

Research Aims

- Assess current IOL resources, policies, and practices in Nagpur, India
- Use the situational analysis results to inform the dissemination strategies for the MOLI study

Misoprostol or Oxytocin
for Labour Induction Study

- Open-label randomised trial** in 3 Indian hospitals of women being induced with low dose oral misoprostol for hypertensive disease in pregnancy and requiring augmentation after membrane rupture.
- 520 participants** randomised to receive either further oral misoprostol (25mcg every 2 hours) or titrated intravenous oxytocin for augmentation.
- Enrollment completed July 2022; published results forthcoming!

Situational Analysis

Research components:

- Document review of intl. and national guidelines on IOL
- Interviews with key Indian stakeholders (**n=9**) to gather information and opinions about current policies and practices on IOL in India
- Site assessments (**n=31**) and interviews with providers (**n=62**) at public and private healthcare facilities and pharmacies in Nagpur District, India
- Time period:** Aug. 1, 2022 – October 31, 2022
- Ethics approvals:** University of Liverpool; All India Institute of Medical Sciences (AIIMS), Nagpur

Indian Guidelines on Misoprostol for IOL

- Use of uterotonics for IOL is supported at hospitals with capacity to perform caesarean section.
- Oral and low-dose vaginal misoprostol are recommended as a method for cervical ripening in cases with unfavorable cervix.
- Misoprostol is currently not included in guidelines for labor augmentation.

Key sources:

Ministry of Health and Family Welfare (MoHFW). Guidance note on Use of Uterotonics during Labour, 2015.

Federation of Obstetric and Gynaecological Societies of India (FOGSI). Induction of Labour: Good Clinical Practice Recommendations, 2018.

MoHFW, Government of Maharashtra. Standard Treatment Protocol, 2018.

“It would be good to have local guidelines that apply to India...and make it clear that if we are using misoprostol then what dose or how many doses are to be used under what circumstances.”

-- Interview #5, Ob/Gyn, charitable health centre

“I know several people who use misoprostol for induction routinely. The only reason we have not used it is there are no clear guidelines on it.”

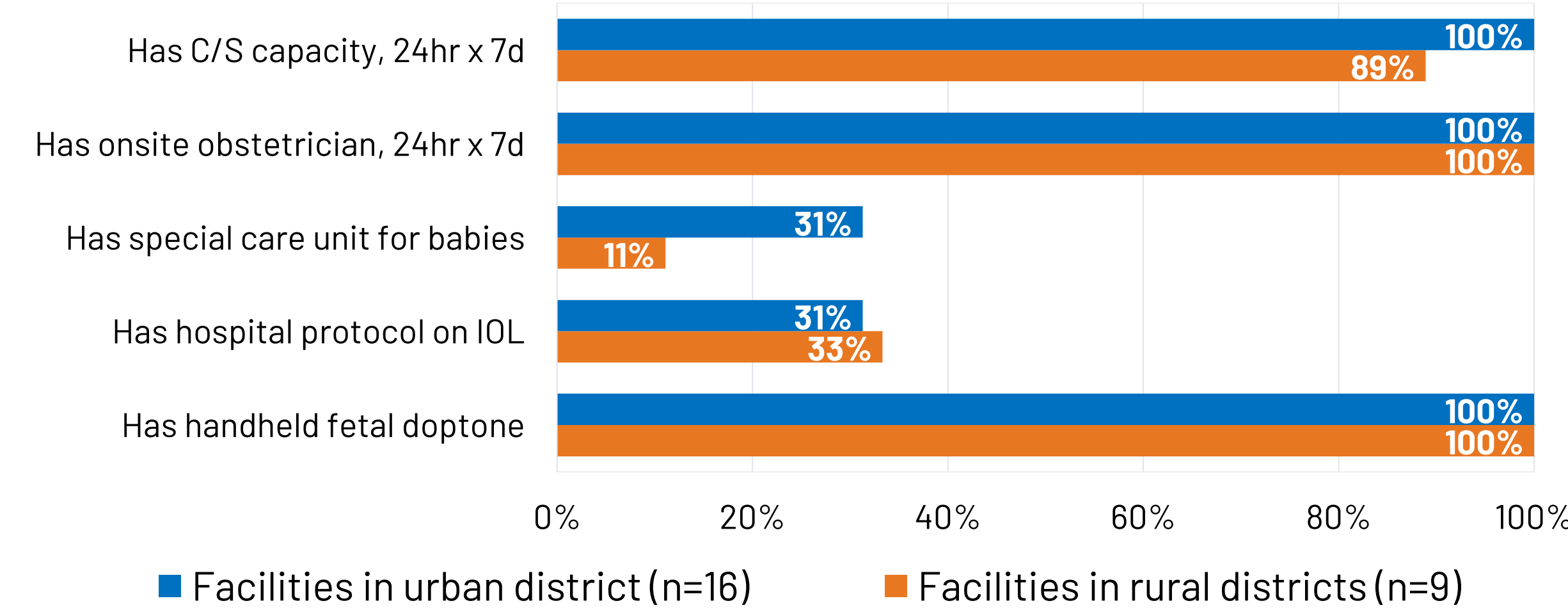
-- Interview #1, Ob/Gyn, private hospital

