

# Uniject, Training and Reminders to Increase the Use of Prophylactic Oxytocin for the Management of the Third Stage of Labor in Latin America

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**Tackling the biggest maternal killer: Progress and challenges in preventing postpartum hemorrhage**

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# A behavioral intervention to improve adoption of evidence-based clinical care: the Global Network Guidelines Trial



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# Objective

- To design and evaluate a multifaceted behavioral intervention to facilitate the adoption of evidence-based practices in Latin American maternity hospitals

# The Intervention

## Selection of opinion leaders

- Peer nomination
- 3 - 6 per hospital

## The Intervention

## Implementation & maintenance

- Training
- Reminders
- Audit & feedback

## Guideline dissemination

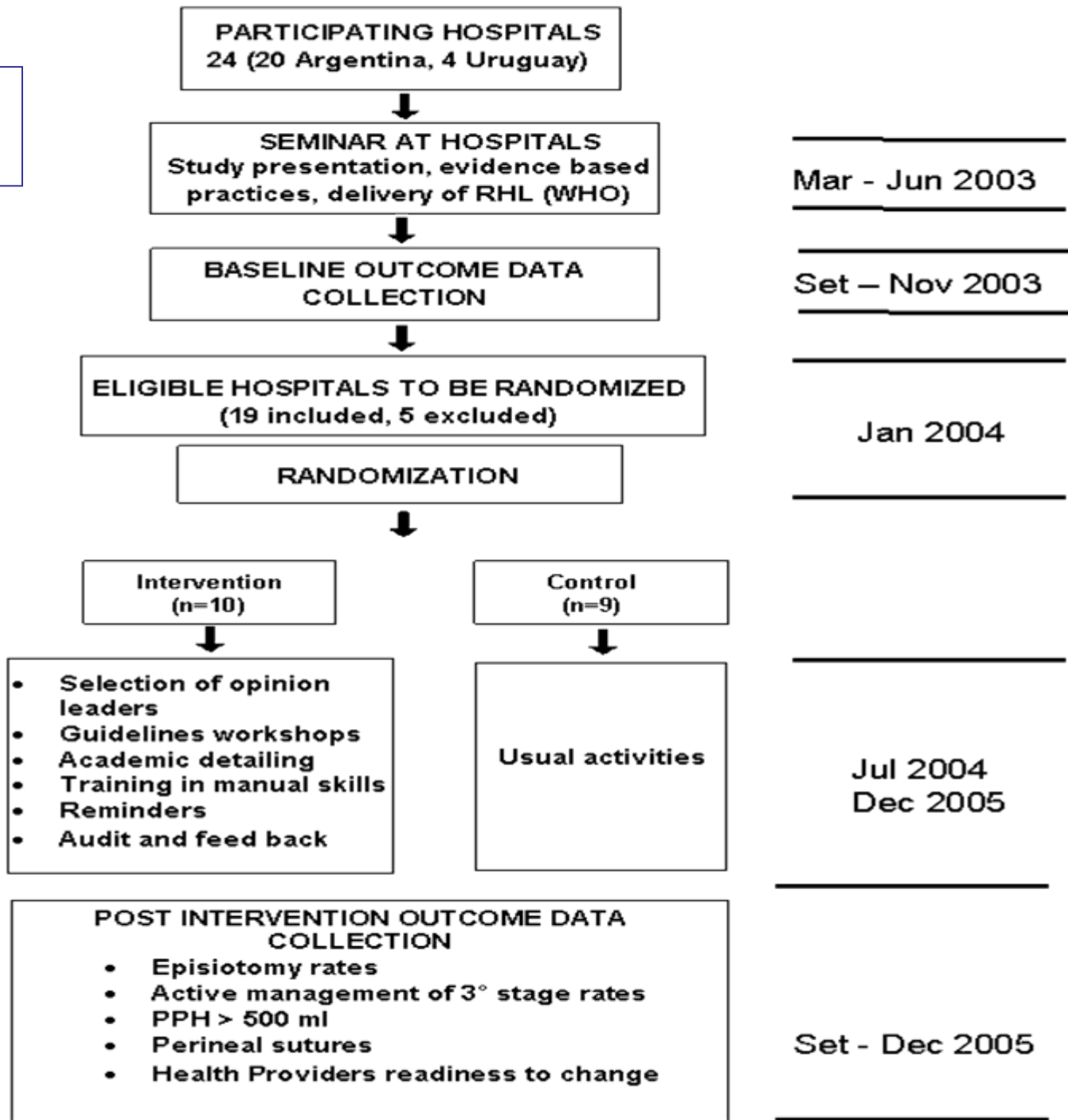
- Academic detailing
- Computer and bibliography

