



Quality of medicines for life-threatening pregnancy complications

in low- and middle-income countries: A systematic review

An estimated

295,000 women

die every year due to complications of pregnancy and childbirth



Most of these deaths occur in low- and middle-income countries (LMIC)



The main causes of maternal death are

27%

Postpartum haemorrhage (PPH)

14%

Pre-eclampsia/eclampsia (PE/E)

11%

Sepsis due to direct maternal infections cause



It is estimated that **1 in 10** medicines in LMIC are substandard and falsified medicines

Adequate and timely use of **good quality, safe, effective, and affordable medicines** is essential to ...



...**reduce maternal mortality** and to achieve **universal health coverage**



Sustainable development goals

3 GOOD HEALTH AND WELL-BEING



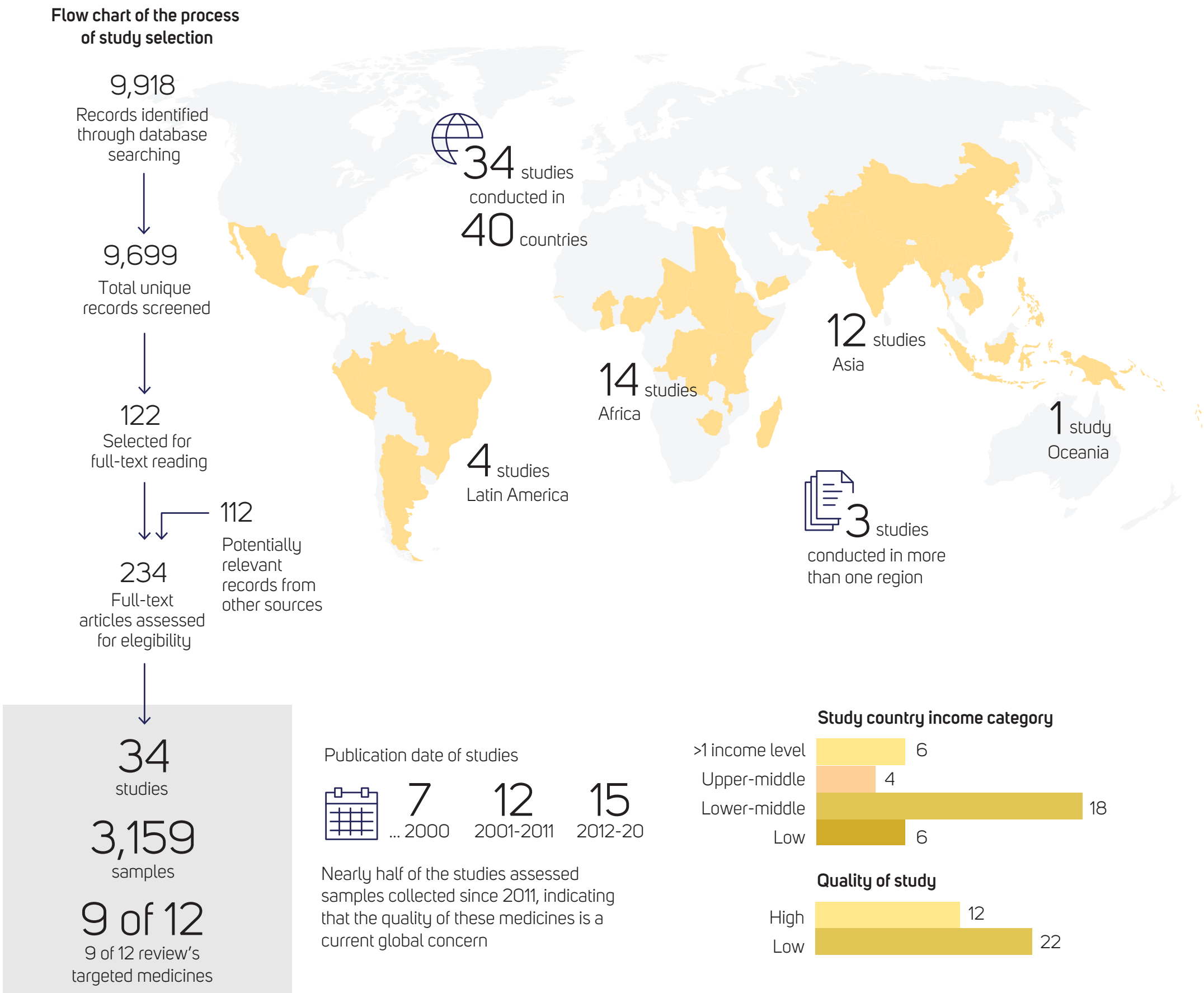
Ensure healthy lives and promote well-being for all at all ages

