Postpartum hemorrhage management and nursing care interventions: An updated review

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Abstract---**Background:** Postpartum hemorrhage (PPH) is a leading cause of maternal mortality globally, contributing to approximately 27.1% of maternal deaths. The primary cause of PPH is uterine atony, characterized by the failure of the uterus to contract after childbirth. Despite active management strategies like exogenous oxytocin administration, PPH rates have not significantly decreased, and there is growing evidence suggesting adverse effects from medical interventions such as oxytocin. Alternative methods like skin-to-skin

contact (SSC) and early breastfeeding have emerged as promising preventive measures. **Aim:** The aim of this review is to examine the role of SSC and early breastfeeding in preventing PPH, focusing on their effects on the duration of the third stage of labor, postpartum blood loss, and the underlying physiological mechanisms. **Methods:** This updated review synthesizes evidence from numerous studies on PPH prevention, with a particular emphasis on physiological management strategies. We explore the impact of SSC and early breastfeeding on uterine contraction and oxytocin production, as well as their role in mitigating blood loss during the third stage of labor. **Results:** Evidence suggests that SSC and early breastfeeding stimulate endogenous oxytocin production, facilitating uterine contraction and potentially reducing PPH. Additionally, these interventions contribute to shorter third stages of labor and lower postpartum blood loss compared to traditional medical management methods. Studies indicate that physiological management strategies, including SSC and breastfeeding, may be as effective as or superior to active management in low-risk populations. **Conclusion:** SSC and early breastfeeding are valuable components of postpartum care that should be integrated into routine practices to reduce the risk of PPH. Further research is needed to clarify the optimal management strategies and confirm the long-term benefits of these physiological approaches.

Keywords---Postpartum hemorrhage, uterine atony, skin-to-skin contact, breastfeeding, oxytocin, third stage of labor, maternal care.

Introduction

Globally, 295,000 maternal fatalities were reported in 2017, resulting in an overall maternal mortality ratio (MMR) of 211 deaths per 100,000 live births. Achieving a 75% reduction in maternal mortality is one of the targets outlined in Sustainable Development Goal 5, as endorsed by the World Health Organization (WHO). Obstetric hemorrhage stands as the primary cause of maternal death worldwide, contributing to 27.1% of all maternal fatalities [1]. Of all obstetric hemorrhages, postpartum hemorrhage (PPH) is responsible for 72% of these deaths [2]. The active management of the third stage of labor (AMTSL) is a preventive strategy for PPH, encompassing the administration of exogenous oxytocin (Pitocin), controlled cord traction, and early cord clamping. Nevertheless, emerging evidence highlights the adverse effects of exogenous oxytocin on normal maternal physiological changes during the postpartum period, as well as an increased risk of PPH in women receiving higher doses of exogenous oxytocin [3,4,5]. The physiological management of the third stage of labor has garnered increasing attention in research. Numerous studies have examined the impact of early skin-to-skin contact (SSC) between the neonate and mother, along with early breastfeeding, in preventing PPH by influencing the duration of the third stage of labor and postpartum blood loss [6,7,8,9,10,11,12]. The goal of this review is to explore the role of SSC and breastfeeding in mitigating PPH, shortening the third stage of labor, and reducing postpartum blood loss, as well

as to elucidate the physiological mechanisms underlying these effects during labor.

Postpartum Hemorrhage:

The definition of postpartum hemorrhage (PPH) varies across institutions. According to the WHO, PPH is defined as "blood loss of 500 mL or more within 24 hours after birth, while severe PPH is blood loss of 1000 mL or more within 24 hours" [13]. The Royal College of Obstetricians and Gynecologists [14] similarly defines PPH as "the loss of 500 mL or more of blood from the genital tract within 24 hours of childbirth," categorizing PPH as either minor (500–1000 mL) or major (greater than 1000 mL). The American College of Obstetricians and Gynecologists (ACOG) initially defined PPH as blood loss exceeding 500 mL following vaginal delivery or 1000 mL following cesarean section [15], with an updated definition stating "cumulative blood loss greater than or equal to 1000 mL or blood loss accompanied by signs or symptoms of hypovolemia within 24 hours after the birth process" [16]. Saxton et al. categorized the definition of PPH into medical and physiological terms. Their medical definition of PPH is "blood loss greater than 499 mL," whereas the physiological definition is "any volume of blood loss that causes signs of shock or anemia; this volume may vary across individuals" (p. 2) [7]. The primary cause of PPH is uterine atony, defined as the failure of the uterus to contract effectively following placental delivery, commonly referred to as atonic PPH [17,18,19]. PPH typically occurs within the first 24 hours, known as immediate PPH, but can extend up to six weeks postpartum, referred to as delayed PPH [20].