## Guidelines workshop

- Development
- Training on academic detailing

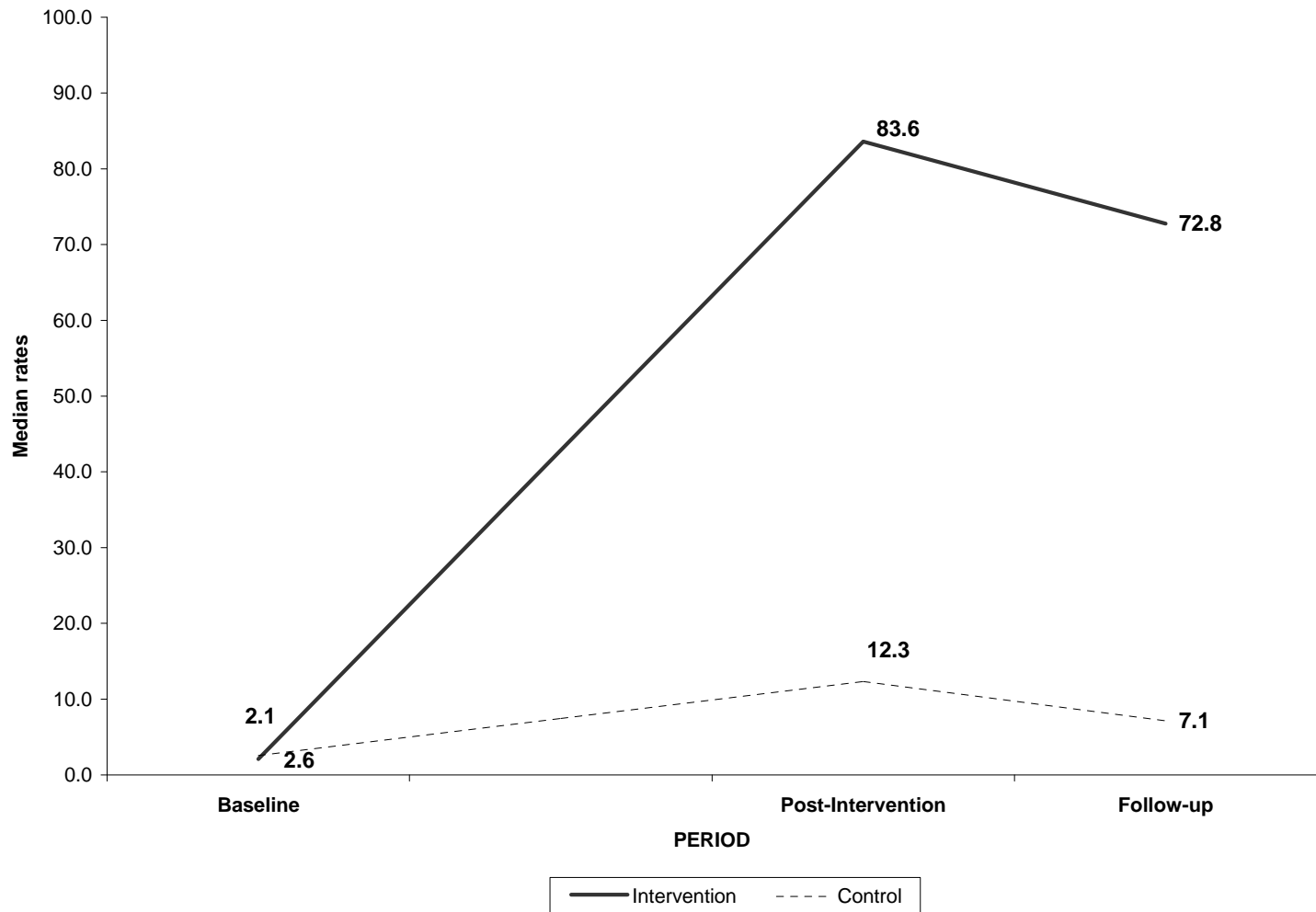
Formative research

# Trial Design and Timeline



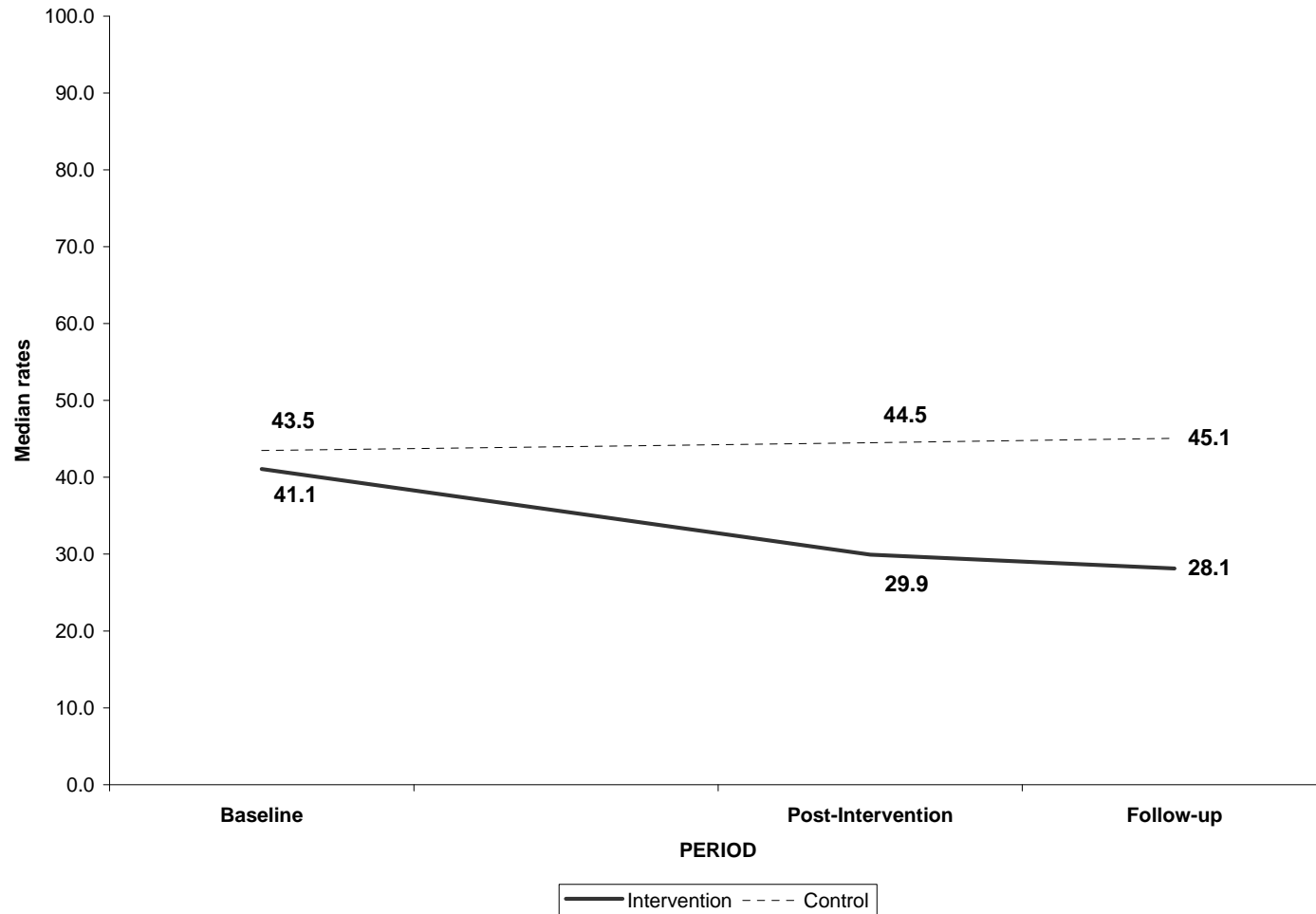
# Follow-up at one year

## *Active management*



# Follow-up at one year

## *Episiotomy*



The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

# A Behavioral Intervention to Improve Obstetrical Care

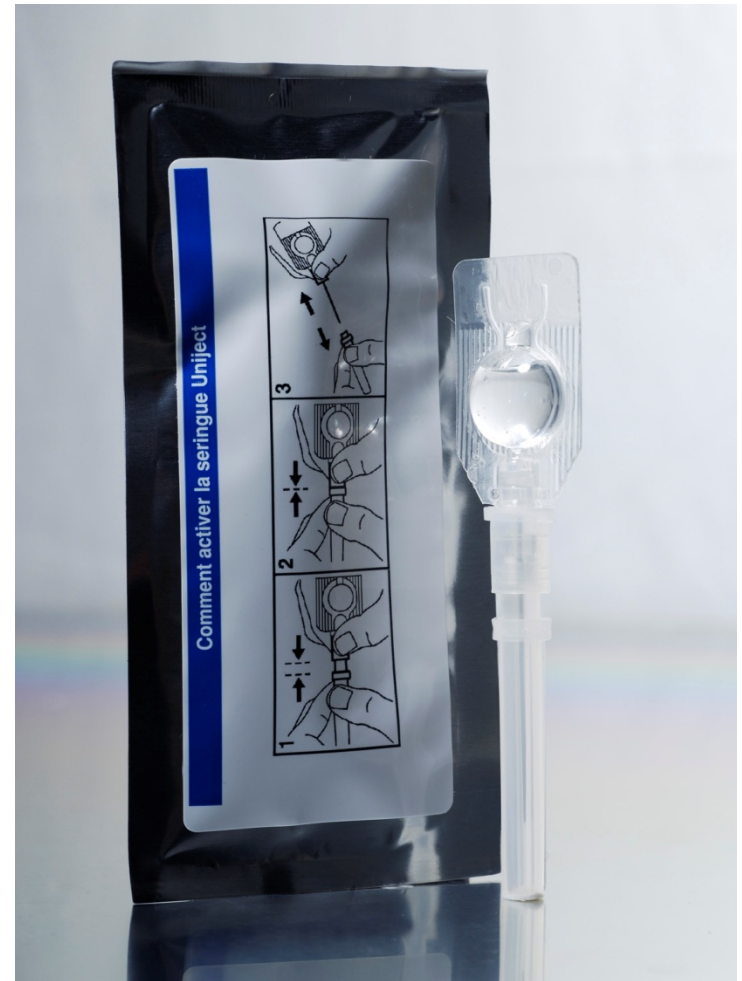
