Utilization and Content Evaluation of Mobile Applications for Pregnancy, Birth and Child Care

Abstract

The purpose of this study was to explore the use of mobile operations about gestation, birth, and child care among pregnant women and to review the characteristics, contents, and credibility of the operations used by these women. styles This study was cross-sectional and was conducted using a check system. One hundred and ninety-three pregnant women shared in this study. The questionnaire was developed to examine the pattern and reasons for gestation- related operation.

Introduction

Although gestation is a physiological process, there are also social and artistic influences during this time that affect a pregnant woman and the people around her. During this period, not only do women witness changes in their bodies but they also witness changes in their particular connections, places and liabilities. Thus, it's important for pregnant women to acclimatize to these changes [1]. Adaption to gestation is defined as the accession of a motherly part during gestation, and this is a conception that involves some psychosocial variables. Lederman defined seven psychosocial variables for a woman's transition into fatherhood during gestation acceptance of gestation, identification of a fatherhood part, relationship with her mama, relationship with her hubby, medication for labour, antenatal fear of helplessness and loss of control in labour and concern for the well- being of tone and baby [2]. During gestation, women have a tendency to gather information on theirs and their baby's well- being as they prepare for their new part and for meeting their new family member. New information coffers, similar as mobile apps and blogs, have lately begun to be used by pregnant women [3].

The 47 mobile apps used by actors were reviewed and distributed grounded on functions and inventors. The credibility of the information handed by the mobile operations was estimated using a structured dimension. Results Fifty- five percent of the actors were using mobile apps related to gestation, birth, and/ or child care [4]. First- time maters used the apps significantly more frequently than women who were pregnant for the alternate time. Women who had used a smartphone for a longer period of time were more likely to use apps related to gestation, birth, and/ or child care. The most constantly- used information concerned signs of threat and complaint during gestation. Experts' quick opinions and Q&A formats related to diet and drug administration during gestation were the women's most cited need for content in operations. Information was the most common function of the apps. In the evaluation of information credibility, the' information source' order had the smallest score [5]. Conclusions The results showed that operations related to gestation, birth, and child care have come an important information source for pregnant women. To fulfil the requirements of druggies, believable operations related to gestation, birth, and child care should be developed and managed by good healthcare professionals.

Gestation and postpartum ages bear durability in care and comforting. During the epidemic process, telemedicine and telenursing operations have been used to meet the need for healthcare

Ehsan Kamani*

Department of medical, Arak university, Iran

*Author for correspondence:
Ehsan_Kamani@gmail.com

86

J. Labo. Child. (2022) 5(5), 86-90

throughout the world, and chops in this area have been developed. This study aimed to identify the use of mobile operations by pregnant women in entering health information, comforting, and healthcare during the COVID- 19 epidemic and their torture situations during gestation [6].

This was a descriptive study. A questionnaire and the Antenatal tone Evaluation Questionnaire (PSEQ) were administered to collect the data. The PSEQ was developed to estimate a woman's adaption to gestation before labour and contained seven subscales acceptance of gestation, identification of a fatherhood part, relationship with her mama , relationship with her hubby, medication for labour, antenatal fear of helplessness and loss of control in labour and concern for the well- being of tone and baby [7]. Lower scores indicated a lesser position of adaption to gestation. Mobile operations and blogs are decreasingly used by consumers to seek health information. A mobile operation is a software programme that can be used after being downloaded onto a cell phone or tablet. A blog is a particular website run by an individual (who doesn't bear any specific knowledge) and a digital media field, where any information requested about any subject is participated explicitly. numerous mobile operations and blogs give information on a variety of health areas, including women's health. stated that there were further than 1000 operations for gestation, parturition and invigorated care. Pregnant women can pierce general information on gestation as well as detailed information similar as foetal development, problems that do during gestation, managing strategies, weight operation, salutary advice and medical examinations recommended by the week of gestation. Blogs also give gestation information. They also give pregnant women the occasion to partake their guests and recollections of gestation and parturition and to offer suggestions and support to other women [8].

