,04)	21(20)	0,78	0,39
	Teacher	----	1(0,95)	----	0.00
	Private employee	2(1,90)	5(4,46)	1,29	0,25
	Public employee	3(2,85)	3(2,85)	----	0,99
	Student	23(21,90)	1(0,95)	20,17	0,00
	Hairdresser	1(0,95)	----	----	0,00

Prepared by the Authors

According to parity, the highest percentage corresponds to primiparous women, in relation to primiparous women with primary education corresponds to 44.76% (47), in relation to origin, urban origin stands out with 28.57% (30); with respect to equivalent marital status in this range, the highest prevalence predominates in women living in a free union with 25.71%, and the majority are students with a figure of 21.90%.

Table 7. Demographic and clinical characteristics of the study population in patients with postpartum hemorrhage in relation to clinical characteristic causes of PPH with demographic data instruction, precedence, marital status and occupation

Causes of Postpartum Hemorrhage								
		Uterine atony (%)	Cervical tear (%)	Perineal tear (%)	Vaginal tear (%)	Retention of placental debris (%)	chi-square	p
Instruction	Primary education	9(8,57)	1(0,95)	3(2,85)	1(0,95)	5(4,46)	11,94	0,01
	High school	38(36,19)	17(16,19)	8(7,61)	1(0,95)	13(12,38)	52,05	0,00
	University	4(3,80)	2(1,90)	----	----	3(2,85)	0,67	0,71
Origin	Rural	25(23,80)	11(10,47)	7(6,66)	1(0,95)	12(11,42)	27,93	0,00
	Urban	26(24,76)	9(8,57)	4(3,80)	1(0,95)	9(8,57)	43,94	0,00
Civil status	Married	18(17,14)	8(7,61)	1(0,95)	1(0,95)	11(10,47)	26,51	0,00
	single	6(5,71)	6(5,71)	3(2,85)	1(0,95)	3(2,85)	4,95	0,29
	Free union	27(25,71)	6(5,71)	7(6,66)	0(0)	7(6,66)	34,17	0,00
Occupation	Agriculture	9(8,57)	5(4,46)	2(1,90)	0(0)	4(3,80)	5,2	0,15
	Housewife	25(23,80)	5(4,46)	4(3,80)	1(0,95)	11(10,47)	44,78	0,00
	Teacher	1(0,95)	----	----	----	----	----	0,00
	Private employee	3(2,85)	2(1,90)	----	----	2(1,90)	0,29	0,86
	Public employee	2(1,90)	1(0,95)	1(0,95)	0(0)	1(0,95)	0,67	0,88
	Student	10(9,52)	7(6,66)	4(3,80)	1(0,95)	2(1,90)	11,42	0,02
	Hairdresser	1(0,95)	-----	----	----	----	----	0,00

Prepared by the Authors

The main cause of postpartum hemorrhage in relation to education is uterine atony in women with secondary education with 36%, who live in urban areas with 25% in marital union status 25% and who perform their occupation as housewives in 23%.

Table 8. Demographic and clinical characteristics of the study population in patients with postpartum hemorrhage in relation of clinical characteristic Duration of Labor with demographic data instruction, precedence, marital status and occupation

Labor Duration						
		Adequate	Prolonged	Precipitated	chi-square	p
Instruction	Primary education	10(9,52)	6(5,71)	3(2,85)	3,89	0,14
	High school	70(66,66)	2(1,90)	5(4,46)	178,43	0.00
	University	8(7,61)	1(0,95)	0(0)	5,44	0,01
Origin	Rural	44(41,90)	7(6,66)	5(4,46)	87,00	0,00
	Urban	44(41;90)	1(0,95)	4(3,80)	109,94	0,00
Civil status	Married	31(29,52)	6(5,71)	2(1,90)	38,00	0,00
	single	16(15,23)	2(1,90)	1(0,95)	35,53	0,00
	Free union	47(44,76)	5(4,46)	1(0,95)	97,60	0,00
Occupation	Agriculture	13(12,38)	2(1,90)	5(4,46)	9,70	0,00
	Housewife	41(39,04)	3(2,85)	2(1,90)	100,96	0,00
	Teacher	1(0,95)	----	----	0,00	0,00
	Private employee	7(6,66)	----	----	0,00	0,00
	Public employee	5(4,46)	1(0,95)	----	2,67	0,10
	Student	20(19,04)	3(2,85)	1(0,95)	43,67	0,00
	Hairdresser	1(0,95)	----	----	0,00	0,00

Prepared by the Authors

In the following table there is a relationship in the duration of labor in patients with secondary education with an adequate labor, in the same way there is an equality of cases in relation both in patients of urban and rural origin being 41.90% that persists in women who have a marital status of free union, and who are housewives 39.04%.

