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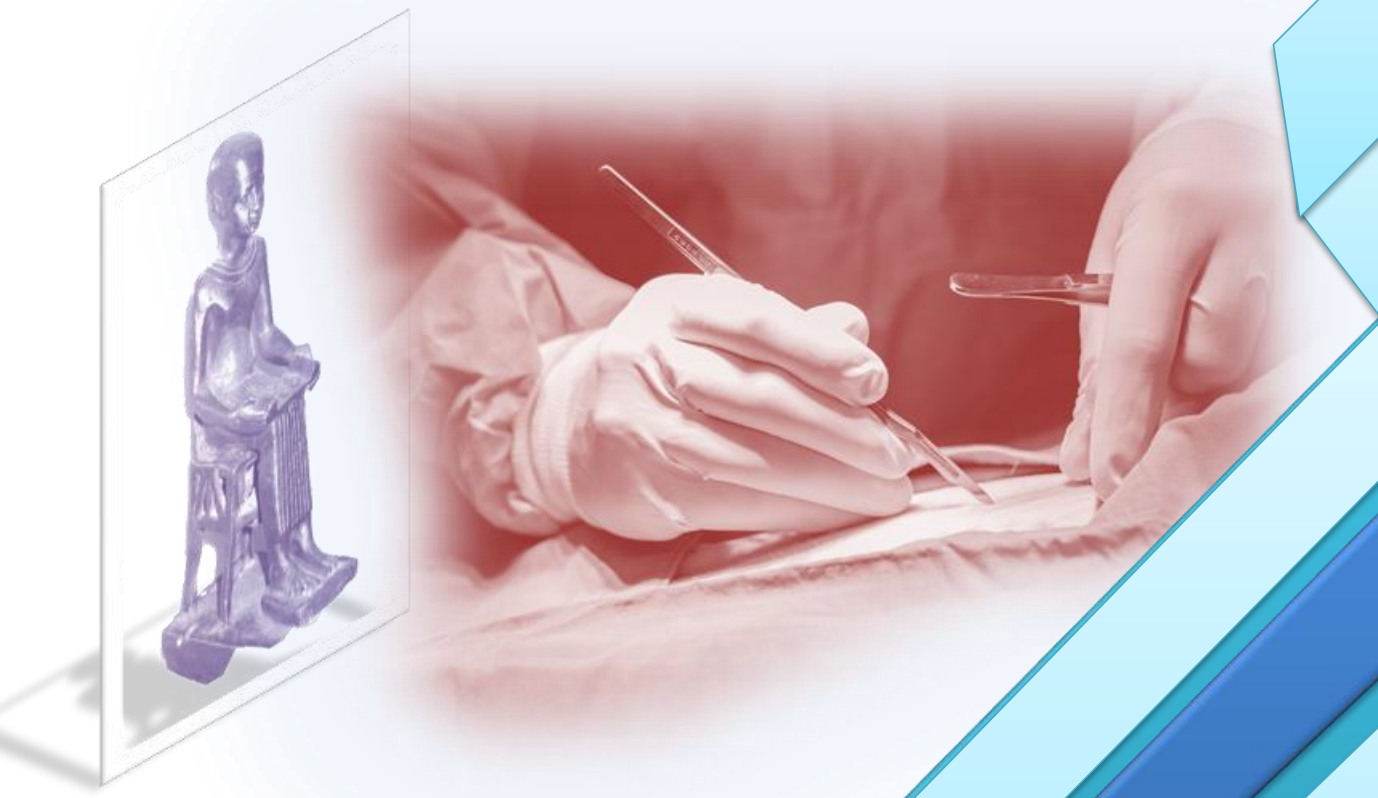

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Social Media Influence and Determinants of Childbirth Mode Preferences Among Women in Childbearing Age

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Abstract

Background: Social media has become an influential tool in shaping health behaviors, including decisions regarding childbirth. The increasing trend of cesarean section (CS), often elective and without medical indication, may be influenced by online narratives and fear of childbirth (FOC), particularly among first-time mothers.

Aim of the work: This study aimed to assess the impact of social media on pregnant women's choices regarding the mode of delivery, with attention to the influence of demographic factors, perceptions, content types, and credibility of online information.

Patients and methods: A descriptive cross-sectional study was conducted among 400 pregnant or recently delivered Egyptian women using an online Google Forms questionnaire. Inclusion criteria included women aged 18–40 years, smartphone users, and social media users (Facebook/WhatsApp). Tools included demographic data, obstetric history, patterns of social media use, perceptions of childbirth content, and trust in online medical information. Data were analyzed using SPSS v26 with chi-square and logistic regression.

Results: A significant association was found between social media exposure and birth method consideration ($P < 0.001$). Influential factors included age (<25 years), high school education, middle-to-high socioeconomic status, nulliparity, frequent social media use, following non-health professionals, exposure to birth-related videos, and trust in social media advice. Content perceived as somewhat or highly influential increased the odds of considering a birth method due to social media (OR = 10.96–20.78). Fear-inducing content and personal narratives were particularly persuasive.

Conclusion: Social media significantly shapes women's perceptions and decisions regarding childbirth. Personal stories, videos, and fear-based content were key drivers of elective CS preferences. Nulliparous women and those with limited real-life birth experiences were most susceptible.

Keywords: Cesarean Section; Vaginal Birth; Childbirth; Decision-Making; Maternal Health; Digital Health.

INTRODUCTION

The mode of childbirth delivery has long been a subject of medical, social, and cultural debate. The decision between vaginal delivery (VD) and caesarean section (CS) is influenced by a range of factors, including medical indications, healthcare accessibility, maternal education, and sociocultural beliefs [1].

