

Assistance factors that influence the high indexes of maternal mortality for puerperal hemorrhage

Fatores assistenciais que influenciam nos altos índices de mortalidade materna por hemorragia puerperal

Factores de asistencia que influyen en los altos índices de mortalidad materna para la hemorragia puerperal

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REVISA

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RESUMO

Objetivo: evidenciar os fatores relacionados a assistência no manejo da hemorragia pós-parto que contribuem para que esse agravo esteja entre as maiores causas de mortalidade materna. **Método:** Para isso foi realizada uma revisão integrativa da literatura, por meio da análise de periódicos publicados de 2010 a 2019 nas bases de dados SciELO, MEDLINE e PUBMED, além de dados do Ministério da Saúde, da OPAS, da OMS, da Fiocruz e do IBGE. **Resultados:** Foram encontrados um total de 55 publicações, sendo 40 artigos, 1 livro, 5 manuais, 2 protocolos e 7 publicações em sites oficiais. Na análise final dos estudos 13 artigos, 1 livro, 5 manuais, 2 protocolos e 7 publicações em sites oficiais com dados de saúde foram utilizados para a elaboração da pesquisa. **Conclusão:** torna-se imprescindível refletir quanto às dificuldades na aplicação de um manejo adequado da HPP, além de todas as consequências que essa intercorrência acarreta na vida dessas mulheres e de seus familiares, fatores esse que evidenciam a magnitude de um problema de saúde pública. Portanto, é inevitável que as políticas públicas, os profissionais de saúde, principalmente aqueles que prestam assistência na área da obstetria e os pesquisadores, tenham uma maior cautela em relação a HPP. **Descritores:** Hemorragia Pós-Parto; Diagnóstico Precoce; Protocolo.

ABSTRACT

Objective: to highlight the factors related to assistance in the management of postpartum hemorrhage that contribute to this condition being among the major causes of maternal mortality. **Method:** For this purpose, an integrative literature review was carried out, through the analysis of journals published from 2010 to 2019, in the SciELO, MEDLINE and PUBMED databases, in addition to data from the Ministry of Health, PAHO, WHO, Fiocruz and IBGE. **Results:** A total of 55 publications were found, 40 articles, 1 book, 5 manuals, 2 protocols and 7 publications on official websites. In the final analysis of the studies, 13 articles, 1 book, 5 manuals, 2 protocols and 7 publications on official websites with health data were used to prepare the research. **Conclusion:** it is essential to reflect on the difficulties in applying proper management of PPH, in addition to all the consequences that this complication has on the lives of these women and their families, factors that demonstrate the magnitude of a public health problem. Therefore, it is inevitable that public policies, health professionals, especially those who provide assistance in the area of obstetrics and researchers, are more cautious in relation to PPH. **Descriptors:** Postpartum hemorrhage; Early Diagnosis; Protocol.

RESUMEN

Objetivo: destacar los factores relacionados con la asistencia en el manejo de la hemorragia posparto que contribuyen a que esta afección se encuentre entre las principales causas de mortalidad materna. **Método:** para este fin, se realizó una revisión integral de la literatura, a través del análisis de revistas publicadas de 2010 a 2019, en las bases de datos SciELO, MEDLINE y PUBMED, además de datos del Ministerio de Salud, OPS, OMS, Fiocruz y IBGE. **Resultados:** se encontraron un total de 55 publicaciones, 40 artículos, 1 libro, 5 manuales, 2 protocolos y 7 publicaciones en sitios web oficiales. En el análisis final de los estudios, se utilizaron 13 artículos, 1 libro, 5 manuales, 2 protocolos y 7 publicaciones en sitios web oficiales con datos de salud para preparar la investigación. **Conclusión:** es esencial reflexionar sobre las dificultades para aplicar un manejo adecuado de la HPP, además de todas las consecuencias que esta complicación tiene en la vida de estas mujeres y sus familias, factores que demuestran la magnitud de un problema de salud pública. Por lo tanto, es inevitable que las políticas públicas, los profesionales de la salud, especialmente aquellos que brindan asistencia en el área de obstetricia e investigadores, sean más cautelosos en relación con la HPP. **Descritores:** Hemorragia Post Parto; Diagnostico Temprano; Protocolo.