Objective:

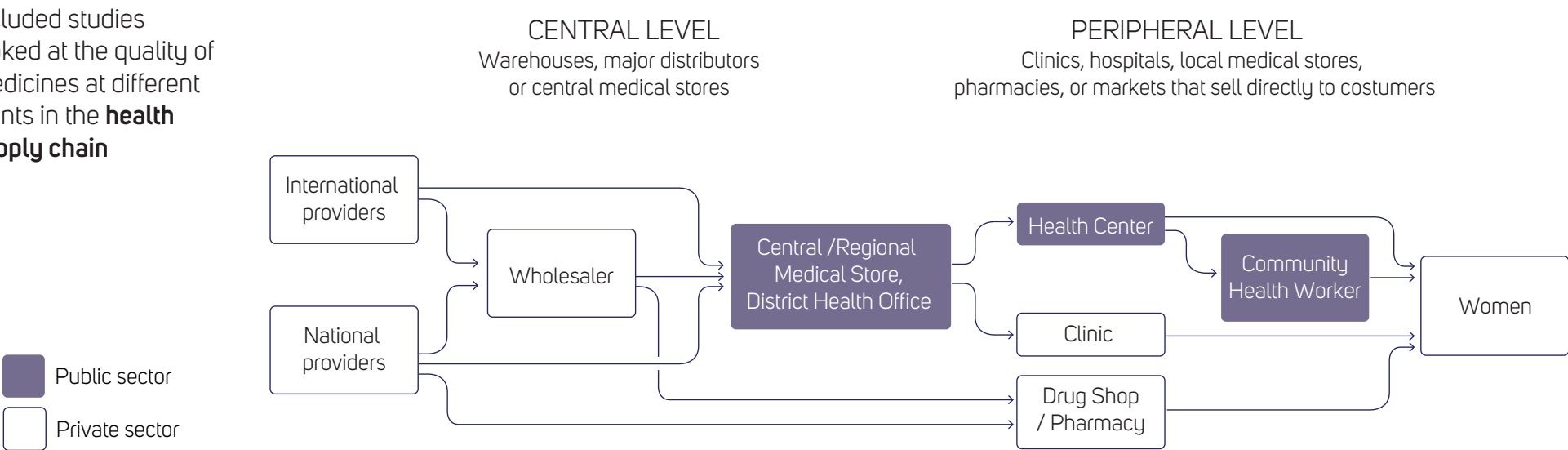
to identify, critically appraise and synthesize **findings of studies on quality of selected medicines** (uterotonics, tranexamic acid, magnesium sulfate, and injectable antibiotics) **available in LMIC.**