Over recent decades, there has been a global increase in CS rates, often surpassing the World Health Organization (WHO) recommended range of 10–15% of total births [2].

While CS can be lifesaving in certain circumstances, the rising trend of elective CS without medical necessity has raised concerns among healthcare professionals. In many other countries, the preference for CS has increased despite medical recommendations favouring vaginal birth when safe and feasible. Studies indicate that several factors contribute to this trend, including fear of childbirth[3], misconceptions regarding the safety and ease of CS, and the role of social media in shaping public perceptions [4].

A growing body of research suggests that social media platforms play a significant role in disseminating health-related information, influencing women's perceptions of childbirth, and ultimately affecting their choice of delivery method [5].

Social media has become a dominant force in influencing healthcare decisions, including the choice of delivery mode. Studies have shown that pregnant women frequently turn to platforms such as Facebook, Instagram, and YouTube for information about childbirth [6]. These platforms provide access to personal birth stories, medical advice, and promotional content, which can significantly shape women's attitudes and expectations. However, the accuracy and reliability of health-related information on social media are often questionable. Misinformation regarding childbirth options, exaggerated fears of vaginal delivery, and glorification of elective CS have contributed to the rising preference for caesarean deliveries in many regions [2]. For instance, research has shown that fear of Labor pain, concerns about vaginal trauma, and perceptions of CS as a more controlled method of childbirth are frequently reinforced through online narratives [3].

To counteract the spread of misleading information, healthcare providers must engage more actively on social media platforms, providing evidence-based content and addressing misconceptions. Educational interventions, including mobile health applications, have demonstrated success in improving awareness and encouraging informed decision-making among pregnant women [4]. Several factors contribute to women's preferences for childbirth mode; Fear of childbirth is a significant determinant of delivery preference. Studies indicate that fear of Labor pain, complications, and loss of control during vaginal delivery can lead women to prefer CS, even in the absence of medical necessity [3]. Interventions such as childbirth education classes and psychological counselling have been shown to reduce fear and promote confidence in vaginal birth. The role of obstetricians, midwives, and other healthcare providers is crucial in shaping women's childbirth choices. Research has demonstrated that when healthcare professionals provide balanced, evidence-based information about the risks and benefits of different delivery methods, women are more likely to opt for vaginal birth when medically appropriate [6].

Studies have shown that factors such as maternal age, education level, socioeconomic status, and cultural beliefs play a role in delivery preferences. For example, urban women with higher education levels may have greater exposure to social media content advocating for elective CS, while rural populations may rely more on traditional knowledge and family experiences [5].

Recent research highlights the effectiveness of digital health interventions in promoting informed decision-making among pregnant women. Mobile health (mHealth) applications providing continuous support and education have been successful in reducing fear of childbirth, increasing self-efficacy, and encouraging vaginal birth when appropriate [4].

These findings suggest that incorporating digital education strategies into prenatal care can help address misconceptions and empower women to make evidence-based choices. This study aims to explore the factors influencing pregnant women's preferences for mode of delivery, with a particular focus on the impact of social media, educational interventions, and healthcare provider recommendations. Understanding these influences can help healthcare professionals develop targeted strategies to promote evidence-based childbirth choices and improve maternal and neonatal health outcomes.

PATIENTS AND METHODS

Setting of the study:

The study used a cross-sectional questionnaire, which women completed once using an electronic platforms and hardcopy questionnaires. Researchers located a few author pages that were open to sharing study-related content on their social media sites in order to enroll volunteers. These websites were selected due to their public pages, wide range of pregnancy related content, and large followings.

Research design: The current study employed a descriptive cross-sectional research approach.

Study subjects: A snowball sampling was given access to an online survey tool. The trial was open to women of different gestational ages. The study's sample was chosen based on a number of inclusion criteria, such as: a) Pregnant woman, recently delivered or nullipara planning pregnancy soon; b) being at least 18 to 40 years old; c) owning an Android mobile device; d) using Facebook and WhatsApp programs; e) not having any mental or physical health issues. 400 women who consented to participate in the study ultimately completed the questionnaire

Tools for Data Collection: In the present research, a structured interviewing questionnaire divided into four parts was utilized. The researchers employed a predesignated, validated questionnaire to examine **women's demographic and obstetric characteristics**, including age, occupation, educational attainment, parity, gravidity, previous delivery method, and past medical and surgical history, is included in **Part I**.

Part (II): Social media usage: This part comprises five statements that discuss the respondents' subjective experiences on social media. The questions included: How often do you use social media? Which social media platforms do you use most frequently? How much time do you spend on social media daily? Do you follow

any social media accounts or pages related to pregnancy, childbirth, or maternal health? If yes, please list the types of accounts or pages you follow.

Part (III): Exposure to childbirth-related content on social media

This part comprises eight statements that discuss the respondents' exposure to childbirth-related content on social media. The questions included: Have you encountered information about different modes of delivery on social media? What types of childbirth-related content have you come across on social media? How frequently do you encounter posts or discussions about childbirth in your social media feeds? In your opinion, how credible is the information about childbirth that you see on social media? Have you ever considered a delivery method after seeing information about it on social media? To what extent has social media influenced your decision regarding your preferred mode of delivery? If social media influenced your delivery decision, what aspects were most influential? Have you encountered any conflicting advice or opinions on social media regarding modes of delivery? Do you trust medical professionals' advice shared on social media more, less, or equally compared to traditional healthcare settings?