Prevalence and Consequences of PPH:

Obstetric hemorrhage remains a leading cause of maternal mortality worldwide, accounting for 27.1% of pregnancy-related deaths [1]. This preventable condition poses significant challenges to global obstetric care. In a systematic review and meta-analysis of 71 studies utilizing meta-regression techniques, Calvert et al. estimated the global prevalence of postpartum hemorrhage at 10.8% for blood loss greater than or equal to 500 mL, with regional variations: Africa accounted for 25.7% of cases, Latin America and Asia each contributed 8%, and Europe and North America each had a prevalence of 13% [21]. The rising incidence of PPH globally may be attributed to the hypermedicalization of the natural birthing process [22,23,24,25]. In the United States, the incidence of PPH increased by 27% between 1995 and 2004 [26]. A recent cohort study reported a 47.5% increase in the rate of PPH between 2009 and 2015 at a tertiary hospital in the U.S. [17]. Beyond contributing to maternal mortality, PPH is a critical concern due to its association with severe maternal morbidity. Grobman et al. examined the prevalence of severe maternal morbidity and its etiologies in the United States, finding that PPH is responsible for nearly half (46.6%) of severe morbidity cases [27]. Maternal hemorrhage is linked to numerous adverse outcomes, including anemia, hypovolemic shock, disseminated intravascular coagulation, acute respiratory distress, renal failure, impaired breastfeeding, and the exacerbation of pre-existing conditions, all of which compromise both physical and psychological well-being [28,29].

Causes of PPH:

The predominant cause of PPH is uterine atony [30,31]. The causes of PPH can be summarized by the four Ts: trauma (injuries from lacerations), tone (uterine atony), thrombin (coagulation disorders), and tissue (retained tissue) [31,32,33,34].

Most Prevalent Cause of Postpartum Hemorrhage (PPH)

The predominant factor contributing to the increasing incidence of postpartum hemorrhage (PPH) is uterine atony, which is referred to as atonic PPH. Between 75% and 80% of PPH cases are attributed to uterine atony [31,37,41]. This condition arises when the uterine muscle fails to contract effectively following childbirth. Several factors predispose women to uterine atony, including the presence of uterine leiomyomata, multiple pregnancies, oxytocin augmentation, uterine overdistension, chorioamnionitis, prolonged labor, grand multiparity, fetal macrosomia, polyhydramnios, precipitous labor, and the administration of magnesium sulfate and halogenated anesthetics [32]. Despite the identification of various risk factors, empirical evidence substantiating specific predisposing factors remains scarce, and many claims remain speculative. However, it is widely acknowledged that any factor disrupting uterine contraction can precipitate PPH. Predicting atonic PPH is challenging, as this condition may occur in the absence of identifiable risk factors. Notably, statistics indicate that atonic PPH occurs more frequently in women without any known risk factors [25,42]. Consequently, all women are vulnerable to PPH, emphasizing the importance of implementing preventive strategies during all deliveries.

Risk Factors for Atonic PPH

Although PPH can occur without the presence of risk factors, knowledge of these factors remains a cornerstone in predicting the likelihood of hemorrhage [43]. PPH is an unpredictable and rapidly progressing condition with few definitive symptoms. Research indicates that 60% of women do not exhibit any signs that might suggest an increased risk of excessive bleeding [44]. For this reason, PPH remains largely idiopathic, with its exact causes remaining unclear. In certain cases, PPH may be associated with multiple risk factors, while in other instances, it may result from improper management during the third stage of labor. Women in suboptimal care settings may face inadequate maternal care, thus heightening their risk of complications. Primigravid mothers are particularly vulnerable to PPH due to their increased likelihood of experiencing hemorrhage from unknown causes [45]. Several factors compromise uterine contraction, thereby increasing the risk of PPH. These include the size of the infant (e.g., a neonate weighing more than 4.0 kg), placenta previa, polyhydramnios, exhaustion of uterine muscles following prolonged labor, incomplete placental separation, a distended bladder, high parity, weakening of the myometrium, multiple pregnancies, and the administration of exogenous hormones such as Pitocin [3,19,26,33,35,46,47]. One detrimental effect of administering exogenous oxytocin during normal labor is its potential to suppress endogenous oxytocin production [48,49]. Anemia during pregnancy further exacerbates the risk of PPH by impairing clotting mechanisms, which complicates hemorrhage control and heightens the risk of fatality [37].

