

# International survey on variations in practice of the management of the third stage of labour

Mario R. Festin,<sup>1</sup> Pisake Lumbiganon,<sup>2</sup> Jorge E. Tolosa,<sup>3</sup> Kathryn A. Finney,<sup>4</sup> Katherine Ba-Thike,<sup>5</sup> Tsungai Chipato,<sup>6</sup> Hernando Gaitán,<sup>7</sup> Liangzhi Xu,<sup>8</sup> Sompop Limpongsanurak,<sup>9</sup> Suneeta Mittal,<sup>10</sup> Abraham Peedicayil,<sup>11</sup> Noor Pramono,<sup>12</sup> Manorama Purwar,<sup>13</sup> Sheela Shenoy,<sup>14</sup> & Sean Daly<sup>15</sup>

**Objective** To determine the use of the active management of the third stage of labour in 15 university-based obstetric centres in ten developing and developed countries and to determine whether evidence-based practices were being used.

**Methods** From March 1999 to December 1999, the Global Network for Perinatal and Reproductive Health (GNPRH) conducted an observational, cross-sectional survey to assess the use of the practice and its components. Prospective data on patient characteristics and the interventions used in the management of the third stage of labour were collected using standardized methods. Data on approximately 30 consecutive vaginal deliveries in each centre (452 in total) were included.

**Findings** Significant intracountry and intercountry variation in the practice of the active management of the third stage of labour was found (111/452 deliveries used active management), which confirmed the existence of a large gap between knowledge and practice.

**Conclusion** Areas identified for improvement are the urgent implementation of the evidence-based clinical management practice defined as the active management of the third stage of labour; increased accessibility to systematic reviews in developing countries; and the conduction of clinical trials that assess the impact of this intervention in other settings.

**Keywords** Labor stage, Third/drug effects; Postpartum hemorrhage/drug therapy; Oxytocin/therapeutic use; Umbilical cord; Delivery, Obstetric/methods; Hospitals, University; Evidence-based medicine; Cross-sectional studies; Multicenter studies; Developed countries; Developing countries (*source: MeSH, NLM*).

**Mots clés** Troisième période accouchement/action des produits chimiques; Hémorragie post partum/chimiothérapie; Oxytocine/usage thérapeutique; Cordon ombilical; Délivrance, Obstétrique/méthodes; Hôpital universitaire; Médecine factuelle; Etude section efficace; Etude multicentrique; Pays développé; Pays en développement (*source: MeSH, INSERM*).

**Palabras clave** Tercer periodo del trabajo de parto/efectos de drogas; Hemorragia posparto/quimioterapia; Oxitocina/uso terapéutico; Cordón umbilical; Parto obstétrico/métodos; Hospitales universitarios; Medicina basada en evidencia; Estudios transversales; Países desarrollados; Países en desarrollo (*fuentes: DeCS, BIREME*).

الكلمات المفتاحية: المرحلة الثالثة من المخاض، التأثيرات الدوائية على مراحل المخاض، النزف التالي للولادة، المعالجة الدوائية للنزف التالي للولادة، الأوكسي توكسين، معجل الولادة، الاستخدام الدوائي للأوكسي توسين، الحبل السري، السرر، طرق التوليد، المستشفيات، الجامعة، الطب المرتكز على البينات، دراسة مستعرضة، دراسة متعددة المراكز، البلدان النامية، البلدان المتطورة (المصدر: رؤوس الموضوعات الطبية، إقليم شرق المتوسط).

Bulletin of the World Health Organization 2003;81:286-291.

Voir page 290 le résumé en français. En la página 291 figura un resumen en español.

يمكن الاطلاع على الملخص بالعربية على الصفحة ٢٩١.

## Introduction

Post-partum haemorrhage (PPH) is the most common cause of maternal mortality and serious maternal morbidity worldwide, especially in the developing world, accounting for

approximately half of the 600 000 maternal deaths per year (1, 2). Interventions such as the active management of the third stage of labour, when performed routinely, have been shown to reduce the risk of PPH (maternal blood loss >500 ml) and severe PPH (maternal blood loss >1000 ml) (3). The

<sup>1</sup> Professor in Obstetrics and Gynecology and Clinical Epidemiology, University of the Philippines Manila, College of Medicine-Philippine General Hospital, Pedro Gil Street, Ermita, Manila, Philippines (email: mfestin@pworld.net.ph, mfestin@hotmail.com). Correspondence should be addressed to this author.