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Tyler Hartwell, Ph.D., and Linda L. Wright, M.D., for the Guidelines Trial Group\*

## Following questions

- Is this intervention feasible in other settings?
- Can the effects be replicated?
  - **CAMBIO project**
- Can we simplify the intervention and still show effect?
  - **Uniject study**

# Uniject, Training and Reminders Intervention

# Oxytocin Unijects



BIOL, Argentina

# Training

- Evidence on prophylactic oxytocin
- How to administer
  - Vials & syringes
  - Unijects
- Training using JHPIEGO model
- 2-3 hs



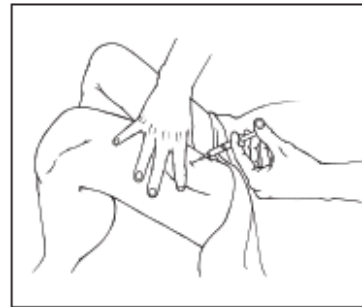
# Use of Reminders

## Manejo Activo de la Tercera Etapa del Parto

Ofrecerlo a todas las mujeres...

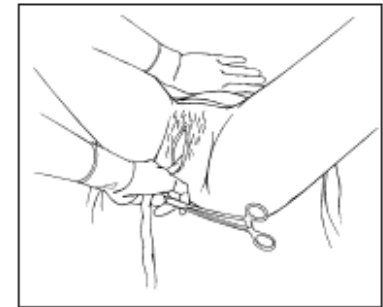
1

Inyectar oxitocina dentro del primer minuto después del nacimiento del bebé.



2

Extraer la placenta mediante tracción controlada del cordón umbilical, presionando simultáneamente sobre el útero en el sentido contrario (contra tracción).



3

Masajear el útero por sobre el abdomen luego de la expulsión de la placenta.