The Internet operation rate in Turkey is66.8, and96.8 of individualities enjoy a smartphone. Over half (65) of Turkish people use the Internet to gain health information, still, there are no studies that report whether or not pregnant women in Turkey use mobile operations and blogs or how frequently and for what purposes they use these programmes [9]. There are also no studies demonstrating the goods of the use of gestation- related mobile operations and blogs on a woman's adaption to gestation. This is the first study to determine whether pregnant

women use mobile operations and blogs and to ascertain the goods of these programmes on adaption to gestation in Turkey. It's considered that this study will make a significant donation to the creation of a database to integrate these programmes into healthcare services and to plan their use [10].

Gestation is a period of life in which women witness physiological, social, and cerebral changes. The gestation period can be associated with cerebral torture due to these changes. Cerebral torture is frequently defined as depression, anxiety, and stress. Cerebral torture during gestation can affect from numerous factors, similar as family connections, connubial connections, employment status, negative life gests , difficulties and requirements performing from gestation, lack of social and emotional support during gestation, and social insulation [11].

Pregnancy and postpartum ages bear durability in care and comforting. At the same time, these ages are sensitive ages where the line between illness and health becomes thinner. Thus, while icing durability in care and comforting, guarding this group from gestation torture and the pitfalls of the COVID- 19 epidemic is pivotal. This situation has also increased the need for distance healthcare provision. Mobile health operations, which can be fluently attained through virtual operation requests, have come an essential tool in meeting this need [12].

Mental health and gestation apps are extensively available and have the eventuality to ameliorate health issues and enhance women's experience of gestation. Women constantly pierce digital information throughout their gestation [13]. still, health care providers and women have little information to guide them toward potentially helpful or effective apps. A accretive methodical approach was used to identify, elect, describe, and assess the most popular and largely stoner- rated apps available in the United Kingdom from January to March 2021. This included developing a script- grounded hunt strategy and hunt process, writing evaluation criteria, and conducting a narrative description and evaluation of the named apps [14].

Useful hunt terms were linked, which included nonclinical, aspirational, and problem- grounded expressions. There were 39 apps named for addition in the review. No apps specifically targeted women with anxiety in gestation. Of the 39 apps included in the review,

33 (85) concentrated solely on mind- body ways to promote relaxation, stress reduction, and cerebral well- being. Only 8 of the 39 (21) apps included in the review reported that health care professionals had contributed to app development and only1/39 (3) handed empirical substantiation on the effectiveness and adequacy of the app. The top12/39 (31) apps were estimated by 2 independent pundits using the developed criteria and scores. There was a small negative correlation between the pundits' scores and app stoner standing scores, with advanced stoner standing scores associated with lower critic scores [15].

The operation model of pregnant women in Hangzhou relies on the electronic mama and Child Health text. The electronic mama and Child Health text was developed and continuously bettered by Hangzhou Women's Sanitarium with the strong support of applicable government departments and in collaboration with professional information institutions [16]. It was completely promoted for use in the Hangzhou area in July 2017. Pregnant women in the Hangzhou area establish their lines in community hospitals during early gestation and register in the Mother and Child Health Handbook app contemporaneously. Pregnant women have regular antenatal checks at community hospitals until week 24 of their gestation, as well as regular motherliness checks at delivery hospitals until delivery after 24 weeks. Each community sanitarium adopts a unified information system, and each delivery sanitarium adopts obstetric electronic medical records, participating the information of each motherliness scan and delivery in community hospitals and delivery institutions to the same Hangzhou data platform, which shares the data with the Mother and Child Health Handbook app [17]. The motherly and Child Health Handbook app is substantially composed of modules, similar as records and examination results, prenatal education classes, children's test results, and an Internet sanitarium. Druggies can view the records and examination results of each motherliness scan, click on the literacy content that matches their requirements and preferences, and communicate with croakers online through the app [18].