<sup>2</sup> Coordinator, Global Network for Perinatal and Reproductive Health; Professor Department of Obstetrics and Gynecology, Khon Kaen University, Thailand.

<sup>3</sup> Coordinator, Global Network for Perinatal and Reproductive Health; Director, Division of Research in Reproductive Health; Assistant Professor of Obstetrics and Gynecology, Thomas Jefferson University, Philadelphia, PA, USA.

<sup>4</sup> Global Network for Perinatal and Reproductive Health, Thomas Jefferson University, Philadelphia, PA, USA.

<sup>5</sup> Adviser on RH/FP Programmes, UNFPA-Country Technical Services Team, Bangkok, Thailand.

<sup>6</sup> Senior Lecturer, Department of Obstetrics and Gynaecology, University of Zimbabwe School of Medicine, Avondale, Harare, Zimbabwe.

<sup>7</sup> Department of Obstetrics and Gynecology, Clinical Epidemiology Center, Universidad Nacional de Colombia, Instituto Materno Infantil Carrera, Bogotá, Colombia.

<sup>8</sup> Professor of Obstetrics and Gynecology, The Second University Hospital, West China University of Medical Sciences, Sichuan, China.

<sup>9</sup> Associate Professor of Obstetrics and Gynecology, King Chulalongkorn Memorial Hospital, Bangkok, Thailand.

<sup>10</sup> Chair, Department of Obstetrics & Gynecology; Director in-Charge, WHO-CCR in Human Reproduction, Human Reproduction Research Centre-ICMR; Programme Director, All India Postpartum Programme, All India Institute of Medical Sciences, New Delhi, India.

<sup>11</sup> Professor of Obstetrics & Gynecology, Christian Medical College & Hospital, Tamil Nadu, India.

<sup>12</sup> Obstetrics/Gynecology, Diponegoro University, Semarang, Indonesia.

<sup>13</sup> Professor of Obstetrics and Gynecology, Government Medical College, Nagpur, India.

<sup>14</sup> Associate Professor in Obstetrics and Gynaecology, Government Medical College, Kerala, India.

<sup>15</sup> Master/CEO, Coombe Women's Hospital, Dublin, Ireland.

intervention consists of three components: the administration of a prophylactic oxytocic during or after delivery of the baby, the early clamping and cutting of the umbilical cord on delivery, and the delivery of the placenta by controlled cord traction (4). One of the key components of active management, the use of oxytocic agents such as oxytocin, has been shown to be particularly effective in reducing maternal blood loss associated with PPH (5). Furthermore, when used in combination with the other steps of active management, oxytocin was found to be more effective than prostaglandins such as misoprostol in reducing severe PPH (6).

Although active management of the third stage of labour has been successful in reducing PPH, it might, as with other interventions administered during labour such as epidural anaesthesia, modify the "natural" or physiological progression of childbirth (3). As an alternative to active management, some clinicians advocate using the expectant management of the third stage of labour. It is a passive or physiological approach and involves waiting for signs of placental separation and allowing the placenta to deliver spontaneously or aided by gravity or nipple stimulation. Although this is popular in some northern European countries and in some hospitals and clinics in the United States and Canada, it is less effective in reducing the incidence of PPH than active management. In the Hinchings-brooke randomized clinical trial of approximately 1500 parturients at low risk for PPH, the rate of PPH was significantly lower in the active management group (6.8%) than the expectant management group (16.5%) (7). An earlier study also found that the incidence of PPH in parturients who received physiological (expectant) management was significantly higher than in those who received all three components of active management (odds ratio 2.4, 95% confidence interval 1.6 to 3.7) (8).