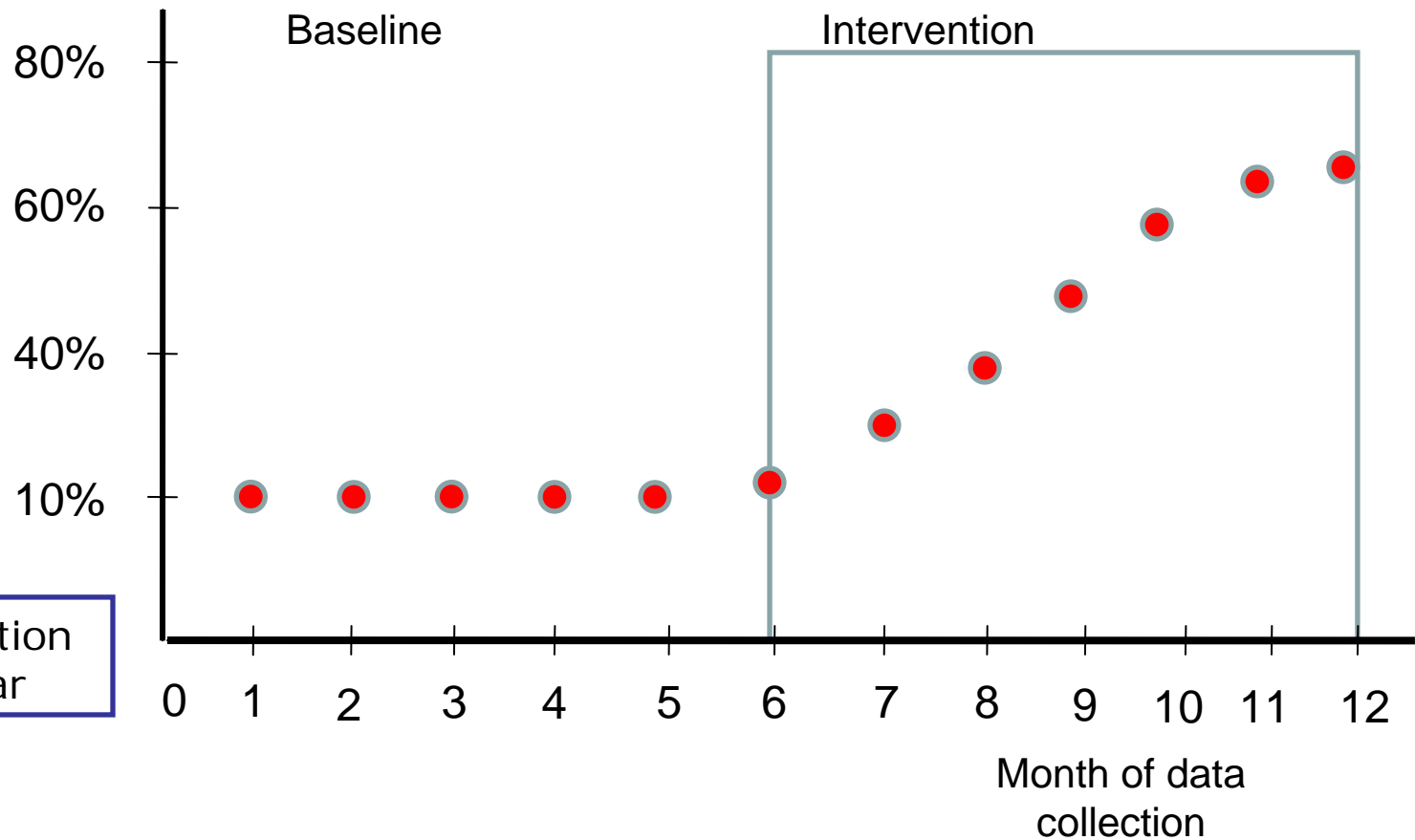
!

Luego de la expulsión de la placenta y cada 15 minutos durante las dos primeras horas, palpar el útero por sobre el abdomen, asegurándose de que no esté blando y verificar la cantidad de sangrado vaginal.