Table 9. Demographic and clinical characteristics of the study population in patients with postpartum hemorrhage in relation of clinical characteristic complications of PPH with demographic data instruction, precedence, marital status and occupation

Complications of Postpartum Hemorrhage						
		Anemia	**Preeclampsia**	**shock hypovolemic**	**chi-square**	**p**
Instruction	Primary education	19(18,09)	----	----	0,00	0,00
	High school	72(68,57)	4(3,80)	1(0,95)	125,64	0,00
	University	9(8,57)	----	----	0,00	0,00
Origin	Rural	54(51,42)	2(1,90)	----	48,29	0,00
	Urban	46(43,80)	2(1,90)	1(0,95)	80,86	0,00
Civil status	Married	38(36,19)	1(0,95)	----	35,10	0,00
	single	18(17,14)	1(0,95)	----	15,21	0,00
	Free union	44(41,90)	2(1,90)	1(0,95)	76,89	0,00
Occupation	Agriculture	19(18,09)	1(0,95)	----	16,20	0,00
	Housewife	44(41,90)	1(0,95)	1(0,95)	80,39	0,00
	Teacher	1(0,95)	----	----	0,00	0,00
	Private employee	7(6,66)	----	----	0,00	0,00
	Public employee	6(5,71)	----	----	0,00	0,00
	Student	22(20,95)	2(1,90)	----	16,67	0,00
	Hairdresser	1(0,95)	----	----	0,00	0,00

Prepared by the Authors

The main complications of postpartum hemorrhage in this review study were anemia (68.57% of the total sample of 105 patients), with a predominance of patients from rural areas, of unmarried marital status, and housewives.

Discussion

Postpartum hemorrhage (PPH) is the leading cause of maternal morbidity and mortality worldwide. It is essential to recognize that the literature has described a series of identifiable risk factors for PPH, which make it possible to identify postpartum women at high risk of presenting this complication; however, in other cases it can occur in women with no known or clinically associated factors. There are a large number of risk factors ranging from socioeconomic status to clinical characteristics that should be identified early.

In relation to the different studies reviewed, age is considered as a demographic characteristic for PPH in women younger than 15 years and older than 35 years; in relation to our study there are women in these age groups, however, the high percentage is between 18 -26 years; the average age was 23 years, this is consistent with a study in 2012 conducted in Cuba, which showed that 50% of patients were found in the age group between 21 and 34 years (26,27). These data show that age is a very important factor for this obstetric pathology; there is coincidence in considering pregnant women between 20 and 35 years of age as a group at higher risk, but not leaving aside adolescents who are also a very vulnerable group.

Likewise, the present study compared with others has similar results, suggesting that marital status is a very significant characteristic for postpartum hemorrhage. A study carried out in Colombia where the age of the patients who presented PPH was between 13 and 42 years, most of them were multiparous, 50% of the patients lived in a free union, and most of them lived in urban areas (27). These last data are like our study; marital status and urban origin are correlated with the main cause of PPH, which corresponds to uterine atony, and the same demographic characteristics are related to parity, the only difference in our study is the high percentage of primigravid patients who presented PPH. (28,29)

In the case of the educational level of the postpartum women, 73% of them have high school education, and with respect to occupation, 29% of the patients are housewives. Both results are correlated with the clinical characteristic of term pregnancy and the most common cause of PPH, which is uterine atony. These data are in agreement with Santana A, where he found that 56.4% have high school and 84.8% are housewives (28). In the case of our study the clinical characteristic of primigravidae is correlated in 21% with students. Likewise, a study carried out in Ambato, Ecuador, found that 65% have or have finished high school (30). From the results obtained, it can be established that the study population has high school, which shows that women have an adequate level to be able to grasp the information to prevent unwanted pregnancies, adequate prenatal control and its complications, and women who are housewives are highly concerned about the home, other children, etc., which leads them to neglect their health.

In the study it was found that 45.5% of the patients were multiparous, of which 26.6% corresponded to rural origin, this result is related to the study carried out in Colombia, which determined that of the 78 patients who presented postpartum hemorrhage, 53.8% were multiparous (30), this may be caused by the loss of elasticity of the muscular fibers of the uterus due to multiple pregnancies and this leads to a higher incidence of PPH.

Regarding uterine atony, 48.6% of the cases presented uterine atony, this result is related to the study of Lucana H, where 63.7% of the group of cases presented uterine atony, in contrast to the control group where 76.3% of the pregnant women at term did not have atony (29), thus uterine atony is caused by the deterioration of the contractibility of the uterine muscle fiber.

Conclusions

After analyzing the data of the present study of the postpartum women who presented PPH, it was concluded: The most prevalent demographic characteristics of the postpartum women who presented postpartum hemorrhage were age between 18-26 years, urban residence, with a high school level and housewife marital status.

The demographic situation could increase the incidence of postpartum hemorrhage in women living in rural areas and is related to multiparity, either due to lack of access to health systems or lack of prenatal checkups.

Due to these figures, it is important to emphasize the importance of active management of the third stage of labor with trained personnel.

The most frequent cause of postpartum hemorrhage found was uterine atony, so the protocols for active management of the third stage of labor should be strictly followed, with the appropriate use of uterotonics, controlled cord traction and uterine massage.

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