A review in the Cochrane Library lends further credence to the effectiveness of active management over expectant management (9). Five randomized controlled trials were identified, each designed to assess the effect of active management of the third stage of labour on maternal blood loss, PPH, and other maternal and perinatal complications. Data from these trials suggests that, in a maternity hospital, active management is consistently associated with first, a reduced risk of maternal blood loss, PPH and severe PPH, prolonged third stage of labour, and maternal anaemia, and second, an increased risk of maternal nausea, vomiting, and raised blood pressure due to the use of ergometrine. This review concluded that routine "active management is superior to expectant management" in terms of blood loss, PPH, and other serious complications of the third stage of labour, and it recommends that "the active management of the third stage should be the routine management of choice" for women expecting a single baby by vaginal delivery in a maternity hospital (9).

Findings from the Cochrane review and other literature clearly indicate that the active management of the third stage of labour is an effective tool in reducing PPH. However, there is an absence of studies assessing the impact of this intervention in developing countries. Poignantly, it is in developing countries, where PPH is a significant problem, that the active management of the third stage of labour could have a considerable impact.

The Global Network for Perinatal and Reproductive Health (GNPRH) (10), formed in 1996 by obstetricians, paediatricians, and educators based in 13 countries, focuses on improving maternal and perinatal health outcomes using

evidence-based clinical practices. It conducted a survey of the use of the active management of the third stage of labour in 15 university-based obstetrical care centres in ten countries. The objectives of the survey were first, to determine the use of the active management of the third stage of labour and its components in the tertiary care centres of the GNPRH and second, to determine whether evidence-based best practices were being used at these centres.

## Methods

From March 1999 to December 1999, we conducted a pilot, observational, cross-sectional survey to determine the use of the active management of the third stage of labour in 15 university-based referral obstetric centres participating in the GNPRH. All the investigators who were part of the GNPRH in 1999 agreed to take part in the study. The study was submitted to and approved by the Institutional Review Board or Ethics Committee at each one of the institutions participating in the study. A specific sample size was not estimated a priori as it was agreed between the investigators that the enrolment of at least 30 consecutive women in labour in each setting would provide sufficient information to achieve the objective of the survey.

## Data collection

To assess the use of the intervention, approximately 30 consecutive vaginal deliveries in each centre were observed and recorded by an assigned clinician who was familiar with the definition of active management of the third stage of labour. A standardized data-collection instrument was used to collect data on the administration of oxytocics during delivery, controlled cord traction, and early cord clamping. Prophylactic oxytocic usage was defined as the administration of any oxytocic concurrently with the delivery of the anterior shoulder of the baby or immediately after the delivery of the fetus (9). Early cord clamping refers to clamping the umbilical cord immediately after delivery of the baby. Controlled cord traction refers to gentle effective pulling on the clamped umbilical cord after signs of separation and then every two to three minutes if unsuccessful. Each data-collection instrument received a sequential unique identifier number with no link to the medical record or the parturient's name. Demographical information on factors such as age, parity, and gravity was obtained through a retrospective review of the parturient's medical record. All women delivering during the period of the survey were considered eligible for the study, unless they delivered by caesarean section.

## Data management and analysis

Data forms were reviewed by the investigator at each centre and were sent electronically to the University of the Philippines, Manila. Whenever needed, completion of missing items in the initial data was made at the centre and the file was again transmitted to Manila. Our primary outcome of interest was the global use of the three components of the active management of the third stage of labour. MS Excel (Microsoft 2000, version 9.0) was used to organize the data to assess the use of this evidence-based practice, and descriptive statistics such as frequencies were generated using the EpiInfo version 6.04 (CDC, 1995) statistical software package.

## Results

A total of 452 vaginal deliveries were observed at 15 sites (21–44 observations per site). The mean age of participants was 26 years (16–43 years), the median gravidity was 2 (0–13), and median parity was 1 (0–11).

### Use of the intervention

There were high levels of intracountry and intercountry variability in the frequency of use of the active management of labour. Overall, the use of this intervention was low, and was practised in 111 out of 452 deliveries (24.6%) (Fig. 1). One centre, Dublin, had high use of all three components (98%). Five centres did not use the complete package (two in Bogotá, Trivandrum, New Delhi, and Yangon), as shown in Fig. 1, although Table 1 shows that some of these centres did receive one or two of the components.