Introduction

Pregnancy is a unique and very important event in the woman's life, it is the phase that precedes childbirth, marked by numerous physiological and emotional transformations. Some women during pregnancy are more vulnerable and others show a more strengthened psychological and prepared for the changes. It is essential that health professionals are able to adequately assist women in labor, as in some situations a moment that should be special can become traumatizing. Thus, good prenatal care is essential to prevent complications during the pregnancy-puerperal cycle.¹

Postpartum haemorrhage (PPH) is characterized as profuse bleeding that can manifest after vaginal or cesarean deliveries, which can result in coagulation disorders, renal failure, hypovolemic shock, Sheehan syndrome and adult respiratory distress.² It is defined as blood loss above 500 ml in vaginal deliveries and more than 1,000 ml after cesarean sections, or blood loss through the genital tract that results in hemodynamic instability. It is classified into: primary PPH, when it occurs within the first 24 hours or secondary, those that occur after 24 hours and may manifest up to six weeks postpartum.³⁻⁵

Among the predisposing conditions for PPH are multiparity, anomalous and retained placenta, prolonged and instrumented delivery, pregnancy that presented hypovolemia and anemia, hematomyometrial infiltration (Couvalaire's uterus), uterine overstrain, episiotomy, postpartum uterine curettage, chorioamnionitis, previous atony, pre-eclampsia, use of oxytocin in the first period, use of uteroinhibitors, thrombocytopenia or hypofibrinogenemia and conductive anesthesia.⁶⁻⁷ It is important to identify the risk factors for PPH, in order to ensure early diagnosis and establish treatment; on the contrary, it will result in imminent risk, and may progress to hypovolemic shock and death.²

Among the recommendations issued by the WHO (2014) for the prevention of PPH, the importance of using uterotonics during the third phase of vaginal or cesarean delivery is highlighted and recommends the use of oxytocin (10 IU, IV / IM), if not if available, the use of other injectable uterotonics is advised. Late clamping of the umbilical cord should be performed between 1 to 3 minutes after birth and, subsequently, perform essential care for the newborn. It is essential that, during assistance, professionals assess the abdominal uterine tone in order to early identify the occurrence of uterine atony. Controlled cord traction should be associated with the Brandt-Andrews⁷ maneuver, favoring uterine stabilization, and should only be performed by trained professionals. It is also emphasized the importance of performing uterine massage after delivery, every 15 minutes for the first 2 hours after leaving the placenta. Therefore, methods for the prevention of PPH should be added to the routines of all professionals who provide birth assistance, thus reducing the high maternal morbidity and mortality rates.

Treatment for PPH initially consists of controlling the bleeding site in order to prevent progression to hypovolemic shock. Drug treatment is essential in situations with uterine atony, which is the most common cause of PPH. The medication of choice is oxytocin and the others that can be used are: methylergometrine, misoprostol and tranexamic acid. Another non-surgical

intervention that is necessary in cases of atony is uterine massage bi manual or Hamilton Maneuver.⁷ The intrauterine tamponade balloon (BTI)⁸ is widely used in cases of PPH, as it assists in the temporary or definitive containment of bleeding or until new procedures are established. It can be used simultaneously with the non-pneumatic anti-shock (TAN) suit in obstetrics. When the medications and non-surgical strategies mentioned above do not show significant results, it is necessary to proceed to surgical treatment.⁹

Data from PAHO and WHO¹⁰ revealed that between the years 1990 and 2015, the maternal mortality rate was reduced by approximately 44% worldwide. However, it is estimated that 303 thousand women died in 2015 worldwide due to factors related to pregnancy, childbirth and postpartum. And that every day there are about 830 maternal deaths associated with pregnancy and childbirth, 99% of them in developing countries, and it affects mainly women who live in rural areas and in situations of poverty. Unfortunately, this is due to inequalities in access to basic principles such as: education, nutrition and health, as well as inadequate healthcare.

Research carried out by the Brazilian Institute of Geography and Statistics-IBGE¹¹ pointed out that in Brazil, in 2015, the mortality rate was 62 maternal deaths per 100 thousand live births and in the same year some regions of the country stood out for presenting the highest mortality rates; the north with an average coefficient of 76% and the northeast with 75.3% of maternal deaths per 100,000 live births, exceeding the national average. And with lower rates, there are the southeast regions with a rate of 54.3% and the central west with 65.9% of maternal deaths for every 100,000 live births during that year.