Part (IV): Perceptions and attitudes towards birth methods: Seven questions were asked regarding mothers' perceptions and attitudes towards birth methods in this tool created by the researchers. The questions included: How do you feel about the portrayal of childbirth on social media? In your opinion, does social media encourage a more positive or negative perception of certain modes of delivery? Do you believe social media plays a role in perpetuating unrealistic expectations about childbirth? If you have already given birth, what was your mode of delivery? Would you consider changing your preferred mode of delivery based on social media discussions or experiences shared by others? What kind of content would you like to see more of on social media regarding childbirth and delivery methods? Do you think social media should be regulated more strictly when it comes to sharing health-related advice, particularly about childbirth? Are there any other comments or thoughts regarding social media's impact on your views of childbirth and delivery?.

Method

The study was accomplished according to the following steps:

First Phase (Preparatory Phase):

Ethical Considerations:

The ethical committee of the Damietta Faculty of Medicine at Al-Azhar University approved the study prior to its commencement (DFM-IRB 00012367-24-12-002). The relevant authority at the research site granted permission for the official data collection after a comprehensive explanation of the study's aims was provided. Before starting the intervention, each pregnant woman recruited for the study received an explanation of its purpose, and their informed consent was obtained. The participants' right to anonymity and their ability to withdraw from the study at any time were strictly maintained. Confidentiality was ensured for all data sets. The study procedures and data collection instruments did not address ethical, religious, or cultural issues, nor did they pose any risk to the pregnant women. Additionally, the rights and dignity of the participants were respected throughout the study.

Preparation of study tools: The researchers created a structured interview questionnaire, dividing it into four parts and translating them into Arabic to better suit the Egyptian context after conducting a thorough examination of relevant and contemporary literature.

Study tools' validity: Five experts in obstetric and gynecological medicine and 3 public health and community medicine experts from Damietta Faculty of Medicine- Al Azhar University evaluated the face validity of the research tools currently in use. Since the jury panel unanimously agreed that the study tools provided were reliable and relevant to the study's goals, no revisions were made.

Study tools' reliability: The researcher evaluated the reliability of the study questionnaire by examining internal consistency the "Cronbach's alpha coefficient" was used to compare responses from repeated tests.

Pilot study:

Forty pregnant women, or 10% of the study participants (40 women), took part in the pilot study. The pilot study's goal was to evaluate the produced tools' time requirements, applicability, visibility, and clarity. The primary study subjects did not include pilot study participants.

Study procedure:

To participate in the study, participants were gathered from the electronic pages. These pages contained the survey link and study details. To promote participation, the study's objective was made explicit. Readers were encouraged to "like" or "share" the post with their friends, which aided in the quick social media dissemination of the study's news. Participants were taken to the Google Form after clicking the survey link. The permission form was handed to the study sample after they received the participant information sheet. By ticking the "I accept" box at the bottom of the consent form, participants demonstrated their free and informed consent.

There were no required questions on the non-commercial, voluntary questionnaire. It was explained to participants that they may finish the survey on their computer, tablet, or phone whenever it was most convenient for them. They could also end the survey at any moment and skip any questions. For those who agreed to participate, the survey took five to ten minutes to complete. One feature of Google Forms precludes researchers from getting more than one response from the same computer. Consequently, only one survey was needed to be filled out by each participant. The poll received responses from 400 pregnant women in total. Over the course of two months, from January to February 2025, cross-sectional study was carried out.

Statistical analysis:

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0 (IBM Corp., Armonk, NY). Descriptive statistics were used to summarize the participants' demographic characteristics, obstetric history, and social media usage patterns. Categorical variables were expressed as frequencies

and percentages. To assess associations between consideration of a birth method due to social media exposure and various independent categorical variables, the Chi-square test or Fisher's exact test (where applicable) was employed. A p-value of less than 0.05 was considered statistically significant. To identify the predictors independently associated with the outcome (consideration of a birth method due to social media), a binary logistic regression analysis was conducted. Variables that were statistically significant in bivariate analysis were included in the multivariate logistic regression model. Adjusted odds ratios (ORs) with 95% confidence intervals (CIs) were calculated to assess the strength and direction of associations. The regression model included demographic factors (age group, education level, socioeconomic status), obstetric characteristics (parity, previous delivery type), and social media-related variables (frequency of use, type of content encountered, perceived influence, perceived trustworthiness, and trust in medical advice on social platforms). Results were presented in tabular format, highlighting significant associations.

RESULTS

Table 1 illustrates the various demographic and obstetric factors of the sample studied and the influence of social media on the consideration of birth methods across them. The findings indicate that younger women (<25 years) were significantly more likely to consider a birth method due to social media (36.2%) compared to older age groups, with the lowest influence observed among women aged 35–44 years (12.8%) ($P = 0.037$). Education level was strongly associated with social media influence on birth method choice ($P < 0.001$). Women with a middle school education were the least influenced (17.0%), whereas those with a high school education were the most influenced (63.8%). Similarly, socioeconomic status played a significant role ($P < 0.001$), with women from low socioeconomic backgrounds being the least influenced (2.1%) compared to those from middle (87.2%) and high (10.6%) socioeconomic levels. Moreover, Parity also demonstrated a significant relationship with social media influence ($P < 0.001$). Nulliparous women (36.7%) were more likely to consider a birth method due to social media compared to multiparous women (23.4%). Additionally, the type of previous delivery was significantly associated with social media influence ($P = 0.029$). Women who had undergone a cesarean section were less influenced (50.8%) compared to those with a history of vaginal delivery (10.7%). On the other hand, factors such as residence (urban vs. rural), pregnancy status, and previous obstetric complications did not show significant associations with social media influence ($P > 0.05$).