There was wide variation in the use of the components of the intervention (Table 1). Variations exist in the number of women who received additional dosages of oxytocin during the third stage of labour (4.6–100%), in the prophylactic use of an oxytocic agent (0–100%), in the practice of controlled cord traction (13.3–100%), and in the number of induced/augmented deliveries (0–60%). Most centres administered some form of oxytocic during the third stage of labour, but overall prophylactic oxytocic usage was only 44% (0–100%) (Fig. 2).

In total, 40.4% of the deliveries were induced or augmented; however, only 26.5% of these parturients received additional oxytocin after the delivery of the baby, but before the delivery of the placenta. Two centres (New Delhi and Philadelphia) had a high percentage of induced/augmented deliveries, with 61.9% and 60% of labours induced/augmented, respectively. These two centres also reported low prophylactic oxytocic usage (19.0% and 13.3%, respectively).

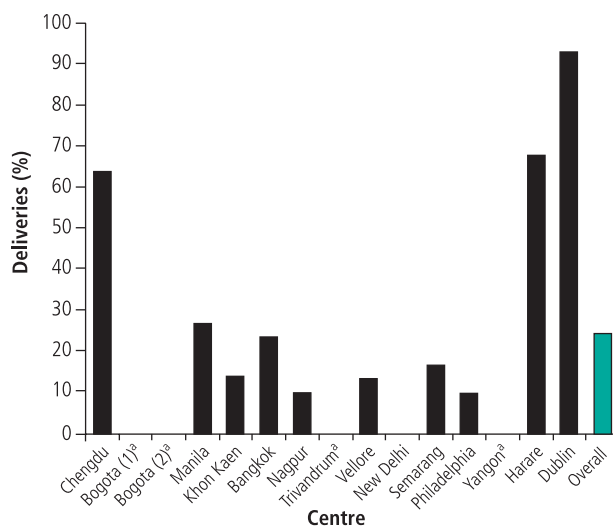
### Oxytocics

In 12 of 15 centres, the mother received an oxytocic drug after the infant was delivered. Oxytocin was the most commonly used oxytocic (53.6%) — used either as an intravenous bolus or as a continuation as a drip that had been started to augment labour — followed by ergometrine (38.2%). Ten centres reported using ergometrine and oxytocin in any sequence during at least one delivery, and only the centre in Harare reported using ergometrine in combination with oxytocin (syntometrine). Prostaglandins (2.4%) were used only in Chengdu, Manila, Nagpur, Vellore, Yangon, and Dublin. Early cord clamping was a common practice (79.4%) in the centres surveyed, with the exception of the two centres in Bogotá and the centre in Yangon, where it was used in only 40.9%, 20.6%, and 0% of the deliveries, respectively. Controlled cord traction was practiced in 70.1% of deliveries.

### Blood loss

Data on blood loss was recorded in 73.9% of the deliveries, with some variations in the method of estimation. Clinical estimation was used in most (86.5%) of these deliveries; blood volume (10.2%) and weight (3.3%) were measured in other deliveries. These variations in the method of estimation limited our ability to accurately assess the amount of blood loss in our survey population.

Fig. 1. Deliveries having all three components of the third stage of labour<sup>a</sup>. The practice of early cord clamping was interrupted in Yangon during the period of this survey, due to the assessment of an intervention that involved placing the infant on the mother's abdomen immediately following delivery



<sup>a</sup>The complete package of three components was not used in any of the deliveries. Only one or two of the components was observed in some of the deliveries.

WHO 03.46

## Discussion

This cross-sectional study uncovered substantial global variation in the use of the active management of labour as an intervention to reduce maternal PPH, especially in the use of oxytocic drugs and controlled cord traction. This is in spite of previous research showing that it is an effective evidence-based practice. The variation might be partly due to different levels of knowledge about the active management.

### Benefits and applications of active management

The benefits of active management of the third stage of labour are well defined and have been disseminated through various sources, including the Cochrane Collaboration and the WHO Reproductive Health Library. The active management of the third stage of labour by itself is a relatively simple, inexpensive intervention that can be applied to a variety of environments. It has been shown to be effective in several randomized clinical trials and is supported in the Cochrane Library where it is described as being an effective measure in preventing PPH.

