

# Anticipatory Guidance for Pregnant Women for Healthy Use of Mobile Phone

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## ABSTRACT

Pregnant women use digital media to maintain contact with professionals, for having entertainment, and to get emotional support. These factors contribute to excessive use of mobile phone use. There is no conclusive evidence for impact of digital gadgets on pregnancy and child birth. In the absence of guidelines for this group, successful integration of anticipatory guidance into the routine antenatal and postnatal care for healthy use of technology during pregnancy is crucial for strengthening both maternal and child health, especially in the current digital context.

**Keyword:** Anticipatory guidance, Digital, Pregnant, Women.

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Pregnant women use digital media and gadgets to get information about pregnancy, connect with other pregnant women, get emotional support, and entertainment. Increased use of digital media has been observed among women during their first pregnancy and their subsequent care for the new-born infant.<sup>1</sup> Uncertainty, ambivalence, anxiety, feelings of loneliness, and lack of adequate information or support during pregnancy are some of the possible reasons for excessive use of technology.<sup>2</sup>

## WHY SHOULD OBSTETRICIAN BE CONCERNED ABOUT IT?

Though not conclusive in terms of causal association, available evidence has shown the association of digital gadgets especially mobile phones with adverse pregnancy and child outcomes. A negative impact on fetal growth was observed among pregnant mothers who had more than 30 minutes of mobile phone usage per day. Further, shorter pregnancy duration, increased risk of preterm birth, low birth weight, and adverse neurodevelopmental effects due to radio frequency radiation emitted from the devices could result in poor cognitive performance and behavioral difficulties such as labile emotions and hyperactivity among children whose mother had excessive cell phone use during pregnancy.<sup>3</sup>

## WHAT CAN AN OBSTETRICIAN DO?

Given nature, vulnerability and outcomes of excessive gadget use during pregnancy, an obstetrician assumes a vital role to promote the healthy use of gadgets among pregnant women during their prenatal visits. This is necessary especially in the absence of any approved guidelines or recommendations from the international or national societies. In this context, a supportive approach based on anticipatory guidance during the routine antenatal visits has immense potential to promote the healthy use of technology during pregnancy.

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## ANTICIPATORY GUIDANCE

This proactive approach for healthy use of technology during pregnancy can include screening and sensitization incorporated into routine antenatal visits.

### Screening

The pregnant women can be screened for excessive use of technology by asking simple questions related to craving, loss of control (experience loss of control for use of technology) and compulsion (use despite knowledge of consequences like sleep delay, procrastination for pregnancy-related tasks etc.). Additionally, pregnant women can be screened for co-morbid

conditions like anxiety and depression during pregnancy which is associated with excessive use of gadgets. Before appropriate referral and management, those screened positive can be sensitized for healthy use of gadgets.

### Sensitization and Recommendations

Irrespective of the screening status related to excessive use of gadgets, all pregnant women should receive brief counseling related to the restriction of online time. This will include keeping mobile phone away from the body while streaming or downloading content avoiding long sitting hours for online activities, taking frequent breaks to get up and move around, doing simple stretching exercises to stay active, to keep an upright spinal posture while viewing the mobile, keeping the device at the chin or eye level to minimize bending and strain on cervical spine and to follow the 20-20-20 rule—for every 20 minutes spent for using screen, try to look away at something that is 20 feet away for 20 seconds to avoid computer vision syndrome. They should regularly adjust chair and height of the monitor as pregnancy progresses so that the top of the digital screen (desktop/laptop/ipad) is in line with eyebrows, sit as close to the desk as possible to avoid straining of the spine while reaching out for the mouse or key pad, use a wrist rest or wrist brace while typing, use a cushion for lower back support and install foot rest. They should have a plan for proper hydration and regular bladder emptying, change tasks to avoid strain and stasis, have a regular meal and sleep plan, and adjust work schedule (meetings, day shifts, work-related travel, work from home etc.). They should be encouraged to promote work–life balance and reduce stress through slowing down in work and increase time spent with family and friends. Similar recommendations should be encouraged while working from home. They should avoid using digital devices an hour before bedtime and keep the bedroom a media free zone as blue light emitted from the devices may interfere with quality and quantity of sleep. Obstetricians can recommend the American Academy of Pediatrics<sup>4</sup> and the World Health Organization<sup>5</sup>

guidelines to pregnant women and young mothers regarding screen time of children.

### THE WAY FORWARD

Successful integration of anticipatory guidance into the routine antenatal and postnatal care for healthy use of technology during pregnancy is crucial for strengthening both maternal and child health especially in the current digital context. Though policy guidelines and recommendations at the national level are imperative, a multidisciplinary effort and capacity building of key stakeholders involved in obstetric care are equally important for improving cyber literacy and ensuring a healthy pregnancy.

### REFERENCES

1. Wallwiener S, Müller M, Doster A, et al. Pregnancy eHealth and mHealth: User proportions and characteristics of pregnant women using web-based information sources—A cross-sectional study [Internet]. *Arch Gynecol Obstet* 2016;294(5):937–944. DOI: 10.1007/s00404-016-4093-y.
2. Sharma MK, Rao GN, Benegal V, et al. Technology addiction survey: An emerging concern for raising awareness and promotion of healthy use of technology [Internet]. *Indian J Psychol Med* 2017;39(4):495–499. DOI: 10.4103/IJPSYM.IJPSYM\_171\_17.
3. Miller AB, Sears ME, Morgan LL, et al. Risks to health and well-being from radio-frequency radiation emitted by cell phones and other wireless devices. *Front Public Health* 2019;7:223. DOI: 10.3389/fpubh.2019.00223.
4. The American Academy of Pediatrics (AAP). Media and Children Communication Toolkit [Internet]. 2018 [cited 2020 Nov 6]. pp. 1–8. Available from: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Pages/Media-and-Children.aspx>.
5. World Health Organization. World Health Organisation Guidelines for physical activity, sedentary behaviour, and sleep for children under 5 years of age [Internet]. World Health Organization 2019 [cited 2020 Nov 6]. Available from: <https://www.who.int/publications/i/item/9789241550536>.