The actors were pregnant women who established their records and registered for the Mother and Child Health Handbook app at colourful community hospitals in Hangzhou between January 1, 2019 and December 31,

2020. Information on the age and place of hearthstone of these pregnant women was collected [19]. They were divided into two groups, civic and pastoral, according to their place of hearthstone; they were also divided into three groups according to age< 18 times old (underage), 18 – 34 times old, and ≥ 35 times old (advanced age). The study dates, study contents, study times (watching a videotape and completing the corresponding online quiz were recorded as one unit), andpost-class test scores of pregnant women sharing in online literacy were collected. All pregnant women were divided into two groups according to the time period when their profile was created the "traditional period" group from January 1, 2019 to December 31, 2019, and the " COVID- 19 period " group from January 1, 2020 to December 31, 2020. The use of online prenatal education during the matching time period was compared and anatomized between the two groups of pregnant women [20]. The total quantum of literacy refers to the sum of the number of clicks and views of all vids within ayear. The number of studies per month refers to the sum of the number of clicks and views of all vids within a month. The frequence of online studies refers to the number of times a single pregnant woman watches a videotape online. According to the frequence, it's divided into five groups 1 time, 2 times, 3 – 9 times, 10 – 16 times, and further than or equal to 16 times. We compare the proportion of different groups between 2019 and 2020 [21].

In the first stage, the necessary information and point demanded in designing a mobile- grounded operation of tone- care for pregnant women, who suffer from preeclampia during COVID- 19 frequence, were delved. The exploration sample at this stage comported of two groups of obstetricians and pregnant women (with/ without preeclampsia, and with/ without COVID- 19 infection). In the group of croakers , all 17 croakers working in hospitals and medical centers combined to Kerman University of Medical lores were invited to share in the study. In the group of pregnant women, 20 people were invited. Ten croakers and 10 pregnant women agreed to share in the study [22].

Discussion

A five- Likert scale questionnaire was designed grounded on the information gathered from other studies, conducted on perfoming tone- care against COVID- 19, pre-eclampsia and gestation We also used the following online websites

to design the questionnaire World Health Organization (WHO), compulsive obsessive complaint (OCD) foundation, and Centers for Disease Control and Prevention (CDC) By this questionnaire, the opinion of obstetricians and pregnant women about the significance of information requirements and data rudiments demanded to design the operation was attained [23].

The face and content validity of the questionnaire was assessed and verified by 6 experts (3 medical informatics specialists and 3 obstetricians). The questionnaire was answered by 20 individualities (10 obstetricians and 10 pregnant women), and its trustability was 0. 896 grounded on Cronbach'salpha.Between December 16th to 30th, 2020, the experimenter distributed the questionnairs among the actors and latterly collected them. Mann- whitney's test was used for data analysis using SPSS software interpretation 23. According to mann- whitney's test, only those educational- instructional requirements and operation capabilities, which had attained $p > 0.005$, were considered in designing the operation. gestation is an important and special period in which several changes do in a woman's body. Pregnant women go through a new and unknown period and they don't know how to manage with the strains they face. thus women need further information during gestation (Loudon etal., 2016, Şirin and Kavlak, 2015). Women can meet their information needs by carrying information from people in their social terrain, healthcare professionals or fresh sources (i.e. books, leaflets and Internet) [24].

Conclusion

This study helped understand the epidemic's impact on gestation torture and operation of mobile health operations by pregnant women during the epidemic. Also, our results indicate that a drop in pregnant women entering health services during this period. Mobile health operations appear to be usable for antenatal follow- ups because mobile operations are common among pregnant women during the COVID- 19 epidemic. The diurnal lives of individualities in Turkey are changing due to perfecting technology. While information has frequently been entered from television, books, experts and endured people in the history, individualities are now suitable to pierce the Internet more snappily. Pregnant women in Turkey constantly use mobile operations and blogs; still, to date, there have been no studies

in these fields.

Conflict of Interest

None

References

1. Ghosh Saikat, Dey Subhasish. Public or private? Determinants of parents' preschool choice in India. *International Journal of Child Care and Education Policy.* 14, (2020).

2. Erel O, Oberman Y, Yirmiya N *et al.* Maternal versus nonmaternal care and seven domains of children's development. *Psychol Bull.* 126, 727-747 (2000).

3. Rooshenas L, Wood F, Brookes-Howell L *et al.* The influence of children's day care on antibiotic seeking: a mixed methods study. *Br J Gen Pract.* 64, e302-e312 (2014).

