SHOULD YOU TRUST A DIPSTICK?



Rapid Tests as Screening for Asymptomatic Bacteriuria in Pregnant Women in Lima, Peru

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Purpose:

To determine if there is a need for an improved rapid urine test in Lima, Peru.

Background:

Asymptomatic bacteriuria in pregnant women has been associated with:

- 1. Preeclampsia
- 2. Preterm birth
- 3. Low birth weight
- 4. Pyelonephritis

In Peru, the prevalence of asymptomatic bacteriuria during pregnancy can be as high as 21.2%.

Antibiotic treatment of asymptomatic bacteriuria reduces the risks of preeclampsia, preterm birth, low birth weight, and pyelonephritis.

An accurate screening test is needed.

Methods:

Identify the current prevalence of asymptomatic bacteriuria in Lima.

Identify current procedures for antenatal screening of asymptomatic bacteriuria in Lima.

Perform a cost analysis of the screening procedures currently in use.

Identify the accuracy/reliability of screening procedures currently in use.

Determine if a need exists for an improved rapid screening test.



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Conclusions:

The current gold standard procedure for screening is a urine culture. The cost is \$4.81 per culture.

Most women receive a dipstick test as screening for asymptomatic bacteriuria. The cost is \$0.21 per test.

Dipsticks can have a sensitivity as low as 2.8%, which leads to a very high number of false negative results.

Dipsticks are not a viable alternative to urine culture as a screening test for asymptomatic bacteriuria in pregnant women.

There is a need for an improved rapid screening test for asymptomatic bacteriuria in pregnant women in Lima.