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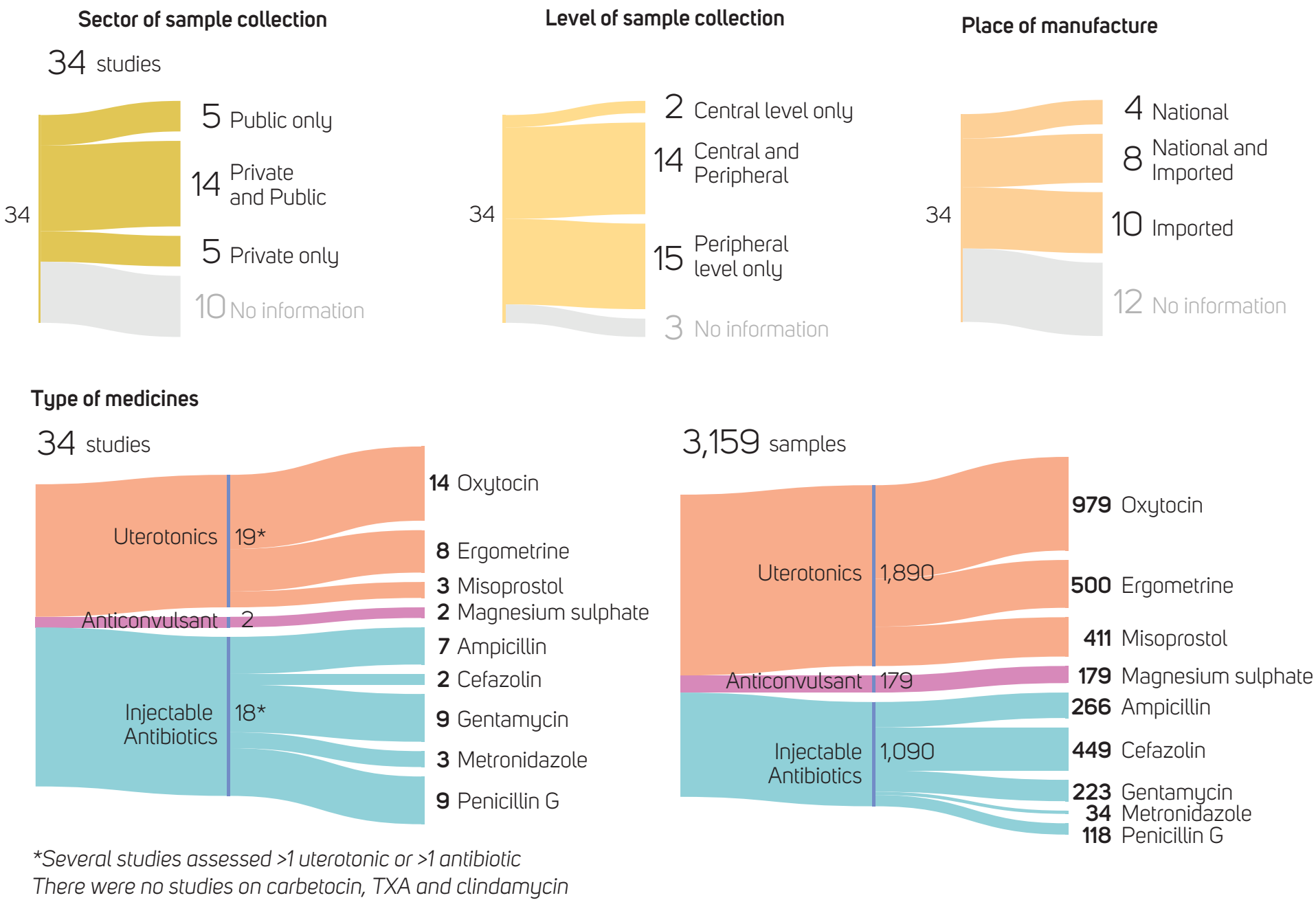


Included studies looked at the quality of medicines at different points in the **health supply chain**