In September 2015, heads of state and government and senior representatives met at the United Nations headquarters in New York to decide on the new global Sustainable Development Goals, in which 17 universal goals and targets were established that should be adopted by 2030. The third objective is to ensure a healthy life and promote well-being for all regardless of age and, having knowledge of the maternal mortality situation at a global level, goal 3.1 was established, which deals with the commitment to reduce the reason maternal mortality to a maximum of 30 deaths per 100,000 live births.¹²

Many cases of maternal deaths could have been prevented through actions that identified the predisposing conditions for PPH. Thus, it is essential to have strategies that encourage patients' access to prenatal care and that it is extended to the puerperium. A thorough anamnesis should be carried out containing all previous gynecological obstetric history, comorbidities and medications in use. It is essential to identify and treat comorbidities such as anemia and monitor blood pressure levels, avoiding complications such as pre-eclampsia, gestational hypertension and hemorrhages. The risk stratification of the pregnant woman should be done by providing adequate assistance according to the pre-determined risks, in addition to constant monitoring throughout the gestational cycle, considering that health conditions may change over this period. Therefore, the faster the identification of risk factors, the less complications and maternal deaths due to PPH.¹³

Among the actions implemented to reduce maternal mortality, the Zero Maternal Mortality from Hemorrhage project stands out, which has been carried out since 2014 with the PAHO / WHO initiative in its Latin American Center for Perinatology, Women's and Reproductive Health (CLAP / SMR)

and has the support of the Latin American Federation of Societies of Obstetrics and Gynecology (FLASOG). These fronts work by mobilizing governments, civil society and communities so that with the collaboration of all and joint actions there is a reduction in severe maternal mortality rates as soon as possible through the prevention of maternal deaths and also the training of professionals with the adoption of simple technologies based on the available resources, aiming to break the difficulties and the geographical and cultural barriers.¹⁴

In 2016, the first training in Brazil for the instructors of the Zero Maternal Death by Hemorrhage strategy took place, promoted by the Ministry of Health and PAHO, with the support of CLAP / SMR, from the Brazilian Federation of Gynecology and Obstetrics Associations (FEBRASGO), International Federation of Gynecology and Obstetrics (FIGO) and FLASOG. This action aimed to prepare doctors and nurses through lectures, debates and realistic simulations of HPP to be technically supported and to support the implementation of the strategy in other Brazilian states, preventing complications for women and babies.¹⁵

Among the fundamental objectives of this strategy is to strengthen the skills of health professionals, improving the skills to act in the management of hemorrhagic obstetric emergencies. And, in the face of serious obstetric complications, assistance by trained professionals is essential to achieve the purposes, support the strengthening of health services, the eradication of deadlocks to access and the guarantee of medicines and blood for transfusions.⁷

PPH is responsible for an important number of maternal deaths in Brazil, which is why it is considered an obstetric emergency, reaching high mortality rates in underdeveloped countries. These complications are preventable, as long as protocols are applied in hospitals and maternity hospitals (intensifying the active management of the third phase of labor), in addition to a previous diagnostic approach and the training of health teams.¹⁶

In this sense, some recommendations were issued by the WHO Guidelines Development Group (GDD)⁵ regarding the organization of the management and treatment of PPH. Among them, the importance of adopting formal protocols for prevention, treatment and transfer of affected patients is emphasized, in health facilities that provide care related to maternity. Institutions should also provide training with simulations on how to proceed in cases of PPH.

Thus, professionals must act with competence and agility in the face of hemorrhagic complications in the puerperium and for that they must have scientific knowledge and be in constant search for training and qualifications.¹⁷ Having knowledge of the recommendations issued to reduce maternal mortality and the importance of implementing prevention methods, such as prior training of professionals, through training and the use of manuals and protocols, this study aimed to highlight the factors related to care in the management of PPH that contribute for this disease to be among the biggest causes of maternal mortality.

Method

This is an integrative literature review, carried out between January and May 2020, to identify productions on assistance in postpartum hemorrhage between the years 2010 and 2019. Six steps were established for its constitution: 1) selection of the research question; 2) definition of study inclusion criteria and sample selection; 3) representation of the selected studies in table format, considering all the characteristics in common; 4) critical analysis of the findings, identifying differences and conflicts; 5) interpretation of results and 6) report clearly the evidence found.