Prevention of PPH

The management of the third stage of labor, aimed at preventing PPH, includes both active and expectant approaches. Active management involves early cord clamping, the administration of a prophylactic uterotonic, and controlled cord traction to facilitate placental delivery. These interventions are designed to reduce the risk of hemorrhage, and the use of oxytocin has been shown to decrease the risk of PPH in both vaginal and cesarean births [13,50,51]. In contrast, expectant (physiologic) management allows spontaneous placental delivery or delivery assisted solely by maternal effort (hands-off) [9,52]. Numerous studies have compared active and expectant management of the third stage of labor, with most favoring active management for preventing severe PPH (i.e., blood loss greater than 1000 mL) [4]. For instance, Prediville et al. conducted a trial comparing the two approaches, revealing that expectant management was associated with a threefold higher risk of PPH compared to active management (OR: 3.1, 95% CI: 2.3–4.2) [53]. Similarly, Rogers et al. found that active management was linked to a 6.8% lower incidence of PPH [54]. However, a more recent systematic review by Begley et al., which included 8247 women across seven randomized and quasi-randomized trials, found no significant difference in PPH incidence among low-risk women. Women in the active management group exhibited higher maternal diastolic blood pressure, increased post-delivery vomiting, more frequent postpartum pain, greater use of analgesia, and a greater likelihood of readmission due to bleeding. Furthermore, active management was associated with a reduction in infant birth weight, likely due to interference with placental transfusion [55]. This uncertainty regarding the optimal management strategy underscores the need for further investigation. Some researchers have suggested that physiological management, which facilitates the natural release of oxytocin, may be an ideal method to ensure efficient placental separation without introducing medical complications, particularly in low-risk women. The rising incidence of PPH in developed countries like the United States has prompted calls for reducing nonessential interventions during normal labor [3,17,56]. Thus, incorporating skin-to-skin contact (SSC) and immediate breastfeeding (BF) as part of PPH management represents an innovative and vital strategy for optimizing maternal care [8,9,49].

The Importance of Preventive Measures for Atonic PPH

Addressing the prevention of PPH is crucial given that its prevalence has remained unchanged despite current treatment approaches. Atonic PPH is more prevalent in low-income, developing nations where access to hemorrhage-control medications is limited. Additionally, the incidence of PPH is increasing in developed nations such as the United States, where the rate has doubled over the past decade [19,57,58]. Endogenous oxytocin does not carry the adverse effects associated with exogenous oxytocin, thus highlighting the need for affordable, readily available interventions [59,60]. Physiological management strategies like SSC and BF can stimulate endogenous oxytocin production, potentially reducing or preventing PPH [8,49,61].

Oxytocin:

Oxytocin is a naturally occurring peptide hormone found across all animal species, exerting effects on both the brain and peripheral systems, particularly during and after childbirth. It is synthesized in the magnocellular nuclei of the supraoptic nucleus (SON) and paraventricular nucleus (PVN) of the hypothalamus. The hormone accumulates in the posterior pituitary gland, from where it is released into the bloodstream in response to various stimuli, such as suckling during breastfeeding, labor, and non-noxious stimuli like touch, warmth, and body stroking [62,63]. Besides its peripheral hormonal role, oxytocin also functions as a neurotransmitter within the brain. The release of oxytocin is regulated by a positive feedback mechanism. Its primary function is to bind to oxytocin receptors in the uterus, stimulating uterine contractions to expel the products of conception and constrict spiral blood vessels at the placental site to curb bleeding [64]. Estrogen plays a preparatory role by increasing the number and sensitivity of these oxytocin receptors. Furthermore, oxytocin is pivotal in lactation, promoting the contraction of mammary glands to facilitate milk ejection. Thus, the body is naturally primed for oxytocin's effects during labor and birth, with the hormone acting as a key agent for uterine contraction and tone enhancement. Early interventions such as skin-to-skin contact (SSC) and breastfeeding (BF) are recommended to optimize these effects. Numerous studies have explored the timing of peak oxytocin levels during the peripartum period, identifying the first 60 minutes postpartum as the period of greatest sensitivity. Research on SSC has shown significant increases in oxytocin levels at 15, 30, and 45 minutes postpartum compared to baseline levels in women who participated in SSC [63,65].

