

# Acceptability of the NASG for Management of Obstetric Hemorrhage in a Rural Mexican Public Health System

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Panel Discussion 3446 - Monday 5 November 2007, 8:30pm Global Experiences with the Non-pneumatic Anti-Shock Garment: A New First Aid Device for Saving Mothers' Lives from Obstetric Hemorrhage

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### Maternal Mortality in Puebla and Oaxaca, Mexico

- Higher than national average
- Hemorrhage is first cause of maternal deaths
- Indigenous, poor, isolated communities
- Limited access to health care
- Low use of evidence-based practices





#### IMSS Oportunidades

- Mexican Institute of Social Security services for rural and economically disadvantaged communities (not enrolled in any form of social security system)
- Network of primary health services (UMR) and rural hospitals (HR)



#### Study Design

- Efficacy of NASG (May 2004-Aug 2005)
  - Low number (n= 20) of enrolled study participants
  - Sub-optimal quality of reporting
  - Possible NASG use without reporting
- Qualitative exploration of NASG acceptability (Oct 2004- Aug 2005)

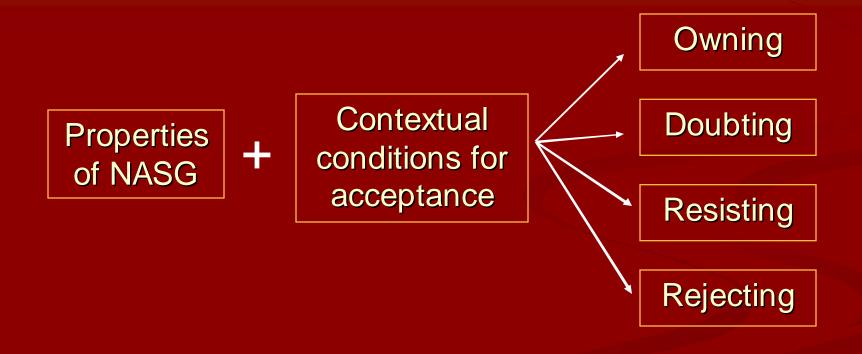
#### Acceptability of NASG in Mexico: Qualitative study methods

 Semi-structured interviews (n=70) conducted in UMRs, HRs and central offices in Oaxaca, Puebla and Mexico City

Profession	n
Nurse/Auxiliary	10
Medical student	6
General practitioner	15
Specialist (certified or resident)	22
Administration	17
Total	70

#### Acceptability of NASG in Mexico: Results

Trajectories of NASG acceptance / rejection



### Acceptability of NASG in Mexico: "Owning" Trajectory

- Immediate acceptance regardless of understanding mechanisms or witnessing its use
- Most common in UMRs
- Conditions related to UMR that led to OWNING:
  - greater need
  - direct training
  - small facility
  - low staff turnover
  - connectedness to community

#### Acceptability of NASG in Mexico: "Owning" Trajectory

"...she [the patient] was stable at all times and that made me feel much calmer, and also I felt that the fact she had the NASG on was going to prevent her from further

hemorrhage..."
auxiliary nurse in Puebla



### Acceptability of NASG in Mexico: "Doubting" Trajectory

- Initial skepticism following the training but witnessing the first case with the NASG resulted in acceptance
- Most frequently observed trajectory
- Conditions that led to DOUBTING:
  - competing resources
  - larger facility with rapid staff turnover
  - \* type of professional training (medical vs. nursing)

### Acceptability of NASG in Mexico: "Doubting" Trajectory

"In the beginning I was very doubtful... I thought: 'what is this?' but after getting to know the NASG better, after having experience with it and seeing how patients recover, I think the NASG is excellent," a DOUBTFUL HR director



### Acceptability of NASG in Mexico: "Resisting" Trajectory

- Opposition using NASG even after witnessing a successful case, acceptance after a series of cases
- Most common in HRs
- Conditions that led to RESISTANCE:
  - hierarchical structure and negative personality traits
  - less open to modifying current practice
  - lack of peer-reviewed evidence that NASG works

### Acceptability of NASG in Mexico: "Resisting" Trajectory

HR director commenting on a RESISTANT obstetrician:

"...he's been working for many years. He's old and doesn't have a good disposition... if we cannot convince our obstetrician, even if our GPs or nurses want to use the NASG, the decision depends on him. What we need is a change in attitude, but that's going to be hard because he's been in practice for too long."

### Acceptability of NASG in Mexico: "Rejecting" Trajectory

- A combination of doubting and resistance without ever accepting the NASG
- Typically specialist doctors from tertiary facilities
- Context that led to REJECTION:
  - "tertiary level mentality"
  - no training
  - interrupted or incomplete observations of recovery

### Acceptability of NASG in Mexico: "Rejecting" Trajectory

A REJECTING doctor from an MOH tertiary hospital in Oaxaca:

"I don't know exactly how it works because I have only seen two patients with it. I would have to witness a case where a patient in shock is actually stabilized with the use of the NASG. The patients I've seen have been stable when they arrive at the hospital and are not bleeding anymore"

## Implications for Implementation of NASG in Health Systems

- NASG, while simple and easy to use, still needs:
  - continuous supportive supervision
  - tailored trainings for different:
    - types of providers
    - patient loads (volume)

## Implications for Implementation of NASG in Health Systems

- Necessary to have early attention from influentials to overcome resistance
- Acceptance issues may be overcome as stronger evidence from efficacy trials is generated and NASG is incorporated into pre-service curricula



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