The guiding question formulated for publications search was: "The quality of care provided to women during the puerperal pregnancy cycle with regard to the diagnosis and management of PPH is being effective, since this condition is one of the main causes of maternal death ? "

The strategy for identifying and selecting the studies was the search for indexed publications, carried out in February 2020, in the databases Medical Literature and Retrieval System on Line (MEDLINE), PubMed, Scientific Electronic Library online (SciELO) and at the Center Latin American and Caribbean Health Sciences Information (LILACS) and data and manuals available on the portals of the World Health Organization (WHO), the Pan American Health Organization (PAHO), the Brazilian Federation of Gynecology Associations and Obstetrics (FEBRASGO), Oswaldo Cruz Foundation (FIOCRUZ).

The following criteria were adopted for the selection of articles: all categories (original, literature review, update, experience report, etc.); articles with abstracts and full texts available for analysis; those published in Portuguese, English or Spanish, between the years 2010 and 2019, and articles that contained in their titles and / or abstracts the following descriptors in health sciences (DeCS): postpartum hemorrhage and maternal mortality. As an exclusion, it was established the use of articles that dealt with general bleeding protocols and not exclusively with PPH, monographs, dissertations and theses.

The terms applied for studies search were: prevenção AND "hemorragia pós-parto" AND "fatores de risco" AND protocolo AND "mortalidade materna".

For the organization and tabulation of data, the researchers developed a data recording instrument (Table 1) containing: author, year of publication, title, nature of the study and general risk factors, category of the study. Following the inclusion criteria, 21 studies were selected for analysis, which are referenced in this text

Results

A total of 55 publications were found, 40 articles, 1 book, 5 manuals, 2 protocols and 7 publications on official websites. Titles and abstracts were read in full for the 40 articles, among which 27 were excluded in relation to the eligibility criteria. In the final analysis of the studies, 13 articles, 1 book, 5 manuals, 2 protocols and 7 publications on official websites with health data were used to prepare the research.

Table 1. Characteristics of publications selected for the review

Author/Year	Title	Type of study
Pan American Health Organization - Opas/ 2018	Care Recommendations Manual for prevention, diagnosis and treatment of obstetric bleeding	PAHO recommendations for the purpose of defining and describing methodological proposals for workshops linked to the Zero Maternal Death from Hemorrhage strategy.
World Health Organization - WHO/ 2014	WHO Recommendations Manual for the prevention and treatment of postpartum hemorrhage	WHO recommendations to provide a basis for the development of the strategic policies and programs needed to ensure the implementation of effective interventions to reduce the global burden of HPP.
Say L, Chou D, Gemmill A, Tunçalp Ö, Moller A-B, Daniels J, et al./2014	Global causes of maternal death: a WHO systematic analysis	Bibliographic research to analyze global estimates of the main causes of maternal mortality from January 2003 to December 2012.
Dias S, Pereira AKS, Cabral ALM/ 2019	Immediate postpartum hemorrhage: performance of the nursing team	Bibliographic research, of a nature qualitative, which sought to identify updates in the literature regarding postpartum hemorrhage and to clarify the role of the nursing team in the care provided to puerperal women affected by immediate postpartum hemorrhage.
Macedo PC, Lopes HH /2018	Postpartum hemorrhage: a review article	Literature review that sought to update the theme, focusing on the identification of factors risk management, therapeutic management and methods of preventing PPH.
Gonçalves CR, Osanan GC, Delfino SM / 2016	Puerperal Hemorrhage Protocol	Protocol aimed at protecting and promoting women's health with an immediate impact on the prevention of maternal morbidity and mortality in the city of Belo Horizonte.
Fundação Oswaldo Cruz - Fiocruz./ 2019	Key Questions About Postpartum Hemorrhage Management	Guidance on the main questions about the management of PPH.
Rangel R de CT, Souza M de L de, Bentes CML, Souza ACRH de, Leitão MN da C, Lynn FA,	Care technologies for the prevention and control of hemorrhage in the third stage of childbirth: a systematic	A systematic review that sought to identify the evidence regarding the contributions of the care technologies used to prevent and control hemorrhage in the third