Table 2 presents the patterns of social media usage and their influence on birth methods. The findings reveal a strong association between frequent social media use and being influenced in birth method decisions ($P < 0.001$). Women who used social media several times a day were significantly more likely to consider a birth method based on social media content (93.6%) compared to those who used it once a day (2.1%). Following pregnancy-related content was another significant factor ($P < 0.001$). Women who followed such content were more likely to consider birth methods due to social media influence (74.5%) compared to those who did not (25.5%). Similarly, exposure to content about birth methods had a strong impact ($P < 0.001$), as 74.5% of those who had encountered such content reported being influenced, whereas only 25.5% of those who had not encountered birth-related content reported any influence. The type of content followed also influenced decision-making. Women who followed non-health professionals were significantly more likely to be influenced compared to those who followed health professionals ($P < 0.001$). Furthermore, the frequency of seeing birth-related posts was significantly associated with birth method consideration ($P < 0.001$), with 38.3% of those who frequently saw such posts being influenced compared to 12.8% of those who rarely encountered such content. Regarding content type, personal stories ($P < 0.001$), videos ($P < 0.001$), and opinion discussions ($P = 0.037$) were significantly associated with considering birth methods due to social media influence. **Figure 1** illustrates the percentage of social media platform usage with consideration of birth methods choice due to social media. Facebook emerges as the most widely used platform in both groups, with over 93% of participants reporting its use.

Table 3 presents perceptions of birth-related information on social media and its influence on birth method consideration. The perceived credibility of social media information was a significant factor ($P < 0.001$). Participants who found the information somewhat trustworthy (74.5%) were more likely to consider a birth method due to social media compared to those who viewed it as not trustworthy (12.8%). The extent of perceived influence also showed a strong association ($P < 0.001$). Among those who considered birth methods based on social media, 14.9% believed that the content influenced them "a lot," while 51.1% acknowledged "somewhat" influence. In contrast, those who reported no influence at all were significantly higher in the non-influenced group (43.4%). Regarding the most influential content type, personal stories (36.2%) and posts or opinion discussions (23.4%) were more likely to influence birth method consideration, with opinion discussions showing significant association ($P < 0.001$). Fear-based posts were also highly influential, with 12.8% of participants who considered a birth method reporting their influence ($P < 0.001$). Conversely, alternative birth promotion was significantly more common among those who were not influenced by social media (11.3% vs. 2.1%, $P < 0.001$).

While overall perception of birth-related content did not show statistical significance ($P = 0.141$), those who viewed social media content as very positive (17%) were more likely to be influenced than those with neutral (53.2%) or negative perceptions (4.3%). Interestingly, a substantial proportion (25.5%) of those influenced reported no particular emotions regarding the content. Social media also played a role in shaping perceptions of different birth methods. A significantly higher proportion of participants who considered a birth method due to social media had developed a positive view of vaginal birth (40.4% vs. 26.4%, $P = 0.003$) and cesarean birth (31.9% vs. 20.8%, $P = 0.011$). Notably, negative views of alternative delivery settings were significantly higher among those who were not influenced by social media (17% vs. 8.5%, $P = 0.012$).

Table 4 explores the experiences and trust in social media birth-related information and its influence on birth method consideration. Encountering conflicting information on social media was significantly associated with birth method consideration ($P < 0.001$). A higher proportion of participants who considered a birth method due to social media reported frequently (17%) or sometimes (63.8%) encountering conflicting information compared to those who did not (9.4% and 52.8%, respectively). Conversely, those who rarely encounter conflicting information were significantly less likely to be influenced by social media (37.7% vs. 19.1%). Trust in medical professionals' advice on social media, compared to traditional medical settings, was not significantly associated with birth method consideration ($P = 0.053$). Among those influenced by

social media for birth method decisions, 38.3% preferred vaginal birth, while 53.2% preferred cesarean delivery. In contrast, a significantly higher proportion (66%) of those not influenced by social media preferred cesarean birth. The demand for specific birth-related content on social media varied significantly between groups (P = 0.003). A higher proportion of those not influenced by social media expressed the need for information about vaginal birth (17.0%) and cesarean birth (17.0%), while only 10.6% and 8.5%, respectively, of those who considered a birth method due to social media, reported the same. Despite variations in the information content needed, most participants (86%) expressed a desire for more regulated birth-related information on social media, with no significant difference between those influenced and not influenced (P = 0.199).

Table 5 presents the logistic regression analysis identifying factors associated with considering a birth method due to social media. Regarding educational level, participants with only a middle school education were significantly less likely to consider a birth method due to social media compared to those with postgraduate education (OR = 0.138, P = 0.023). Those from a low socioeconomic background were significantly less likely to be influenced by social media compared to those from a high socioeconomic level (OR = 0.009, P < 0.001). Additionally, nulliparous participants had a high likelihood of considering a birth method due to social media (OR = 26.48, P < 0.001), and primiparous participants (OR = 13.166, P < 0.001), compared to multiparous women. Those who previously had a vaginal birth were significantly less likely to be influenced by social media compared to those who had a cesarean section (OR = 0.049, P < 0.001).

Regarding the frequency of social media use, those who used social media once a day were significantly less likely to be influenced by social media (OR = 0.019, P = 0.010) compared to those who used it less than once a day. Those who followed non-health professionals for birth-related content had a significantly increased likelihood of being influenced (OR = 8.983, P = 0.013). Moreover, those who sometimes saw birth-related posts were significantly more likely to be influenced by social media than those who rarely saw such posts (OR = 3.801, P = 0.047). as regards the type of content encountered, watching videos was significantly associated with considering a birth method due to social media (OR = 4.482, P = 0.001).

