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Ranjitha Vasa

Advisor(s): Ozgul Muneyyirci-Delale

Navigating Fertility: A Critical Review of Fertility Apps in Modern Healthcare

Introduction: Mobile health applications offer a convenient way to access and store fertility and menstrual information. Previous research on these apps lacks comprehensive evaluation. The majority of apps are not concordant with evidence-based fertility awareness methods. We aim to bridge the existing gaps in fertility app functionality and content by conducting a comprehensive assessment.

Methods: Initial Apple app store search yielded 606 apps. Search terms included “fertility” “menstrual cycle” and “period tracker”. Exclusion criteria included apps that cost money, non-English, not-relevant, and duplicates. A combination of Masaud et al.’s and Chyjek et al.’s rubrics were used to evaluate the remaining 25 apps. Two medical students (S.M. and S.H.) and a second-year obstetrics and gynecology resident (R.V.) independently reviewed the apps. Average sums of each category were calculated, reflecting overall quality of the apps with a maximum score of 34.

Results: 48% of apps were labeled as moderately adequate quality, 52% were adequate, and no apps were poor. The highest scoring app was 30.26. Only one app used substantially accurate literature and met educational objectives. 56% of apps required in-app purchases, while 48% were compatible across Android and Apple platforms, and 92% had implemented educational imagery. Notably, 20% of apps had no clear privacy statement, and only one app had no conflict of interest. About 24% of apps were well-organized, and 88% did not have any factual errors.

Conclusions: Fertility apps lack crucial user features, high-quality consumer education, or promote unsubstantiated facts leading to misinformed patients and practitioners. Strict guidelines, possibly peer review, needs to be implemented prior to app availability. By doing so, health care providers may provide their patients with beneficial tools to make informed decisions regarding their reproductive health.