Facility Assessments

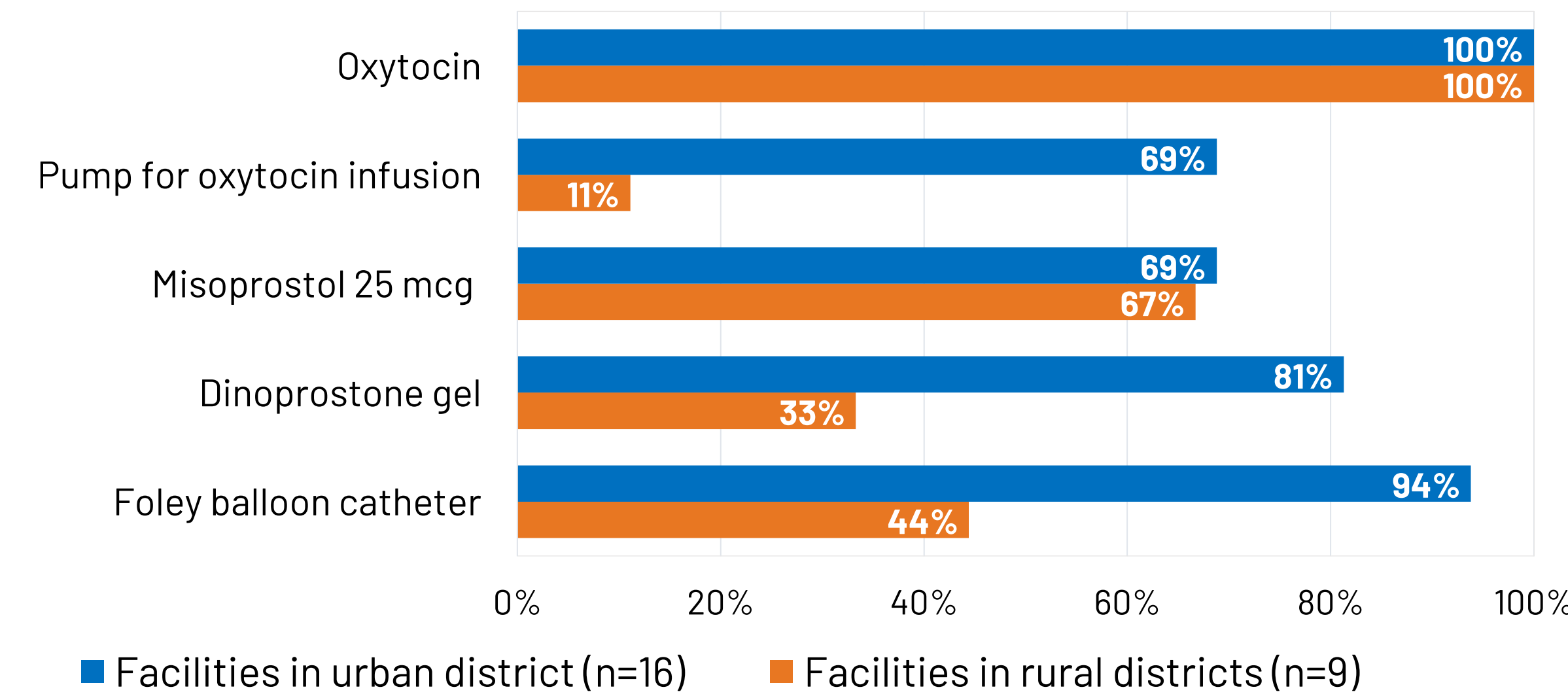
- 31 hospitals (6 public, 25 private)** with the capacity to perform caesarean sections were purposefully selected
 - 16 in the urban subdistrict (Nagpur City)
 - 15 in nearby rural subdistricts (Ramtek, Kamptee, Katol, Umred, Kalemshawar)