Psychophysiological effects linked to oxytocin include promoting calmness, enhancing maternal-infant bonding during breastfeeding, and providing both short- and long-term adaptation benefits. Additionally, oxytocin induces anxiolytic effects, lowers blood pressure, raises the pain threshold, reduces plasma cortisol, and offers antidepressant properties [65,66]. Noteworthy studies examining the relationship between SSC and oxytocin include Feldman et al., who measured oxytocin in saliva and plasma in parents [67], and Gordon et al., who investigated the levels in both fathers and mothers during infant touch [68]. Uvnäs-Moberg has extensively studied the associations between oxytocin, breastfeeding, and SSC, showing that both interventions significantly elevate maternal oxytocin levels [63,69].

Physiological Management to Prevent or Minimize the Incidence of Postpartum Hemorrhage (PPH):

PPH can be managed through nonpharmacological approaches, one of which is nipple stimulation during labor—a concept documented since the 1800s. Nipple stimulation, which involves breast massage, influences the pituitary gland, leading to oxytocin release, a hormone that helps induce labor. This intervention is typically administered within 15 minutes post-delivery to provoke a short-term surge in oxytocin, thereby enhancing uterine contractions. These intensified contractions facilitate the expulsion of the placenta and any remaining blood clots, helping to prevent PPH [70,71,72]. A pivotal study by Chua et al. [74]

investigated the effects of breastfeeding on uterine tone. In their trial with 11 participants, two groups were compared: one group underwent immediate breastfeeding (Group A), while the other group received manual nipple stimulation (Group B). The study found a 17–730% increase in uterine activity following breastfeeding and nipple stimulation compared to baseline values. The greatest increase was observed in women who breastfed their infants, showing a median increase of 93% in uterine activity, while synthetic oxytocin, commonly used for PPH prevention, showed a median increase of 96.5% in uterine activity [74]. This highlights the value of natural interventions in preventing PPH and minimizing unnecessary pharmacological treatments like Pitocin [25,40,41,42,43,44,45,46,47,48,49]. Another physiological intervention that positively influences oxytocin levels is SSC, which, through its multisensory nature, stimulates the pituitary gland to release oxytocin. This elevation leads to increased uterine contractions, thus aiding in the prevention of PPH. However, this intervention remains underexplored in research [8,49,65].

Skin-to-Skin Contact (SSC):

SSC refers to the practice of placing a diaper-clad infant upright on the mother's bare chest, ensuring continuous skin-to-skin contact. The infant should be adequately covered to maintain optimal temperature and prevent respiratory issues [75,76]. Saxton, Fahy, and Hastie describe SSC as the practice where a healthy, naked newborn is placed on the mother's bare abdomen or chest (depending on umbilical cord length) immediately post-birth. The infant has direct access to the maternal nipple and can hear the mother's heartbeat. Both mother and baby should be covered with a warm blanket and left undisturbed for at least one hour. This process is carefully observed to ensure proper adaptation for both parties post-birth [7]. SSC is not only beneficial for full-term infants but also for stable premature infants, demonstrating numerous maternal benefits. These include enhanced maternal-infant bonding, increased milk production, higher breastfeeding success rates, improved psychological and emotional wellbeing, reduced clinical depression, shorter placental expulsion times, facilitated uterine involution, reduced maternal anxiety, greater satisfaction, pain relief from episiotomy, improved hematocrit levels, less lochia, shorter maternal hospital stays, and reduced cortisol levels. Thus, SSC offers a comprehensive range of physical and psychological advantages for the mother [77].