The intervention could have a considerable impact on reducing PPH in many resource-poor nations. There is an urgent need for randomized clinical trials to be conducted in the developing world that examine the possible effect of active management on PPH and that identify which components of the intervention are effective in reducing PPH (8).

Although this study was based at tertiary care institutions, it is probably unlikely that the active intervention is used at other levels of the healthcare systems such as primary healthcare centres. Practitioners based at tertiary centres often instruct clinicians who are students, residents, or fellows and who are located at the primary healthcare centres. Our data could have important applications in other areas, such as rural areas and birthing homes, where access to the immediate management of complications of the third stage of labour (such as PPH) might not be readily available. Furthermore, the

Table 1. Use of the components of the third stage of labour by centre

Centre	Prophylactic oxytocic usage (n) <sup>a</sup>	Early cord clamping (n) <sup>a</sup>	Controlled cord traction (n) <sup>a</sup>
Chengdu (n = 30)	28 (93.3)	30 (100.0)	20 (66.7)
Bogotá (1) n = 22)	2 (9.1)	9 (40.9)	17 (77.3)
Bogotá (2) n = 34)	6 (17.6)	8 (23.5)	18 (52.9)
Manila (n = 30)	11 (36.7)	29 (96.7)	26 (86.7)
Khon Kaen (n = 30)	25 (83.3)	28 (93.3)	4 (13.3)
Bangkok (n = 30)	12 (40.0)	25 (83.3)	23 (76.7)
Nagpur (n = 30)	3 (10.0)	30 (100.0)	30 (100.0)
Trivandrum (n = 30)	0 (0.0)	30 (100.0)	23 (76.7)
Vellore (n = 30)	6 (20.0)	21 (70.0)	27 (90.0)
New Delhi (n = 21)	4 (19.0)	20 (95.2)	8 (38.1)
Semarang (n = 30)	7 (23.3)	30 (100.0)	16 (53.3)
Philadelphia (n = 30)	4 (13.3)	29 (96.7)	25 (83.3)
Yangon (n = 31)	23 (74.2)	0 (0.0 <sup>b</sup> )	13 (41.9)
Harare (n = 44)	38 (86.4)	39 (88.6)	39 (88.6)
Dublin (n = 30)	30 (100.0)	30 (100.0)	28 (93.3)
<b>Total (n = 452)</b>	<b>199 (44.0)</b>	<b>358 (79.2)</b>	<b>317 (70.1)</b>

<sup>a</sup> Figures in parentheses are percentages.

<sup>b</sup> The practice of early cord-clamping was interrupted in Yangon during the period of this survey, due to the assessment of an intervention that involved placing the infant on the mother's abdomen immediately following delivery.

practice of active management, whenever possible, might prevent such complications, although the available evidence for its application in such situations is not clear.

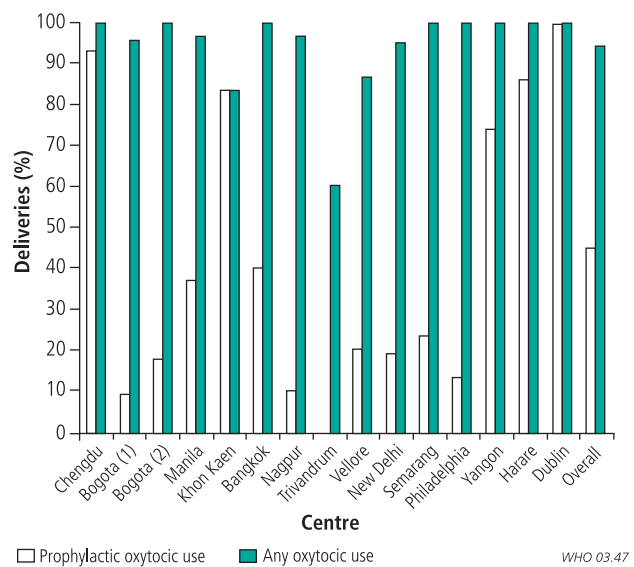
### Use of oxytocics

Oxytocic agents have to be administered parenterally, which could create barriers to using this component of active management, both from a logistical and cost perspective. Uniject™, a prefilled single-dose injection system invented by the Program for Appropriate Technology in Health (PATH), might improve access to and the safety of parenteral administration. Currently, the technology is being evaluated in maternity units in Angola and Indonesia as a tool for administering oxytocin for active management of the third stage of labour (11). The ability of the oxytocics to reduce blood loss is thought to be aided greatly by the other two components of the intervention — early cord clamping and controlled cord traction (2). In addition, future studies should examine the use of better methods of blood loss estimation to evaluate the impact of the use of active management of the third stage of labour.