et al./ 2019	review	stage of childbirth.
Villarreal ALC, López JCP/ 2013	Review of soft instrumented uterine cavity versus manual review of the relationship with postpartum hemorrhage	Observational, cross-sectional and descriptive study that aimed to demonstrate uterine cavity revision techniques that prevent puerperal hemorrhage.
Padilha CB, Ravelli APX, Wosniak TC, Szczerepa MF, Alves FBT, Skupien SV./2019	Review: Postpartum hemorrhage	The objective was to conduct an integrative review of the production of knowledge about hemorrhage postpartum between the years 2013 to 2017
Díaz NB, Samper NC, Medina NC, Díaz LF, Jover AM, Ingelmo JMR /2014	Oxytocin compared to carbetocin to prevent postpartum hemorrhage brings cesarean.	Its purpose was to compare the effects of uterotonics, through an observational and retrospective study.
Brazilian Federation of Gynecology and Obstetrics - Febrasgo/ 2010	Guidance Manual Abortion, Childbirth and Puerperium	Manual with guidance regarding assistance during abortion, childbirth and the puerperium, in order to reduce maternal mortality rates.
Baggieri RAA, Vicente GS, Cabalero C, Barbosa HM, Santos RS, Baggieri RAA, et al./2011.	Postpartum hemorrhage: prevention and treatment	Bibliographic review that aimed to analyze methods of prevention and treatment of PPH.
Mavrides E, Allard S, Chandraharan E, Collins P, Green L, Hunt BJ, Riris S, Thomson AJ./2016	Prevention and management of postpartum haemorrhage	Review of guidelines for the management of puerperal bleeding.
WHO, 2012	Recommendations for the prevention and treatment of postpartum haemorrhage	WHO recommendations in order to provide a basis for the design and implementation of strategic and effective policies and programs, with a view to reducing global HPP rates.

Discussion

In a report carried out by PAHO in 2018, the maternal mortality ratio in Brazil in 2015 was equivalent to 216 deaths per 100,000 live births. As indicated by WHO⁵, such indices may have PPH as a cause, since it is the main cause of maternal deaths in developing countries, being also responsible for a quarter of

all maternal deaths globally. This body also emphasizes that most of these deaths could be prevented through measures that improve the assistance provided to these women.

When analyzing the cases of maternal deaths from PPH, some problems were identified that hinder their management. Among them is the delay of the patient to seek help in a health unit and organizational ones. These factors often contribute to the expenditure of time for the outcome of the PPH, and also favor the delay in the control of puerperal bleeding and the adoption of inappropriate conduct due to the lack of preparation of professionals, thus resulting in prolonged disabilities and even deaths.^{7,18}

It is essential that professionals have an understanding of the techniques and intervention measures, as well as their indications and probable complications that may occur, the importance of carrying out training and continuous training for the entire team responsible for providing care, in order to provide assistance with higher quality and favor the improvement of technical and scientific capabilities. As well as the need for the implementation and institution of management manuals and protocols favoring success and agility in treatment.¹⁹⁻²⁰ It also assumes that maternal mortality rates will only be reduced when there is quality care during the prenatal period, active control in the third delivery period and agile and efficient therapeutic management.

When drafting recommendations on PPH, WHO5 in the process of evaluating cases of maternal death due to PPH or maternal near miss²⁸, noted that delay in handling is the main responsible for complications and, thus, time is considered an essential issue in through these situations. In view of this scenario, he noted the importance of intensifying attention to management time, adopting the "Golden Hour" concept in obstetrics, which aims to suppress morbidity and mortality rates related to delays in the approach to puerperal bleeding. The ideal is the prevention and control of bleeding within the first hour after the diagnosis is established or at least to be at an advanced stage of treatment at the end of this period, always seeking to stop the lethal triad of hemorrhage, characterized by: acidosis, coagulopathy and hypothermia. Therefore, professionals need to be able to act in these situations with awareness and precision, adopting sequenced steps with the least amount of time possible.

Knowing that HPP is among the main causes of maternal death in the world and because it is one of the most feared obstetric emergencies, it is essential that the health team has knowledge of the risk factors that may manifest during pregnancy, childbirth and in the puerperium, seeking to prevent and reduce the occurrence of this complication.²³ However, despite being able to present itself in an unpredictable way, there are several risk factors associated with severe hemorrhage that need to be identified even during prenatal care, to be carefully monitored and managed correctly in order to avoid further complications. For this, the professional must be aware of the indications that lead to a correct diagnosis for the effective conduct of assistance.²⁰

Strategies for preventing bleeding should start with determining the risk profile of each woman still in prenatal care and from there outline methods to treat and prevent possible complications that may manifest during pregnancy or during childbirth, preventing so that a little bleeding develops into a severe hypovolemia.²¹ Thus, the combination of prediction and prevention, early

analysis, sequenced, coordinated, rapid and effective actions are essential to guarantee and reduce maternal deaths from PPH. Therefore, for this to be possible, it is necessary that the team is trained to use protocols with a multidisciplinary approach involving strategies for hemodynamic maintenance, identification and treatment in a timely manner.