Facility Assessments: Results (n=25)*

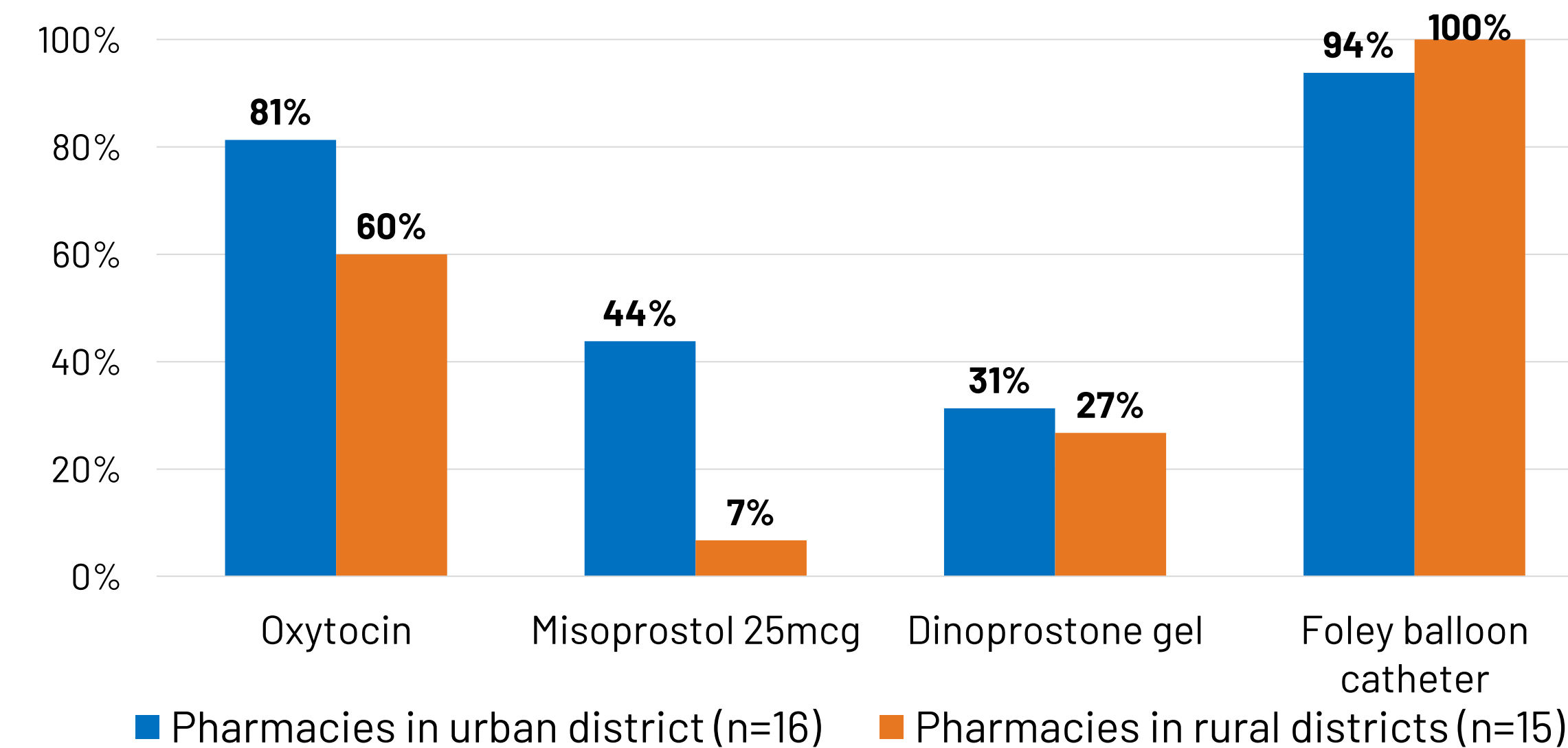
*25 out of 31 facilities reported having performed IOL in the past year (2 public, 23 private)



IOL Agents Available at Facilities (n=25)



IOL Products Sold at Pharmacies (n=31)



Provider Surveys (n=62)

- Respondents were senior OB (38), medical officers (10); staff nurses (7), ANMs (5), resident (1) and senior anesthesiologist (1)
- Methods preferred by providers for **cervical ripening** include: *
 - Misoprostol 25mcg tablets (42%; 24/57)
 - Dinoprostone gel (40%; 23/57)
 - Oxytocin (11% 6/57)
 - Foley catheter (7%; 4/57)
- For **labor augmentation** nearly all providers confirmed oxytocin as their preferred method (61/62) and only 1 provider specified misoprostol

* Excludes 5 providers who responded “none/don’t know”

“...misoprostol is for cervical priming. I never use it for augmentation. Augmentation is only done by Pitocin and Pitocin is never for induction.”

-- Interview #4, Ob/Gyn, private hospital

Use of Misoprostol for IOL

55% (34/62) said they used misoprostol as part of their standard practice

- Routes used: vaginally (100%), orally (44%) and sublingually (15%)
- Typical dose: 25mcg tab (85%); 50mcg tab (15%)
- Typical frequency: every 2–3 hours (12%); every 4–6 hours (88%)

45% (28/62) said they did not and gave the following reasons:

- Concerns about adverse effects from misoprostol (71%; 20/28)
- Not included in hospital protocols or other guidelines (46%; 13/28)
- Not consistently available at their hospital (14%; 4/28)

“Misoprostol is a wonderful drug ... It is cheap, it is stable even in our conditions, easy to administer especially when given orally. Patients are very comfortable when we don’t have to do the vaginal examination and the response is very good.”

-- Interview #5, Ob/Gyn, charitable health centre

Main Takeaways

- Need for further dissemination of the latest evidence and recommendations on misoprostol use for IOL
- Concerns by providers about adverse effects from misoprostol need to be addressed through additional dissemination and training efforts
- Attention needed to improve access to misoprostol 25mcg and other key resources for IOL, particularly in facilities in rural areas
- Development and access to guidelines on IOL should be prioritized in places where IOL is performed to support best practices