### Limitations of the study

Despite uncovering substantial variations in the practice of the active management of the third stage of labour, the present study had some minor limitations. These included its descriptive nature, small sample size per centre, lack of double entry of the data, limited training of the study personnel on

Fig. 2. Proportion of oxytocic use during deliveries



standardized data collection procedures related to this project, and participation of the survey population involved in other research projects. For example, during the time of this survey, the centre in Yangon was also participating in the Baby Friendly Hospital Initiative, which required that the infant be placed on the mother's abdomen immediately following delivery. As a result, the centre's standard practice of early cord clamping was interrupted during the time of this study.

### Availability of information

Although variation in clinical practices such as the use of the active management of the third stage of labour across centres is to be expected, our data show a significant lack of implementation of evidence-based clinical practices, specifically with the active management of the third stage of labour, that have proven to be useful, and which could result in improved care if used. Moreover, there is a gap between the knowledge derived from publication of systematic reviews and its use in developing countries. At the time of this survey (1999), many of the centres involved might not have had access to systematic reviews such as the Cochrane database or the WHO Reproductive Health Library. There is a need to make practitioners aware of the results of investigations that would show efficient methods of reducing morbidity and mortality during delivery. Dissemination of information about effective, evidence-based clinical practices is lacking, especially in developing countries, and mechanisms for their implementation need to be established and monitored over time.

### Looking to the future

In an effort to address the gap between the existence of information on evidence-based best practices and the implementation of these practices, each of the investigators involved in this study will present the results of the survey at their centres and specifically discuss the data of their own centre with all the healthcare providers and students. We expect to conduct a follow-up survey to monitor whether practice has changed as a result of these activities. Guidelines, where not already in place, should be established indicating who should administer oxytocic agents, which have to be



administered parenterally. Such guidelines would need to be established at all levels of care, including tertiary care centres such as those that were part of this study. The use of simple quality improvement models, using process and outcome indicators, to identify and optimize key systems of care for women in labour and during delivery, including a system for using the active management of the third stage of labour, should be implemented. Feedback on a regular basis to the practicing clinicians or healthcare providers involved with labour and delivery would also be beneficial.

Further study is needed on ways of increasing the accessibility, availability, and use of systematic reviews at healthcare centres in developing countries. All the centres involved in this study now have access to the Cochrane Reviews and the WHO Reproductive Health Library, which provide evidence-based reviews on various practices to improve maternal health. Access to systematic reviews is being improved by organizations like the Health InterNetwork Access to Research Initiative (12). A follow-up study to determine the impact of such improvement to access to information for best practices would be useful after a notable period of time. Established networks such as the GNPRH should be used as vehicles for the rapid dissemination of existing evaluations available through systematic reviews and to encourage the use of such information in routine clinical practice.

The findings of this study on the variations of the management of the third stage of labour should encourage the centres (and others, also) involved in this study to evaluate current practices and to determine how new evidence-based recommendations might be implemented in their respective settings.