SSC Physiology and Its Relation to Uterine Atony

Skin-to-skin contact (SSC) is a multisensory intervention that stimulates the pituitary gland, promoting endogenous oxytocin production. Engaging in activities such as holding, touching, smelling, and hearing the baby accelerates social impulses to the brain, enhancing oxytocin secretion, which is known as the "social hormone." This physiological process is evident across all types of SSC, but particularly in kangaroo mother care, where the oxytocin released contributes to uterine contractility [7, 62]. As such, SSC is considered an effective intervention that stimulates the release of oxytocin, enhancing uterine contractility and thereby preventing uterine atony, a leading cause of postpartum hemorrhage (PPH).

Previous Studies on the Relationship Between SSC and Uterine Atony

Moore et al. noted that SSC reduces the likelihood of uterine atony. In their review, they criticized the common Western practice of separating mother and infant and advocated for early SSC, including placing infants on their mothers' bare chests. They argued that SSC has neuroscience-based advantages that foster neurobehavioral responses and fulfill the biological needs of mothers [78]. In a study by Handlin et al., the effects of SSC on cortisol and ACTH levels were investigated. They found that SSC led to a reduction in both cortisol and ACTH, which in turn triggered an increase in endogenous oxytocin levels, inversely correlated with the reduction in the former two hormones. The study demonstrated a positive correlation between the duration of SSC and endogenous oxytocin levels, alongside a negative correlation with cortisol levels. Notably, the use of exogenous oxytocin appeared to suppress the release of endogenous oxytocin and elevate cortisol levels in the group receiving exogenous oxytocin [65, 79]. Dordevic's study, which involved 216 mothers in a study group and 216 in a control group, found significant benefits of SSC. The SSC group exhibited fewer severe cases of uterine involution, reduced post-delivery anemia (as evidenced by hemoglobin and erythrocyte levels), lower sanitary napkin consumption, and shorter hospital stays compared to the control group [80]. Matthiesen et al. investigated the effects of infant hand massage and suckling on maternal oxytocin levels. They documented every movement of the infants from birth until their first breastfeeding and analyzed maternal blood samples every 15 minutes. The results revealed that even infant hand massage raised maternal oxytocin levels, significantly affecting uterine contractions and milk ejection [62].

Breastfeeding (BF)

Breastfeeding, defined as the direct feeding of an infant from the mother's breast, is recommended by the World Health Organization (WHO) as the exclusive method of infant nutrition during the first six months of life, with complementary foods introduced thereafter [42]. Initiating breastfeeding within the first hour after delivery provides the infant with colostrum and stimulates oxytocin production, which aids in relieving maternal stress following childbirth. Furthermore, any attempt by the infant to suckle within 30 minutes of birth is considered beneficial [7]. Early SSC is integral to facilitating immediate and exclusive breastfeeding. A randomized control trial conducted by Moore and Anderson examined the impact of early SSC on breastfeeding success. The study, involving 21 women, employed the infant breastfeeding assessment tool (IBAT) and the index of breastfeeding status (IBS) to assess the effects. The results demonstrated that the SSC group showed higher rates of suckling competency during the first breastfeeding session (p < 0.02) and were able to initiate breastfeeding more effectively (p < 0.04). Thus, very early SSC was associated with enhanced breastfeeding success within the first two hours postpartum [81].

Breastfeeding Physiology and Relation to Uterine Atony

Similar to nipple stimulation, breastfeeding induces a rise in oxytocin levels, leading to increased myometrial contractions. These contractions help expel

pregnancy-related products and reduce the risk of excessive bleeding by promoting the closure of blood vessels [7].

Previous Studies on the Relationship Between Breastfeeding and Uterine Atony

Breastfeeding plays a crucial role in the management of the fourth stage of labor, a critical period initiated by placental delivery and lasting for four hours. Several studies have recommended breastfeeding as an effective non-pharmacological intervention for preventing PPH, particularly in resource-poor settings. Geller et al. emphasized the role of breastfeeding in developing countries, where the prevalence of PPH is high due to home deliveries. They noted that, despite advancements in pharmaceutical and surgical interventions, breastfeeding remains a practical and effective intervention to combat PPH in low-resource settings [82].