...en cada parto,  
por un proveedor calificado

# Methods- Study Design

Use of Prophylactic  
Oxytocin



Presentation  
seminar

# Setting

- 5 1st-2nd level maternity hospitals
- Province of Corrientes



# Outcome Measures

## Primary outcome:

- Rate of use of prophylactic oxytocin

## Secondary outcomes:

- Use of controlled cord traction
- Use of uterine massage
- Rate of use of oxytocin through Uniject
- Maternal admissions to ICU, blood transfusions, and post-partum interventions
- Birth attendants' views of AMTSL and acceptability of Uniject

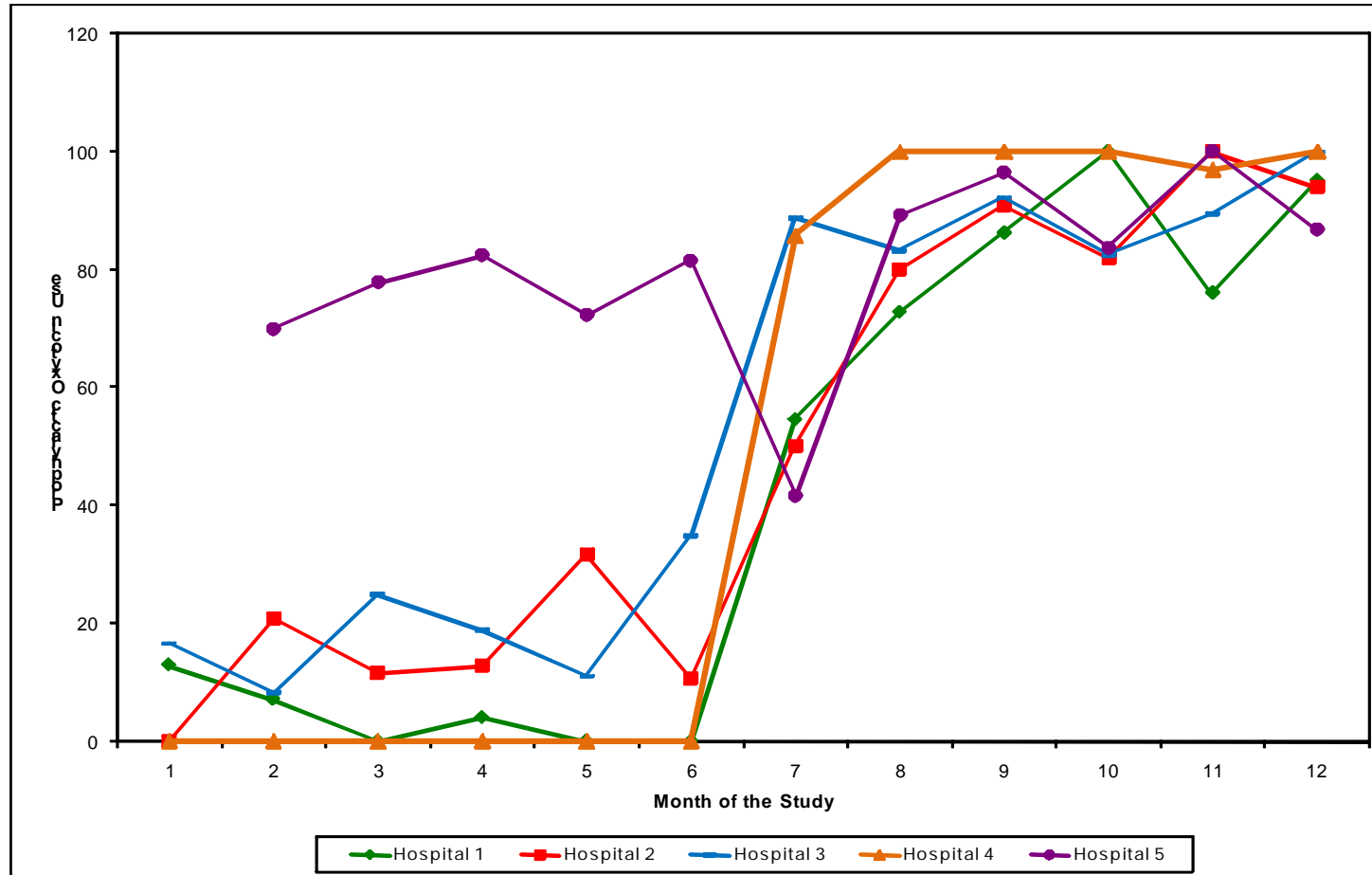
# Maternal and Childbirth Characteristics