### Acknowledgements

We thank Dr Walter Prendiville, and Dr Jerker Liljestrand, for providing technical assistance in the design of the study, and Dr Prendiville for reviewing drafts of this document. We also acknowledge the following at each centre participating in the study: West China University of Medical Sciences: Associate Professor Xun Zhang, Lecturer Jing Wang, Scientific Research Section of Second University Hospital, Head Nurse Hui Zhu, Head Nurse Tangchun Li, and the Second University Hospital. Universidad Nacional de Colombia, Instituto Materno Infantil: Assistant Professor Dr Amparo Díaz and Clínica Carlos Lleras, Colombia: Assistant Professor Dr Andres Rubio. Central Women's Hospital, Yangon: Dr Aye Aye Than. All India Institute of Medical Sciences: Dr Vinod K. Paul, Additional Professor, Department of Pediatrics and Dr Vimallamma, Senior Resident, Department of Obstetrics & Gynecology. Government Medical College: Dr Rajshree Patil and Dr Rajesh Gajbhiye. Christian Medical College and Hospital: Mrs Rosalyn Vasanth. University of the Philippines Manila: Dr Debbie Dy-Meguizo, Dr Felicisimo Rey Castillo, Dr Joselito Santiago, and the Philippine General Hospital. Khon Kaen University: Dr Jadsada Thinkhamrop. Chulalongkorn University Bangkok: Assistant Professor Surasith Chaithongwongwatthana.

**Financial support:** This project was supported by the Rockefeller Foundation, the International Clinical Epidemiology Network (INCLIN), the United States Agency for International Development (USAID) and Thomas Jefferson University.

**Conflicts of interest:** none declared.

---

## Résumé

### Enquête internationale sur les variations relatives aux pratiques de prise en charge de la troisième phase du travail

**Objectif** Évaluer l'utilisation de la prise en charge active de la troisième phase du travail dans 15 centres d'obstétrique des hôpitaux universitaires de dix pays en développement ou développés, et déterminer si des pratiques reposant sur des bases factuelles sont appliquées.

**Méthodes** De mars à décembre 1999, le réseau mondial de santé périnatale et génésique (GNPRH) a réalisé une étude d'observation transversale pour évaluer l'application de la prise en charge active de la troisième phase du travail et de ses divers éléments. Des données prospectives sur les patientes et sur les interventions mises en œuvre dans la prise en charge de la troisième phase du travail ont été recueillies selon des méthodes standardisées. Les données relatives à une trentaine d'accouchements par voie basse réalisés successivement dans chaque centre (452 au total) ont été incluses dans l'étude.

**Résultats** On a observé une variation inter- et intra-pays significative au niveau de la pratique de la prise en charge active de la troisième phase du travail (utilisée dans 111 accouchements sur 452), ce qui confirme l'existence d'un écart important entre les connaissances et leur mise en application.

**Conclusion** Parmi les points à améliorer figurent la mise en œuvre dans les plus brefs délais de la pratique de prise en charge clinique reposant sur des bases factuelles, définie comme prise en charge active de la troisième phase du travail, un meilleur accès des pays en développement aux publications faisant le point de la question et la réalisation d'essais cliniques destinés à évaluer l'impact de cette intervention dans d'autres contextes.

## Resumen

## Estudio internacional sobre las diferencias en el manejo de la tercera fase del parto

**Objetivo** Determinar el grado de implantación del manejo activo de la tercera fase del parto en 15 centros obstétricos universitarios en diez países en desarrollo y desarrollados, observando si se empleaban prácticas basadas en la evidencia.

**Métodos** Entre marzo de 1999 y diciembre de 1999, la Red Mundial para la Salud Perinatal y Reproductiva (GNPRH) realizó un estudio observacional transversal para evaluar el grado de implementación de la citada práctica y sus componentes. Utilizando métodos normalizados, se reunieron datos prospectivos sobre las características de las pacientes y las intervenciones de manejo de la tercera fase del parto. Se incluyeron los datos de aproximadamente 30 partos vaginales consecutivos en cada centro (452 en total).

**Resultados** Se observaron diferencias significativas intrapaises e interpaíses en la práctica del manejo activo de la tercera fase del parto (hubo manejo activo en 111 de 452 partos), lo que confirmó la existencia de una amplia brecha entre los conocimientos y la práctica.

**Conclusión** Los ámbitos de mejora identificados son la aplicación urgente de las prácticas de manejo clínico basadas en la evidencia, concretadas en el manejo activo de la tercera fase del parto, la ampliación del acceso a los exámenes sistemáticos en los países en desarrollo, y la realización de ensayos clínicos orientados a evaluar el impacto de esta intervención en otros entornos.