Regarding the perception of social media content and credibility, those who perceived birth-related content as having "a lot" and "somewhat" of influence were more likely to be influenced by social media (OR = 10.961, P = 0.002) and (OR = 20.778, P < 0.001) respectively. Conversely, those who perceived birth-related social media content as very positive were significantly less likely to consider a birth method due to social media (OR = 0.009, P < 0.001), as were those with a neutral perception (OR = 0.096, P < 0.001), compared to those with a negative or no emotional response. Encountering conflicting information "sometimes" significantly increased the likelihood of considering a birth method due to social media (OR = 3.239, P = 0.026). Participants who trusted medical advice from social media more than advice received in a clinical setting were significantly more likely to consider a birth method based on social media (OR = 36.172, P < 0.001).

Table (1). Influence of Social Media on Birth Methods Consideration Across Demographic and Obstetric Factors

Variable		Total (N=400)	Considered a birth method due to social media		P-value
			Yes(N=188)	No(N=212)	
Age Group (years)	<25	136(34.0%)	68(36.2%)	68(32.1%)	0.037*
	25-34	192(48.0%)	96(51.1%)	96(45.3%)	
	35-44	72(18.0%)	24(12.8%)	48(22.6%)	
Education Level	Middle school	128(32.0%)	32(17.0%)	96(45.3%)	<0.001*
	High school	200(50.0%)	120(63.8%)	80(37.7%)	
	Postgraduate	72(18.0%)	36(19.1%)	36(17%)	
Socioeconomic level	Low	52(13.0%)	4(2.1%)	48(22.6%)	<0.001*
	Middle	312(78.0%)	164(87.2%)	148(69.8%)	
	High	36(9.0%)	20(10.6%)	16(7.5%)	
Residence	Urban	140(35.0%)	64(34%)	76(35.8%)	0.705
	Rural	260(65.0%)	124(66%)	136(64.2%)	
Pregnancy Status	Currently Pregnant	224(56.0%)	100(53.2%)	124(58.5%)	0.578
	Recently Gave Birth	228(57.0%)	112(59.6%)	116(54.7%)	
	Not Pregnant**	172(43.0%)	84(44.7%)	88(41.5%)	
Parity	Nullipara	101(25.3%)	69(36.7%)	32(15.1%)	<0.001*
	Primara	131(32.7%)	75(39.9%)	56(26.4%)	
	Multipara	168(42.0%)	44(23.4%)	124(58.5%)	
Previous Delivery Type TOTAL مختلف	Vaginal	52(13.0%)	20(10.7%)	32(15.1%)	0.029*
	Cesarean	255(63.7%)	95(50.8%)	160(75.5%)	
	Both	12(3.0%)	0(0%)	12(5.7%)	
Previous Obstetric Complications	Yes	72(18.0%)	32(17%)	40(18.9%)	0.631
	No	328(82.0%)	156(83%)	172(81.1%)	

**Significant. ** Not Pregnant; refers to women who have never been pregnant or those who were not recently pregnant in the last year.*

Table (2). Social Media Usage Patterns and Their Influence on Considering Birth Methods

Social media usage patterns		Total (N=400)	Considered a birth method due to social media		P-value
			Yes(N=188)	No(N=212)	
Frequency of Use	Several times a day	332(83.0%)	176(93.6%)	156(73.6%)	<0.001*
	Once a day	44(11.0%)	4(2.1%)	40(18.9%)	
	Several times a week	20(5.0%)	8(4.3%)	12(5.7%)	
	Once a week or less	4(1.0%)	0(0%)	4(1.9%)	
Follows Pregnancy-Related Content	Yes	248(62.0%)	140(74.5%)	108(50.9%)	<0.001*
	No	152(38.0%)	48(25.5%)	104(49.1%)	
Follows Content	Health professional	164(41.0%)	84(44.7%)	80(37.7%)	0.159
	Non-Health professional	88(22.0%)	56(29.8%)	32(15.1%)	<0.001*
Encountered content about birth methods	Yes	252(63.0%)	140(74.5%)	112(52.8%)	<0.001*
	No	148(37.0%)	48(25.5%)	100(47.2%)	
Frequency of Seeing Birth-Related Posts	Very Often	120(30.0%)	72(38.3%)	48(22.6%)	<0.001*
	Sometimes	180(45.0%)	92(48.9%)	88(41.5%)	
	Rarely	96(24.0%)	24(12.8%)	72(34.0%)	
Type of content encountered	Personal stories	64(16.0%)	44(23.4%)	20(9.4%)	<0.001*
	Articles	76(19.0%)	40(21.3%)	36(17.0%)	0.274
	Videos	204(51.0%)	128(68.1%)	76(35.8%)	<0.001*
	Medical advice	192(48.0%)	92(48.9%)	100(47.2%)	0.724
	Posts or opinion iscussions	108(27.0%)	60(31.9%)	48(22.6%)	0.037*

**Significant.*

Table (3). Perceptions of Social Media Birth-Related Information and Its Influence on Birth Method Consideration