It is essential that professionals are able to detect the signs and symptoms that can lead to the appearance of a puerperal hemorrhage, therefore, it is necessary that they are prepared to perform the interventions and care as soon as possible, reducing the risk of the evolution of a moderate to irreversible bleeding. Thus, a trained, qualified team with competent professionals is essential for an effective management of PPH.²²

In this same sense, PAHO (2018) and WHO (2014) establish in their manuals that it is essential that measures for the prevention of PPH are included in the daily lives of professionals and emphasizes that prior planning is essential for a good performance of the team in face of complications and emergencies. These bodies suggest some instruments that should be used by professionals and by the units, among them, the use of realistic simulations, training and formal protocols, all with the purpose of favoring the management of puerperal bleeding, in a sequenced, conscious and correct manner, being these indispensable steps for timely management of PPH. Also according to WHO, the process for implantation and implementation of formal protocols is a complex process and full of challenges, since it is necessary the support of managers for the local adaptation of general guidelines.

According to a publication made in 2019 through the Oswaldo Cruz Foundation's Good Practices Portal, the adoption of tools such as bleeding kits and checklist containing flowcharts with information on the main diagnoses and treatment sequence are great and important allies when addressing a condition from HPP. These tools must be available in all maternity hospitals, be easily accessible and understood and be applied to professionals with different qualifications. The purpose of the HPP protocol is to prevent and reduce maternal mortality, to ensure that pregnant women and postpartum women receive humanized assistance and that access to care is easy. Directly impacting the indexes of the main cause of preventable maternal death.⁹

Among the main causes for PPH described are uterine atony (80 to 90%) being responsible for 4% of maternal deaths.²⁴ They can be highlighted as risk factors related to the high rates of maternal mortality, in addition to uterine atony, the great multiparity and the prolonged use of oxytocin.²⁵ Such conduct is mostly defined by the professional who assists delivery and in some cases it is used sparingly. The presence of important traumas that were not observed, in addition to the routine episiotomy, allows the maintenance of bleeding, a result that calls into question the use of this procedure indiscriminately.²⁵

The absence of myoteaming at the placental implantation site prevents the primary occlusion of the vessels and the activation of coagulation suppressing thrombotamponing which results in a consistent blood loss.¹⁷ For this event to happen properly, it is necessary to emphasize that childbirth assistance must be performed by a qualified professional who is aware of the importance of using uterotonics immediately after birth, as well as performing controlled cord traction and uterine massage after the discharge. Uterine massage and the application of oxytocin 10 IU intramuscularly as a first-line

uterotonic in prophylaxis of hemorrhage. When there is no such knowledge by the professional assisting childbirth, the chances of complications due to hemorrhage and the evolution to maternal death increase, contributing to the increase in maternal death rates due to poor care.

Anemia as a pathology related to PPH and make it clear that identifying and treating it can reduce the morbidity associated with puerperal hemorrhage. Studies have shown that low hemoglobin levels are associated with blood loss during childbirth and the puerperium. Therefore, it is important that the professional is attentive and knows that parenteral supplementation should be considered in cases where there are no satisfactory oral responses.²⁶

It is important to consider that active management in the third period of delivery is essential to prevent bleeding, which can only be well managed when the professional is qualified to manage a case of PPH. Therefore, it is essential to strengthen the structure of quality prenatal care, with the correct management of prevention and therapy in a quick and effective way in order to reduce maternal morbidity and mortality and by improving the quality of care and care for mothers.²⁰

Final Consideration

Good performance in the face of a HPP condition depends on a competent and trained team that knows how to detect signs suggestive of obstetric complications in advance. In addition, a factor to be considered is that the units implement instruments such as manuals and protocols in order to assist professionals in adopting effective management actions, seeking to offer humanized, safe care that can guarantee the quality of the service provided.

Considering what has been observed, it is essential to reflect on the difficulties in the application of proper management of PPH, in addition to all the consequences that this complication has on the lives of these women and their families, factors that demonstrate the magnitude of a problem public health. Therefore, it is inevitable that public policies, health professionals, especially those who provide assistance in the area of obstetrics and researchers, are more cautious in relation to PPH.

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