## ملخص

## مسح دولي لاختلاف الممارسة في تدبير المرحلة الثالثة من المخاض

**الهدف:** تحديد استخدام التدبير الفعال للمرحلة الثالثة من المخاض في 15 مركزاً من مراكز التوليد المرتكزة على الجامعات المتوزعة في بلدان نامية وأخرى متطورة، ولتحديد فيما إذا كانت الممارسات المرتكزة على البيّنات تستخدم.

**الطريقة:** أجرت الشبكة العالمية للصحة الإنجابية والصحة في الفترة المحيطة بالولادة في الفترة بين آذار/مارس 1999 وكانون الأول/ديسمبر 1999 مسحاً مستعرضاً يعتمد على الملاحظة لتقييم استخدام الممارسة ومكوناتها، وقد جمعت معطيات استقبالية حول الخواص المميزة للمريضات وحول المداخلات التي استعملت في تدبير المرحلة الثالثة من المخاض لديهن، وذلك باستخدام طرق معيارية. وقد شمل المسح ما يقرب من 30 ولادة

متابعة عن طريق المهبل في كل مركز ليلبلغ مجموع الولادات المدروسة 452 ولادة.

**الموجودات:** لقد وجدت اختلافات هامة بين البلدان وضمن البلد الواحد في ممارسة التدبير الفعال للمرحلة الثالثة من المخاض (إذ اقتصر استخدام التدبير الفعال على 111 ولادة من أصل 452) مما يؤكد وجود هوة كبيرة بين المعارف والممارسة.

**الاستنتاج:** تم تحديد مجالات التحسين وهي التنفيذ الفوري لممارسات التدبير السريري المرتكز على البيّنات والتي تعرف بأنها التدبير الفعال للمرحلة الثالثة من المخاض، وازدياد فرص المراجعة في البلدان النامية، والقيام بتجارب سريرية لتقييم تأثير هذه التدخلات في المواقع الأخرى.

## References

1. Joint WHO/UNFPA/UNICEF/World Bank statement. *Reduction of maternal mortality*. Geneva: World Health Organization; 1997.
2. Khan QG, John IS, Wani S, Doherty T, Sibai BM. Controlled cord traction versus minimal intervention techniques in delivery of the placenta: a randomized controlled trial. *American Journal of Obstetrics and Gynecology* 1997;177:770-4.
3. Prendiville WJ. The prevention of post partum haemorrhage: optimising routine management of the third stage of labour. *European Journal of Obstetrics and Gynecology and Reproductive Biology* 1996;69:19-24.
4. Brucker MC. Management of the third stage of labor: an evidence-based approach. *Journal of Midwifery and Women's Health* 2001;46:381-92.
5. Prendiville W, Elbourne DR, Chalmers I. The effect of routine oxytocic administration in the management of the third stage of labour: an overview of the evidence from controlled trials. *British Journal of Obstetrics and Gynecology* 1988;95:3-16.
6. Gulmezoglu AM, Villar, J, Ngoc NTN, Piaggio G, Carroli G, Adetoro L, et al. For the WHO Collaborative Group to evaluate misoprostol in the management of the third stage of labor. WHO multicentre randomized trial of misoprostol in the management of the third stage of labour. *Lancet* 2001;358:689-95.
7. Rogers J, Wood J, McCandish R, Ayers S, Truesdale A, Elbourne D. Active versus expectant management of third stage of labour: the Hinchingsbrooke Randomized Controlled Trial. *Lancet* 1998;351:693-9.
8. Prendiville WJ, Harding JE, Elbourne DR, Stirrat GM. The Bristol third stage trial: active versus physiological management of third stage of labor. *BMJ* 1988;297:1295-300.
9. Prendiville WJ, Elbourne D, McDonald S. Active versus expectant management in the third stage of labour (Cochrane Review). *The Cochrane Library*, Issue 1. Oxford: Update Software; 2001.
10. *The Global Network for Perinatal and Reproductive Health (GNPRH)-2002*. <http://www.tju.edu/obgyn/rih/global.cfm>
11. Program for Appropriate Technology in Health (PATH). Status Report on the Uniject™ Prefilled Injection Device. Seattle: PATH; 2000.
12. Health InterNetwork. <http://www.healthinternetwork.net>