Perceptions toward social media birth-related information		Total (N=400)	Considered a birth method due to social media		P-value
			Yes(N=188)	No(N=212)	
Perceived credibility of information	Very trustworthy	44(11.0%)	24(12.8%)	20(9.4%)	<0.001*
	Somewhat trustworthy	260(65.0%)	140(74.5%)	120(56.6%)	
	Not trustworthy	96(24.0%)	24(12.8%)	72(34%)	
Perceived influence extent of information	A lot	32(8.0%)	28(14.9%)	4(1.9%)	<0.001*
	Somewhat	148(37.0%)	96(51.1%)	52(24.5%)	
	Not at all	116(29.0%)	24(12.8%)	92(43.4%)	
The most influential content type	Personal stories	68(17.0%)	68(36.2%)	64(30.2%)	0.204
	Medical advice	132(33.0%)	48(25.5%)	60(28.3%)	0.533
	Posts or opinion discussions	108(27.0%)	44(23.4%)	16(7.5%)	<0.001*
	Fear-based posts	60(15.0%)	24(12.8%)	0(0%)	<0.001*
	Alternative birth promotion	24(6.0%)	4(2.1%)	24(11.3%)	<0.001*
Perception of birth content Perception regard birth related contents on social media	Very positive	52(13.0%)	32(17.0%)	20(9.4%)	0.141
	Neutral	220(55.0%)	100(53.2%)	120(56.6%)	
	Negative	16(4.0%)	8(4.3%)	8(3.8%)	
	No emotions	112(28.0%)	48(25.5%)	64(30.2%)	
Social media encourages Social media effects on bith methods perception	Positive view of Vaginal birth Encourage towards….	132(33.0%)	76(40.4%)	56(26.4%)	0.003*
	Positive view of Cesarean	104(26.0%)	60(31.9%)	44(20.8%)	0.011*
	Positive view of ADS	24(6.0%)	12(6.4%)	12(5.7%)	0.761
	Negative view of Vaginal birth Discourage towards….	28(7.0%)	16(8.5%)	12(5.7%)	0.265
	Negative view of Cesarean	8(2.0%)	4(2.1%)	4(1.9%)	0.864
	Negative view of ADS	52(13.0%)	16(8.5%)	36(17.0%)	0.012*

**Significant. -ADS: Alternative Delivery Settings: Home Delivery and Water Birth.*

Table (4). Experience and Trust in Social Media Birth-Related Information and Its Influence on Birth Method Consideration

Experiences toward social media birth-related information		Total (N=400)	Considered a birth method due to social media		P-value
			Yes(N=188)	No(N=212)	
Conflicting Information Encountered	Frequently	52(13.0%)	32(17%)	20(9.4%)	<0.001*
	Sometimes	232(58.0%)	120(63.8%)	112(52.8%)	
	Rarely	116(29.0%)	36(19.1%)	80(37.7%)	
Trust in medical professionals' advice shared on social media compared to a doctor's clinic or hospital	More	32(8.0%)	20(10.6%)	12(5.7%)	0.053
	Equal	136(34.0%)	60(31.9%)	76(35.8%)	
	Less	204(51.0%)	100(53.2%)	104(49.1%)	
	No trust in both	28(7.0%)	8(4.3%)	20(9.4%)	
Preferred Birth Method	Vaginal	140(35.0%)	72(38.3%)	68(32.1%)	<0.001*
	Cesarean	240(60.0%)	100(53.2%)	140(66%)	
	Home	4(1.0%)	0(0%)	4(1.9%)	
	Water	8(2.0%)	8(4.3%)	0(0%)	
	Can't decide	8(2.0%)	8(4.3%)	0(0%)	
Women Needed birth delivery information on social media (conflict)	Vaginal birth information	56(14.0%)	20(10.6%)	36(17.0%)	0.003*
	Cesarean information	52(13.0%)	16(8.5%)	36(17.0%)	
	Delivery information	24(6.0%)	16(8.5%)	8(3.8%)	
	Medical advice	24(6.0%)	16(8.5%)	8(3.8%)	
	Can't decide	244(61.0%)	120(63.8%)	124(58.5%)	
Would Like More Regulated Information	Yes	344(86.0%)	164(87.2%)	180(84.9%)	0.199
	No	16(4.0%)	4(2.1%)	12(5.7%)	
	Unsure	36(9.0%)	16(8.5%)	20(9.4%)	

**Significant.*

Table (5). Logistic Regression Analysis of Factors Associated with Considering a Birth Method Due to Social Media

Variable		Odds ratio (+Wald)	95%CI	P-value
Age Group (years) ***Ref:35-44***	<25	0.275	0.054:1.396	0.119
	25-34	0.352	0.090 - 1.377	0.133
Education Level ***Ref: Postgraduate***	Middle school	0.138	0.025 : 0.757	0.023*
	High school	0.404	0.104:1.565	0.189
Socioeconomic level ***Ref: High***	Low	0.009	0.001:0.083	<0.001*
	Middle	4.841	0.856:27.39	0.075
Parity ***Ref: Multipara***	Nullipara	26.48	8.199:85.522	<0.001*
	Primara	13.166	4.338:39.957	<0.001*
Previous Delivery Type [*Ref: Cesarean]*	Vaginal	0.049	0.013:0.194	<0.001*
Frequency of Use ***Ref: Less than once a day***	Several times a day	0.224	0.029:1.740	0.153
	Once a day	0.019	0.001:0.379	0.010*
Follows pregnancy-related content [*Ref: No]*	Yes	1.344	0.267:6.771	0.720
Follows content	Health professional	0.920	0.205:4.127	0.913
	Non-Health professional	8.983	1.589:50.769	0.013*
Encountered content about birth methods [*Ref: No]*	Yes	0.573	0.220:1.493	0.255
Frequency of Seeing Birth-Related Posts ***Ref: Rarely***	Very Often	1.006	0.210:4.833	0.994
	Sometimes	3.801	1.017:14.202	0.047*
Type of content encountered	Personal stories	0.966	0.304:3.062	0.952
	Articles	1.234	0.395:3.854	0.718
	Videos	4.482	1.825:11.007	0.001*
	Posts or opinion discussions	0.985	0.382:2.543	0.975
Perceived credibility of information ***Ref: Not trustworthy***	Very trustworthy	2.321	0.465:11.586	0.305
	Somewhat trustworthy	1.542	0.587:4.050	0.379
Perceived influence extent of information ***Ref: Not at all***	A lot	10.961	2.336:51.420	0.002*
	Somewhat	20.778	6.538:66.028	<0.001*
Perception of birth content ***Ref: Negative & No emotions***	Very positive	0.009	0.001:0.064	<0.001*
	Neutral	0.096	0.026:0.354	<0.001*
Conflicting Information Encountered ***Ref: Rarely***	Frequently	2.716	0.706:10.458	0.146
	Sometimes	3.239	1.150:9.125	0.026*
Trust in medical professionals' advice shared on social media compared to a doctor's clinic or hospital [*Ref: Less & No trust in both]* Preferred Birth Method ؟؟؟	More	36.172	5.344:244.859	<0.001*
	Equal	1.428	0.561:3.634	0.455