4. Nesti MM, Goldbaum M. Infectious diseases and daycare and preschool education. *Jornal de Pediatria.* 83, 299-312 (2007).

5. Farah Martha J, Sternberg Saul, Nichols Thomas A *et al.* Randomized Manipulation of Early Cognitive Experience Impacts Adult Brain Structure. *J Cogn Neurosci.* 33, 1197-1209 (2021).

6. McKeon Michael. The Morality of Daycare. *Philosophia.* 41, 97-107 (2013).

7. Taylor D, James EA. An evidence-based guideline for unintended pregnancy prevention. *J Obstet Gynecol Neonatal Nurs.* 40, 782-793 (2011).

8. Sedgh G, Singh S, Hussain R *et al.* Intended and unintended pregnancies worldwide in 2012 and recent trends. *Studies in Family Planning.* 45, 301-314 (2014).

9. Naghavi Moshen. Global, regional, and national age-sex specific mortality for 264 causes of death, 1980–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet.* 390, 11511210 (2017).

10. Bearak J, Popinchalk A, Alkema L *et al.* Global, regional, and subregional trends in unintended pregnancy and its outcomes from 1990 to 2014: estimates from a Bayesian hierarchical model. *Lancet Glob.* 6, e380-e389 (2018).

11. Tunón K, Eik-Nes SH, Grøttum P *et al.* Gestational age in pregnancies conceived after in vitro fertilization: a comparison between age assessed from oocyte retrieval, crown-rump length and biparietal diameter. *Ultrasound Obstet Gynecol.* 15, 41-46 (2000).

12. Hoffman CS, Messer LC, Mendola P *et al.* Comparison of gestational age at birth based on

last menstrual period and ultrasound during the first trimester. *Paediatr Perinat Epidemiol.* 22, 587-596 (2008).

13. Chambliss LR, Clark SL. Paper gestational age wheels are generally inaccurate. *Am J Obstet Gynecol.* 210, 145.e1-e4 (2014).

14. Zegers-Hochschild Fernando, Adamson G David, Dyer Silke *et al.* The International Glossary on Infertility and Fertility Care, 2017. Fertility and Sterility. *Elsevier BV.* 108, 393-406 (2017).

15. Williams Z. Inducing tolerance to pregnancy. *N Engl J Med.* 367, 1159-1161 (2012).

16. Campbell LA, Klocke RA. Implications for the pregnant patient. *Am J Respir Crit Care Med.* 163, 1051-1054 (2001).

17. Stacey T, Thompson JM, Mitchell EA *et al.* Association between maternal sleep practices and risk of late stillbirth: a case-control study. *BMJ.* 342, d3403 (2011).

18. Saigal S, Doyle LW. An overview of mortality and sequelae of preterm birth from infancy to adulthood. *Lancet.* 371, 261-269 (2008).

19. Jenkins A, Millar S, Robins J *et al.* Denial of pregnancy: a literature review and discussion of ethical and legal issues. *J R Soc Med.* 104, 286-291 (2011).

20. Qasim SM, Callan C, Choe JK *et al.* The predictive value of an initial serum beta human chorionic gonadotropin level for pregnancy outcome following in vitro fertilization. *J Assist Reprod Genet.* 13, 705-708 (1996).

21. Cole LA, Khanlian SA, Sutton JM *et al.* Accuracy of home pregnancy tests at the time of missed menses. *Am J Obstet Gynecol.* 190, 100-105 (2004).

22. Verhaegen J, Gallos ID, van Mello NM *et al.* Accuracy of single progesterone test to predict early pregnancy outcome in women with pain or bleeding: meta-analysis of cohort studies. *BMJ.* 345, e6077 (2012).

23. Nguyen TH, Larsen T, Engholm G *et al.* Evaluation of ultrasound-estimated date of delivery in 17,450 spontaneous singleton births: do we need to modify Naegele's rule? *Ultrasound Obstet Gynecol.* 14, 23-28 (1999).

24. Waters TR, MacDonald LA, Hudock SD *et al.* Provisional recommended weight limits for manual lifting during pregnancy. *Hum Factors.* 56, 203-214 (2014).