Previous Studies on the Effects of Breastfeeding and SSC on PPH

Postpartum hemorrhage (PPH) is a significant risk in the postpartum period; however, its incidence can be reduced by enhancing oxytocin levels through physiological methods such as SSC and breastfeeding. Saxton et al.'s retrospective cohort study, which included 10,000 women, found that immediate SSC and breastfeeding significantly lowered the likelihood of PPH (p < 0.0001 for both SSC and BF) [83]. Bingham's study revealed that the use of Pitocin can exacerbate PPH, leading to a decrease in maternal hematocrit (HCT) and hemoglobin (HGB) levels. She advocated for the use of non-pharmacological interventions such as SSC and breastfeeding, which not only promote maternal health but also help prevent PPH. This is consistent with Campbell-Yeo et al.'s findings, which also supported the effectiveness of SSC and breastfeeding in preventing PPH [58- 84]. A retrospective cohort study on 154 cases of atonic PPH revealed that women who engaged in SSC and breastfeeding during the first hour postpartum experienced significantly less bleeding compared to those who did not engage in these practices [17].

Nursing Care Plans:

Nursing care interventions for uterine atony, a leading cause of postpartum hemorrhage (PPH), focus on early identification, prevention, and management of complications. Nurses play a critical role in both the prevention and treatment of uterine atony through various interventions aimed at promoting uterine contractions, controlling bleeding, and ensuring maternal well-being.

1. Early Identification and Monitoring: Prompt recognition of uterine atony is essential. Nurses should continuously monitor the mother's vital signs, including blood pressure, heart rate, and oxygen saturation. Observing signs of excessive bleeding, such as a saturated perineal pad or pooling of blood, is critical. Frequent assessment of uterine tone and fundal height through abdominal palpation is vital to detect uterine relaxation. Nurses should monitor lochia (postpartum vaginal discharge) for increased flow, which may indicate hemorrhage. If excessive bleeding is noted, immediate intervention is required.

2. Initiating Uterine Stimulation: The first line of intervention in uterine atony is uterine massage. Nurses should perform gentle fundal massage to stimulate uterine contractions. This can help to compress the blood vessels and stop the bleeding. If the uterus remains boggy (soft and relaxed), additional interventions, such as administration of uterotonic drugs like oxytocin, should be initiated as per the physician's orders. Oxytocin stimulates uterine contraction, and misoprostol or ergometrine may also be used depending on the clinical context.

3. Administering Fluids and Blood Products: In cases of significant blood loss, fluid resuscitation is necessary. Nurses should administer intravenous fluids (IV) as ordered, such as normal saline or lactated Ringer's solution, to restore circulatory volume and prevent shock. If blood loss is substantial, the nurse may also prepare for the administration of blood products, including red blood cells, platelets, or plasma, according to the patient's needs. Continuous monitoring of laboratory values, such as hemoglobin and hematocrit levels, is essential to assess the effectiveness of the interventions.

4. Supporting Maternal Comfort and Psychological Care: Nurses should provide emotional support and education to the mother, addressing concerns about bleeding, pain, and the overall experience of childbirth. Ensuring the mother's comfort through pain management, providing information about the condition, and offering reassurance can significantly reduce stress and anxiety during this critical time.

5. Collaborative Care: Nurses must collaborate closely with obstetricians, midwives, and other healthcare professionals to ensure comprehensive care for women with uterine atony. If initial interventions fail, further medical or surgical interventions may be required, such as manual removal of the placenta, balloon tamponade, or even hysterectomy in severe cases. These nursing interventions aim to mitigate the risks associated with uterine atony, ultimately ensuring better maternal outcomes in the postpartum period.

Conclusion

Postpartum hemorrhage (PPH) remains a significant global health concern, contributing to a high percentage of maternal deaths and morbidities. The predominant cause, uterine atony, is often exacerbated by medical interventions such as the use of exogenous oxytocin. These findings highlight the necessity of exploring alternative, more natural methods of PPH prevention that can be implemented safely across various healthcare settings. This review emphasizes the potential of physiological management techniques, particularly skin-to-skin contact (SSC) and early breastfeeding, in reducing the incidence of PPH. These interventions, which promote the release of endogenous oxytocin, are instrumental in stimulating uterine contractions and improving the overall efficiency of placental expulsion. Unlike exogenous oxytocin, which can disrupt natural hormonal processes and lead to adverse outcomes, SSC and early breastfeeding work in harmony with the body's physiological processes. Studies suggest that the combination of SSC and early breastfeeding not only shortens the third stage of labor but also results in reduced postpartum blood loss. These benefits are particularly evident in low-risk populations, where physiological