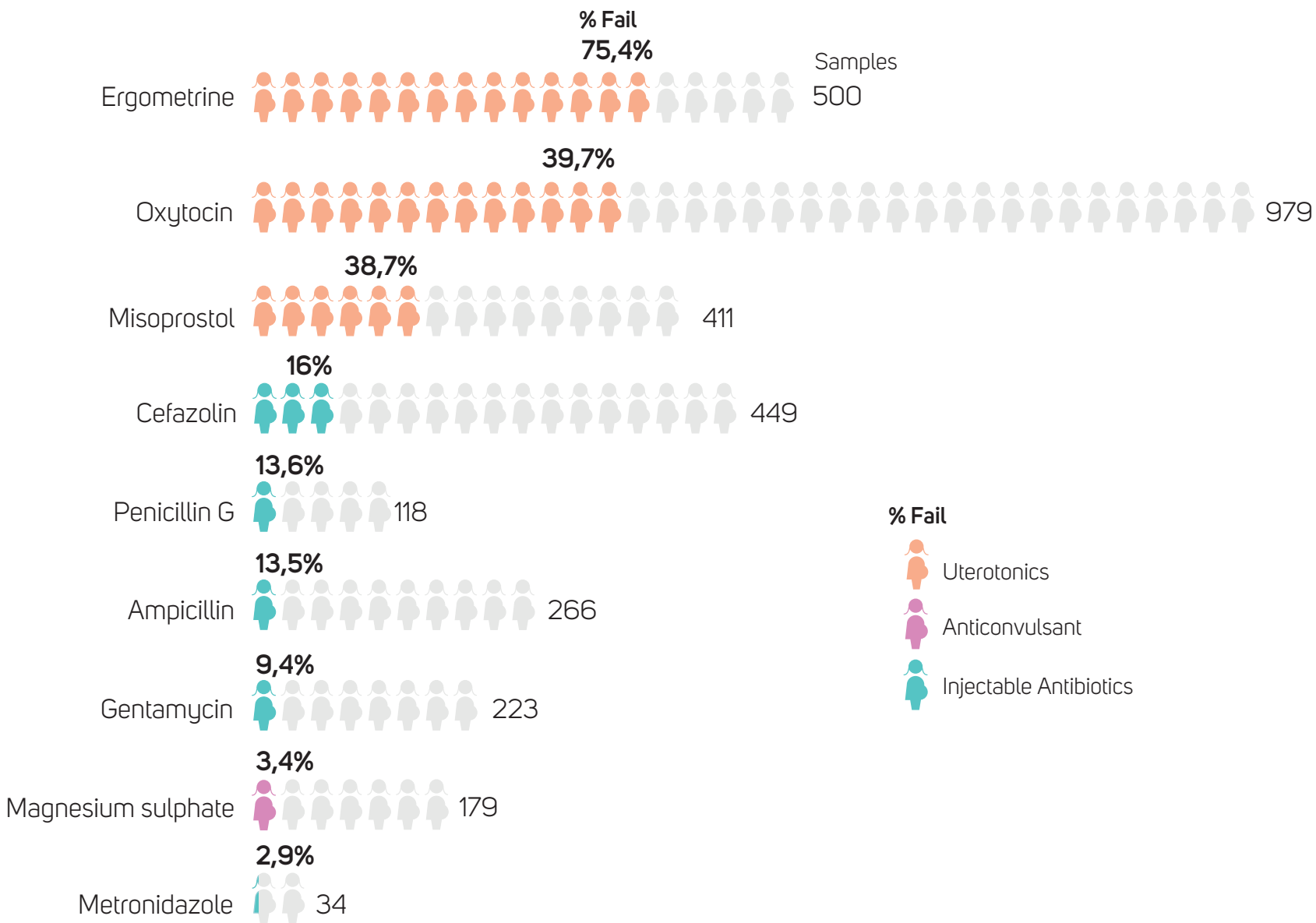


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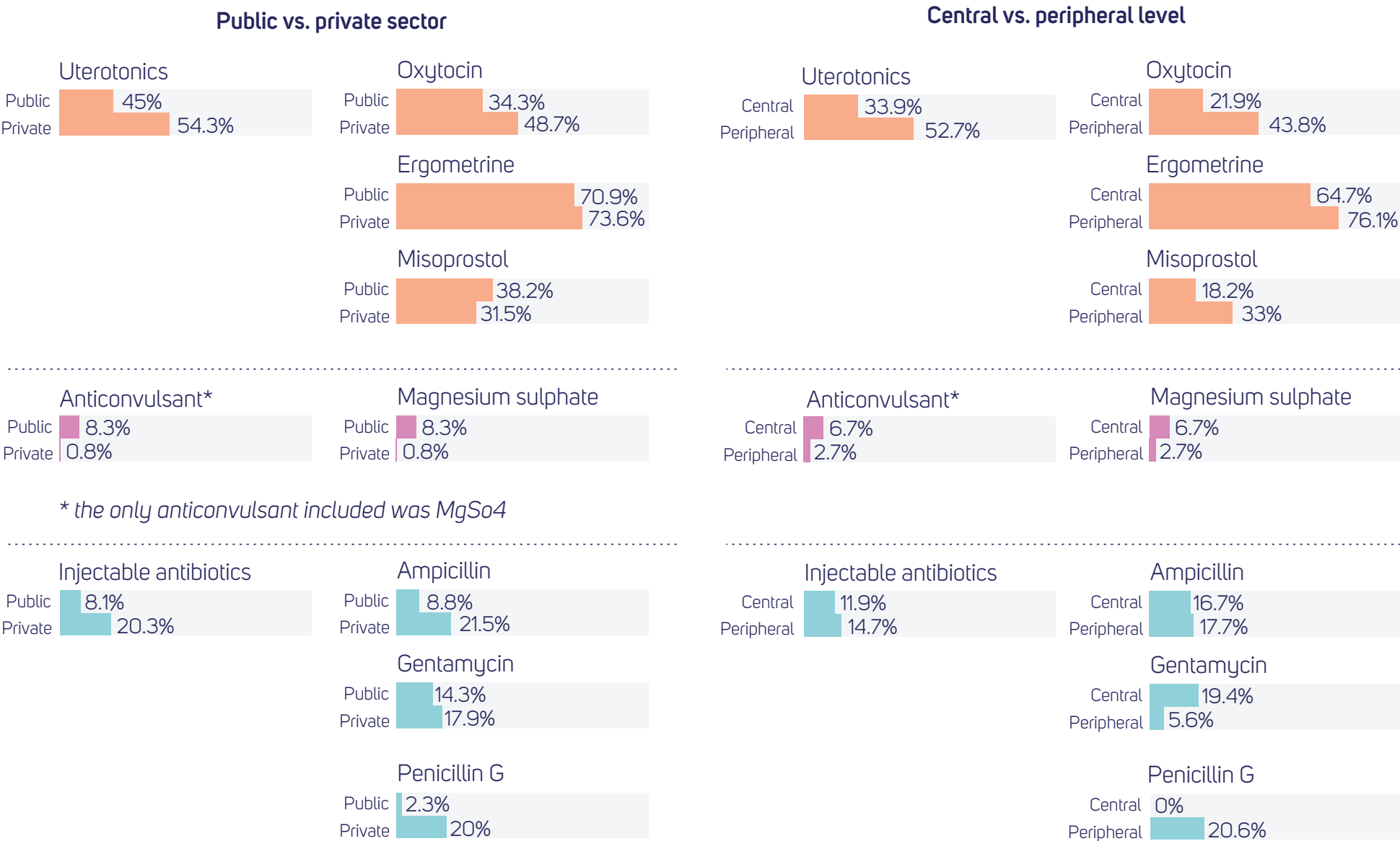
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Prevalence of samples that failed quality tests



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- **Oxytocin** was the drug with the largest number of studies and samples
- **Ergometrine** was the uterotonic with the highest prevalence of failed samples
- **Misoprostol** is a drug stable at room temperature. Nevertheless, a high number of samples were found to be of low quality
- **Anticonvulsants** had one of the lowest prevalence of failed samples
- All antibiotics showed similar prevalence of failed samples, except for **metronidazole**



Conclusion:

There is a widespread problem with the quality of medicines used in LMIC to manage postpartum haemorrhage, pre-eclampsia/eclampsia and infections. This could be a contributing factor to the persistence of severe maternal morbidity and mortality in these settings despite affordable and effective treatments.