**Significant.*

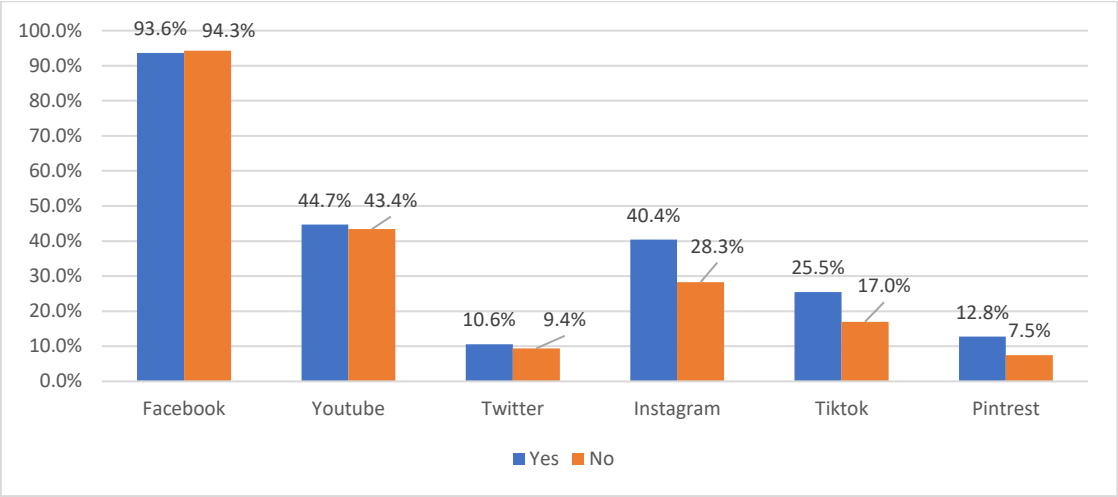

Figure 1. Percentage of Social Media Platforms Use with Consideration of Birth Methods Choice Due to Social Media

DISCUSSION

Pregnancy is characterized by heightened information-seeking behaviour and critical decision-making, particularly concerning the mode of delivery. Traditionally, pregnant women relied on books, family, friends, and healthcare providers for guidance. However, there has been a significant shift toward internet-based resources, largely driven by advancements in mobile technology and dissatisfaction with the limited interaction during routine antenatal appointments [7]. As a result, social media has emerged as a key player in shaping maternal decision-making, offering both advantages and risks. Digital platforms such as medical websites, Facebook groups, and mobile applications now serve as primary sources of both formal and informal health information [8]. This study aimed to assess the impact of social media on pregnant women's choices regarding delivery mode.

A substantial influence on the choice of delivery methods was recorded among younger women, those with higher education, and those from higher socioeconomic backgrounds. These findings align with **Dekker *et al.*** [9], who reported that well-educated women are more comfortable navigating digital environments and frequently engage in online maternity-related discussions, often independent of healthcare professionals. Furthermore, health literacy and use of digital tools are closely linked to educational background, further explaining this trend [10].

Personal experiences also play a crucial role in openness to social media content. Nulliparous women and those with previous vaginal deliveries were more influenced by social media, potentially due to the need to fill knowledge gaps and gain reassurance in their decision-making [11]. Supporting this, **Dogra *et al.*** [12] and **Elgzar *et al.*** [13] found that nulliparous women had higher levels of fear of childbirth (FOC), while **Phunyammalee *et al.*** [14] reported that low-risk pregnant women preferring vaginal delivery exhibited the highest levels of FOC. Social media appears to function as a coping mechanism by providing emotional support and shared experiences.

The type and frequency of social media use also emerged as significant factors influencing the choice of birth mode. Frequent exposure to pregnancy-related content, particularly from non-health professionals, was strongly associated with influencing delivery choices. This raises concerns about information quality. **Tizard and Pezaro** [15] reported that although social media can empower women by broadening access to diverse experiences, it also increases exposure to unregulated and potentially misleading content. Similarly, **Gleeson *et al.*** [16] observed that societal shifts, such as the decline of extended families and the restructuring of traditional gender roles, have led women to increasingly rely on digital platforms to learn about childbirth. These findings present an opportunity for healthcare professionals to join web-based tools to engage with women more effectively and advocate for more balanced, evidence-based content.

The impact of content type on perceptions and choices was also recorded. Personal stories, videos, and opinion-based discussions were significantly associated with the consideration of birth methods. **Munro *et al.*** [17] emphasized that personal narratives can be more persuasive than statistical or clinical information. **Miller *et al.*** [18] further explained that such stories influence fear levels and self-efficacy, which are key psychological drivers in choosing a delivery method. Notably, fear-inducing posts were also found to significantly influence decisions, an alarming trend given the link between fear of childbirth and the rising global rate of caesarean deliveries [19].

Among platforms, Facebook was the most used, with over 93% of participants reporting engagement. This finding aligns with prior studies [9], which identified Facebook as a dominant medium for pregnant women to share experiences and seek information. The credibility of content also emerged as a crucial factor. When social media information was perceived as trustworthy, women were significantly more likely to let it influence their choices. **Wright et al.** [11] found that perceived reliability plays a key role in intrapartum decision-making.