management strategies can effectively replace more invasive medical interventions. Moreover, promoting these natural methods supports the broader goal of reducing unnecessary medical interventions during childbirth, particularly in developed countries where PPH rates have been rising despite the availability of medical treatments. In addition to its physiological benefits, the incorporation of SSC and breastfeeding fosters maternal-infant bonding and has positive long-term effects on both maternal and infant health. However, it is important to note that while these interventions show promising results, more robust studies with larger sample sizes and diverse populations are required to fully establish their effectiveness. In conclusion, integrating SSC and early breastfeeding as part of routine care could significantly reduce the incidence and severity of PPH, offering a cost-effective, low-risk strategy to improve maternal outcomes. Future research should continue to evaluate and refine these practices to ensure optimal care for women globally.

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إدارة النزيف ما بعد الولادة والتدخلات التمريضية - مراجعة محدثة.

الملخص:

الخلفية: يُعد النزيف ما بعد الولادة (PPH) من الأسباب الرئيسية للوفيات الأمومية على مستوى العالم، حيث يساهم في حوالي 27.1% من الوفيات الأمومية. السبب الرئيسي للنزيف ما بعد الولادة هو ارتخاء الرحم، الذي يتميز بفشل الرحم في الانقباض بعد الولادة. على الرغم من استراتيجيات الإدارة الفعالة مثل إعطاء الأوكسيتوسين الخارجي، إلا أن معدلات النزيف ما بعد الولادة لم تنخفض بشكل كبير، وهناك أدلة متزايدة تشير إلى الآثار السلبية للتدخلات الطبية مثل الأوكسيتوسين. ظهرت طرق بديلة مثل الاتصال الجلدي-الجلد (SSC) والرضاعة المبكرة كإجراءات وقائية واعدة.

الهدف: هدف هذه المراجعة هو فحص دور الاتصال الجلدي-الجلد والرضاعة المبكرة في الوقاية من النزيف ما بعد الولادة، مع التركيز على تأثيراتهما على مدة المرحلة الثالثة من المخاض وفقدان الدم بعد الولادة والآليات الفسيولوجية الأساسية .

الطرق: تقوم هذه المراجعة المحدثة بتلخيص الأدلة من العديد من الدراسات حول الوقاية من النزيف ما بعد الولادة، مع التركيز بشكل خاص على استراتيجيات الإدارة الفسيولوجية. نستعرض تأثير الاتصال الجلدي-الجلد والرضاعة المبكرة على انقباض الرحم وإنتاج الأوكسيتوسين، بالإضافة إلى دوره في تقليل فقدان الدم خلال المرحلة الثالثة من المخاض.

النتائج: تشير الأدلة إلى أن الاتصال الجلدي-الجلد والرضاعة المبكرة يحفزان إنتاج الأوكسيتوسين الداخلي، مما يسهل انقباض الرحم ويمكن أن يقلل من النزيف ما بعد الولادة. علاوة على ذلك، تساهم هذه التدخلات في تقصير المرحلة الثالثة من المخاض وتقليل فقدان الدم بعد الولادة مقارنة بأساليب الإدارة الطبية التقليدية. تشير الدراسات إلى أن استراتيجيات الإدارة الفسيولوجية، بما في ذلك الاتصال الجلدي-الجلد والرضاعة، قد تكون فعّالة مثل أو أكثر فعالية من الإدارة النشطة في الفئات السكانية منخفضة المخاطر.

الاستنتاج: يُعد الاتصال الجلدي-الجلد والرضاعة المبكرة من المكونات القيمة في رعاية ما بعد الولادة التي ينبغي دمجها في الممارسات الروتينية لتقليل خطر النزيف ما بعد الولادة. هناك حاجة إلى مزيد من البحث لتوضيح استراتيجيات الإدارة المثلى وتأكيد الفوائد طويلة الأجل لهذه الأساليب الفسيولوجية.

الكلمات المفتاحية: النزيف ما بعد الولادة، ارتخاء الرحم، الاتصال الجلدي-الجلد، الرضاعة، الأوكسيتوسين، المرحلة الثالثة من المخاض، الرعاية الأمومية.