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BACKGROUND

The delivery of mobile health services is an integral tool for modern day mental health consumers and has become utilized across the nation in attempt to mitigate varying barriers to care. Widespread prevalence of mental health illness during the peripartum period opens potential for mobile health services for positive change. Currently while a myriad of perinatal apps are offered, the need to evaluate and identify shortcomings is integral to assuring quality care. To the best of our knowledge, no studies have been conducted that assessed app reviews and consumer perspective. Understanding user perspective is key to maximizing app engagement and delivery of quality perinatal mental health treatment.

METHODS

This integrative review used the Apple store's perinatal mental health apps via key search words and categorized as "Health & Fitness" or "Medical". Twenty-seven apps were selected and 1,184 user reviews were extracted and thematically analyzed and correlated to star rating scale to accentuate consumers' perspectives. The application quality and accessibility were further measured with the 9-point Silberg scale, where higher score indicates higher quality.¹

RESULTS

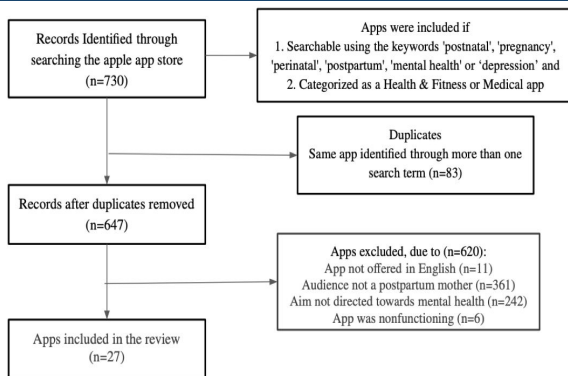


Figure 1. Prisma flow diagram of reviews included in the analysis. 27 apps for perinatal mental health were identified and analyzed.

RESULTS

QUALITY

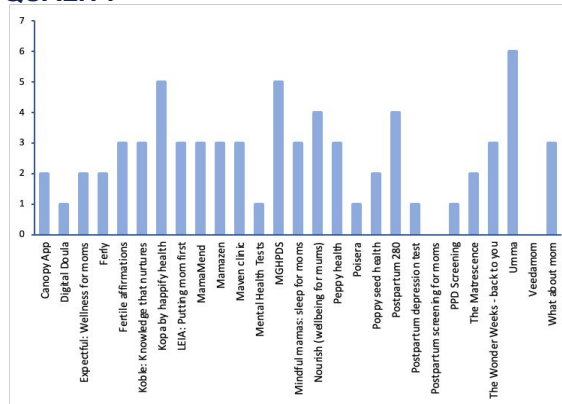


Figure 2. 9-point Silberg scale to assess the quality of web based information. The average Silberg score was 2.55. The maximum score calculated was a 6. Two apps scored a 0.

ACCESSIBILITY

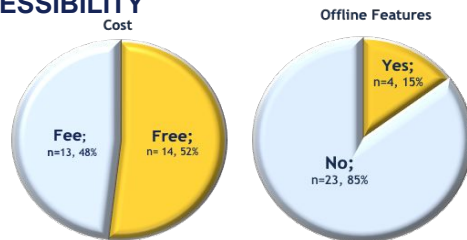


Figure 3. Accessibility was measured by the cost (LEFT) and offline feature (RIGHT).

REVIEWS

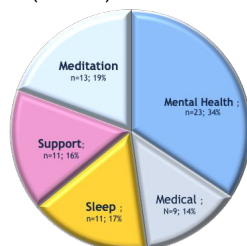


Figure 4. Percent of applications analyzed that offered specific features users reviewed positively.

DISCUSSION AND CONCLUSION

QUALITY: Perinatal mental health apps in the Apple store are not accountable according to Silberg scale (Figure 2).

ACCESSIBILITY: 48% of selected apps cost money or required a subscription. 88.89 % of the apps required internet connection for use (Figure 3).

USER REVIEWS Majority of reviews that referenced app cost and functionality were negative and had low star ratings. The average star rating correlated to cost was 1.6 out of 5. Users frequently commented on hidden app cost in order to use additional features and the associated difficulties with the app interface. Examples includes:

"The app itself is free. But nothing at all on the app is free. Not even little samples."
"Very sneaky, they make it hard to cancel the very expensive subscription."

In contrast, high star ratings correlated with medical, sleep, meditation, mental health, and support functions highlighting the importance of these features in supporting mothers during this period. Currently; however, there is a low percentage of apps that offer these features (Figure 4). Assessment of consumer perspectives on current perinatal mobile applications helps identify the features that users find most useful and furthers our understanding of how to better support mothers grappling with mental illness. In order to mitigate healthcare disparities present for women experiencing peripartum mental health illness, broadening accessibility for consumers in the context of cost and app functionality should be considered and implemented.

LIMITATIONS

Of note, apps analyzed in this study were only those found in the Apple Store. Since no applications were individually downloaded information obtained was only via available description. The potential for missed information is possible if specific features were not advertised.

REFERENCES

1 Griffiths, K. M., & Christensen, H. (2000). Quality of web based information on treatment of depression: cross sectional survey. *Bmj*, 321(7275), 1511-1515.

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