The current study compared trust in social media and clinical advice. Trust in medical advice sourced from social media, over traditional consultations, was significantly associated with consideration of specific delivery methods. Women who prioritized peer-shared experiences over professional guidance were more likely to be influenced in their decisions. This shift reflects a potential erosion of trust in conventional healthcare communication or possibly a disconnect between clinical advice and the individual needs of expectant mothers. As **Lupton** [8] suggest, social media may provide a more personalized and interactive environment, making it more appealing to some women. The quality and content of services offered to pregnant women play a crucial and influential role in

shaping their attitudes and decisions regarding the preferred mode of delivery [2]. The presence of conflicting information on social media adds complexity. Participants exposed to inconsistent or contradictory content reported greater uncertainty and stress, which influenced their decision-making. This aligns with **Abd-Elhamed *et al.*** [10], who found that such exposure can heighten anxiety and fear surrounding childbirth. Similarly, **Oviatt and Reich** [7] observed that social media, while a source of support, can also be a site of misinformation and divergent opinions.

The study also examined the demand for birth-related content. Interestingly, women not influenced by social media were more likely to request information on both vaginal and caesarean births, suggesting a proactive approach to balanced knowledge-seeking. Regardless of social media influence, a majority of participants agreed on the need for more regulated and reliable childbirth content online. This highlights a growing awareness of the potential for misinformation and echoes concerns raised by **Ventola** [20] about the variable quality of digital health information.

Conclusion: Social media significantly influences pregnant women's decisions about their preferred mode of delivery, especially among younger, educated, and first-time mothers. Frequent exposure to personal stories, videos, and fear-based content increases the likelihood of preferring cesarean sections. Trust in social media advice over clinical guidance highlights the need for stronger engagement from healthcare professionals in digital spaces.

Recommendations: Based on the study findings, it is recommended that Healthcare professionals should actively engage on social media to share accurate childbirth information and counter misinformation. Digital antenatal education and targeted communication, especially for younger and first-time mothers, can reduce fear and support informed decisions. Regulating online content and fostering collaboration between healthcare providers and digital platforms are essential, along with further research to explore long-term impacts.

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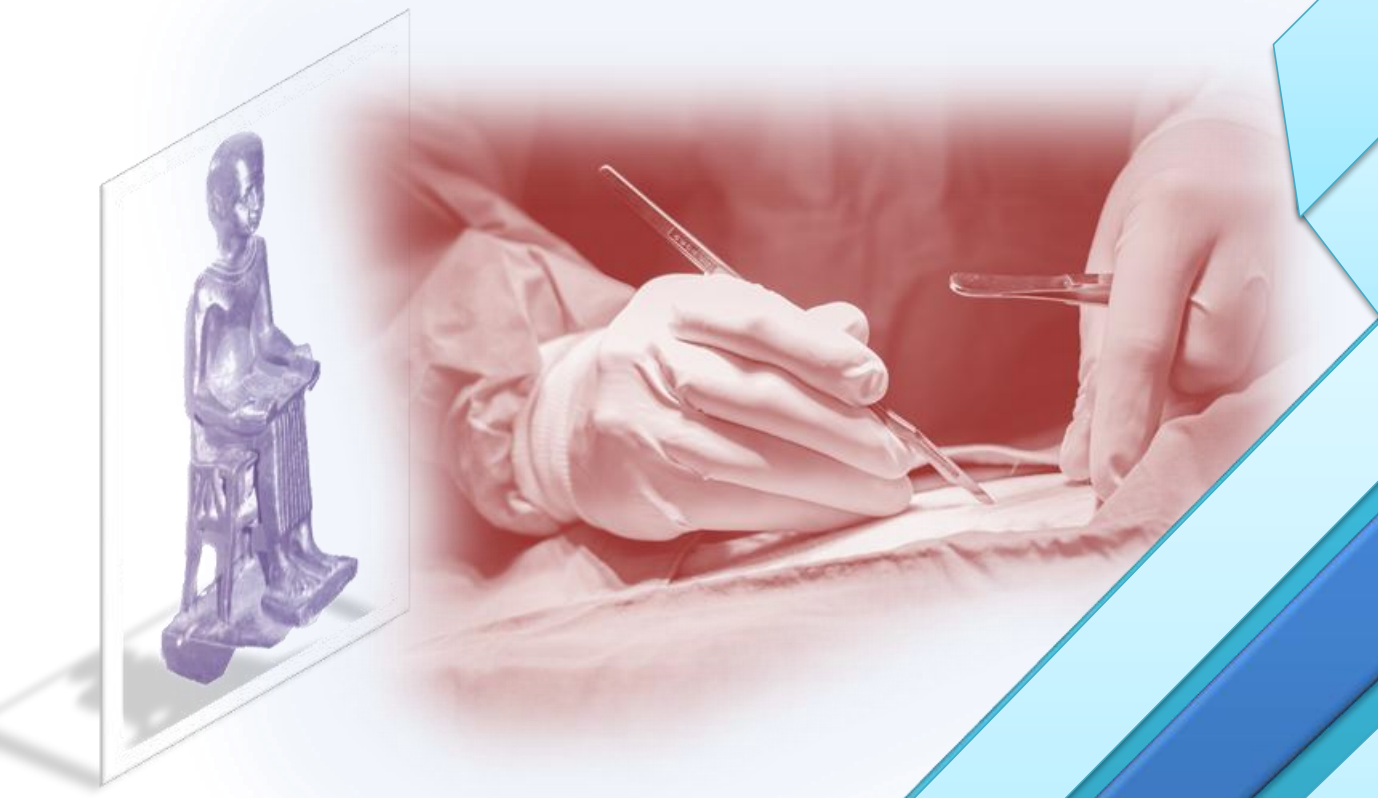

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