Women's characteristics	Baseline (942 women, 5 hospitals)	Intervention (951 women, 5 hospitals)
	Median %**	Median %
Age*	24.1	24.0
Parity		
Nulliparous	29.2	33.5
Type of birth attendant		
Physician	92.3	96.9
Midwife or nurse	11.1	4.8
Other	0.0	0.8
IV infusion during delivery	57.5	51.3
Oxytocin for labor augmentation	50.7	34.6

# Results

	<b>Baseline (941 women, 5 hospitals)</b>	<b>Intervention (951 women, 5 hospitals)</b>	<b>Median of the differences (Range)**</b>
	Median %*	Median %*	
<b>Prophylactic oxytocin use (10 IU)</b>	28.6	84.9	53.7 [-21.2; 70.4]
<b>In vials and syringes</b>	28.6	5.8	-25.9 [-69.4 ; - 16.3]
<b>Oxytocin- Uniject</b>	-	77.3	77.3 [48.1; 96.3]
<b>Prophylactic oxytocin &lt; 10 IU</b>	1.9	0.0	-1.9 [-18.2 ; 0.5]
<b>Other prophylactic uterotonics</b>	0.3	0.0	-0.3 [-1,3 ; 0.0]
<b>Controlled cord traction</b>	55.4	84.9	0.0 [-16.5 ; 40.0]
<b>Uterine massage</b>	71.1	97.8	11.2 [0.0 ; 31.7]

# Rates of use of prophylactic oxytocin by month and by hospital



# Maternal outcomes

	Baseline (942 women, 5 hospitals)	Intervention (951 women, 5 hospitals)
	n	n
<b>Admission to Intensive Care Unit</b>	1	1
<b>Blood transfusion</b>	2	3
<b>Post partum interventions</b>		
Curettage	1	1
Hysterectomy	0	1
Laparotomy	0	0
Drainage of vulvar hematoma	1	6
<b>Retained placenta</b>	7	5
<b>Manual removal of placenta</b>	14	7
<b>Uterotonics post partum (%)</b>	64.2%	38.5%

# Survey to birth attendants

	<b>Baseline (30 birth attendants)</b>	<b>Post Intervention (32 birth attendants)</b>
	<b>%</b>	<b>%</b>
<b>Active management of the third stage labor</b>		
Have you ever heard about the AMTSL?	93.3%	100.0%
Do you know what it consists of?	100.0%	92.9%
<b>Prophylactic oxytocin</b>		
Did you ever administer prophylactic oxytocin for the management of the TSL?	26.7%	100.0%
What is your opinion about its effectiveness?	96.7%	90.6%
What is your opinion about the level of difficulty in its implementation while attending a birth?	96.7%	100.0%
<b>Controlled cord traction</b>		
Did you ever use CCT for the management of the third stage of labor?	90.0%	100.0%
What is your opinion about its effectiveness?	96.7%	100.0%
What is your opinion about the level of difficulty in its implementation while attending a birth?	96.7%	96.9%

	Baseline (30 birth attendants)	Post Intervention (32 birth attendants)
	%	%
<b>Uterine massage</b>		
Did you ever use uterine massage for the management of the TSL?	86.2%	96.9%
What is your opinion about its effectiveness?	93.3%	100.0%
What is your opinion about the level of difficulty in its implementation while attending a birth?	90.0%	96.9%
<b>Uniject</b>		
Did you use Uniject to administer prophylactic oxytocin?	-	96.9%
Do you think the use of Uniject facilitates the administration of prophylactic oxytocin?	-	96.0%
When comparing Uniject with the use of ampoules and syringes, in your opinion the use of Uniject is:		
Simpler	-	87.1%
Equally simple or complex	-	12.9%
More complex	-	0.0%
If Uniject were not available, do you think that the prophylactic administration of oxytocin would be reduced?	-	43.8%

# Preliminary Conclusions

- The 3-component intervention is feasible in the context of small maternity hospitals.
- It is probably effective to increase the use of prophylactic oxytocin, CCT and uterine massage.
- Uniject was well accepted and used by birth attendants

**Thank you!**

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