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Evaluation of PCR technique as a rapid screening method for detection of group B streptococci colonization in pregnant women

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Body

We read the interesting study by El-edel *et al.* [1] published in April–June 2022 issue of the *Menoufia Medical Journal*. El-edel *et al.* [1] studied the performance of the PCR as a screening tool for detecting group B streptococci (GBS) colonization in the urogenital tract of Egyptian pregnant women and estimated its prevalence among these pregnant women. They found that the prevalence of colonization with GBS in the studied pregnant women was 20%. The PCR had 99.0% sensitivity and 98.0% specificity with 72.11% positive predicted value and 70.4% negative predictive value [1]. They concluded that the PCR technique is a rapid, specific, and sensitive test for diagnosis and screening for GBS colonization in Egyptian pregnant women [1]. We believe that the nationwide applicability of that screening tool in Egyptian pregnant women requires the consideration of the following two points. First, it is noteworthy that the evaluation of the costs and benefits of GBS screening protocol using PCR has revealed promising results. It generated a net benefit of \$7 per birth on comparing with the maternal risk-factor strategy. For every one million births, 884 fewer infants would acquire infection with early-onset GBS sepsis and 23 infants would be saved from either disability or death, while 80 700 more pregnant would receive antimicrobial therapy [2]. However, the PCR-based screening technique could be expensive and its implementation in the nationwide screening of pregnant women for GBS detection necessitates substantial financial coverage. Second, the significant prevalence of maternal urogenital tract GBS colonization in a particular population prompts the need to set and implement intrapartum antibiotic prophylaxis protocols. These protocols, employed in many parts of

the world, have dramatically reduced the prevalence of GBS colonization when given to a colonized pregnant woman who has a clinical state that puts her neonate at increased risk for early-onset GBS sepsis [3–5]. Based on the substantial GBS colonization prevalence (20%) in pregnant women reported by El-edel *et al.* [1], we wonder whether the Egyptian intrapartum antibiotic prophylaxis protocol is already set or not.

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Conflicts of interest

There are no conflicts of interest.

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