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DIGITAL MEDIA UTILIZATION AMONG PREGNANT WOMEN IN GARUT REGENCY, INDONESIA

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ABSTRACT

The use of digital media as a source of health information has increased along with the rapid expansion of internet access in Indonesia. Pregnant women are among the population groups that frequently seek health-related information through digital platforms. However, empirical evidence describing how pregnant women utilize digital media for health information at the district level remains limited, particularly in areas with diverse geographic characteristics such as Garut Regency. This study aimed to describe digital media utilization among pregnant women in Garut Regency. A quantitative descriptive study using secondary data from the Ultralight Project (2024). A total of 355 pregnant women were included in the study using total sampling. Data were analyzed using univariate analysis and presented as frequencies and percentages. Pregnant women used various digital media sources, mainly search engines and video-based media. Digital media were used for maternal health information, fetal monitoring, or both. The intensity of use varied from limited to regular weekly use. Pregnant women in Garut Regency use digital media as part of health information-seeking behavior during pregnancy. Digital media function as supportive sources of maternal and fetal health information.

Keywords: Digital Media, Health Information Seeking, Maternal Health, Mobile Health Application, Pregnancy.

INTRODUCTION

The rapid expansion of internet access has substantially transformed patterns of health information seeking worldwide. In Indonesia, digital connectivity has increased sharply over the past decade, reaching 78.19% of the total population in 2023, with the highest proportion of users belonging to the 15–49 age group (APJII, 2023). This demographic range overlaps with women of reproductive age, including pregnant women, positioning digital media as an integral component of their daily lives. National data indicate that more than half of Indonesian internet users have searched for health-related information online, particularly concerning common illnesses, reproductive health, and pregnancy (BPS, 2023). These trends suggest that digital platforms have become prominent sources of health information for the general population and for maternal health in particular.

During pregnancy, the demand for health information increases markedly. Pregnant women seek guidance on physiological changes, fetal development, nutritional requirements, and warning signs of complications in order to support daily health-related decision-making (Ahmadian et al., 2020; Hou et al., 2022). Access to digital information provides opportunities for continuous learning outside clinical encounters. However, increased exposure to online information does not necessarily correspond with improved capacity to evaluate its quality or relevance. Reliance on digital sources may influence how women perceive pregnancy-related risks and determine appropriate health actions, especially when professional consultation is limited or delayed (Ahmadian et al., 2020; Hou et al., 2022).

Maternal health remains a critical public health concern in Indonesia. In 2023, a total of 4,129 maternal deaths were reported through the Maternal Perinatal Death Notification (MPDN) system, reflecting an increase from 4,005 deaths recorded in 2022 (Kementrian Kesehatan Republik Indonesia, 2023). The most frequently reported causes of maternal mortality were hemorrhage (28%), preeclampsia or eclampsia (24%), and infection (11%) (Kementrian Kesehatan Republik Indonesia, 2023). Beyond clinical factors, maternal deaths have been associated with delays in recognizing danger signs, delays in deciding to seek care, and delays in accessing adequate referral services. These circumstances highlight that maternal health outcomes depend on service availability as well as on women's capacity to recognize health risks and respond appropriately through informed behavior.

West Java Province contributes a substantial proportion of maternal deaths at the national level, accounting for approximately 17% of total cases (Lestari, 2025). Garut Regency, one of the most populous districts in West Java, encompasses urban, rural, and mountainous areas (BPS, 2023). Such geographic diversity is associated with variations in access to health services and information and communication technologies. Despite the presence of health facilities, disparities persist in service utilization and technological infrastructure, particularly in rural and remote subdistricts (Khaerani, 2024). These contextual characteristics indicate that geographical and infrastructural factors may shape how pregnant women search for and use health information during pregnancy.

From a public health perspective, health information-seeking behavior constitutes a central component of health-seeking behavior. The Health-Seeking Behavior model proposes that individuals' decisions to seek care are influenced by predisposing characteristics, enabling resources, and perceived health needs (Andersen & Davidson, 2007). Empirical evidence suggests that limited knowledge of pregnancy danger signs is associated with delayed care seeking and higher risk of maternal complications (Yosef & Tesfaye, 2021). In digital environments, online media may function as an influential source of information that shapes knowledge, perceptions of risk, and subsequent health behavior among pregnant women (Yosef & Tesfaye, 2021).

Existing studies in Indonesia have primarily focused on urban populations, digital literacy, or specific applications used during pregnancy (Nissen et al., 2024).

Many investigations assess preferences for particular platforms without offering a comprehensive description of behavioral patterns of digital media use among pregnant women in districts with heterogeneous geographic characteristics. Research that specifically documents how pregnant women in Garut Regency use digital media as sources of health information in everyday life remains limited. This situation indicates a research gap concerning district-level empirical evidence on digital health information behavior during pregnancy.

Addressing this gap is essential to inform maternal health strategies that integrate digital approaches within local contexts. An empirical description of how pregnant women in Garut Regency seek, access, and utilize digital health information may contribute to the design of digital health education interventions tailored to district-level needs. Such evidence is relevant for strengthening maternal health promotion initiatives and ensuring that digital resources support safe and informed pregnancy-related decision-making (Nissen et al., 2024).

LITERATUE REVIEW

The Health-Seeking Behavior framework conceptualizes health-related actions as outcomes of interactions among individual characteristics, social context, and available resources. Andersen's Behavioral Model identifies three core components influencing service utilization: predisposing characteristics such as age, education, and beliefs; enabling resources including income and service availability; and perceived or evaluated health needs (Andersen & Davidson, 2007). Within maternal health contexts, pregnancy introduces physiological changes and potential risks that intensify perceived need for health information and care.

Previous studies have demonstrated that maternal knowledge of danger signs and pregnancy-related risks is associated with timely care seeking and improved outcomes (Yosef & Tesfaye, 2021). Information-seeking behavior during pregnancy may therefore be interpreted as a preventive strategy through which women attempt to manage uncertainty and reduce perceived risk. In environments where access to professional consultation is constrained by distance or cost, informal sources of information, including digital platforms, may become increasingly salient (Andersen & Davidson, 2007).

Technology Acceptance Model (TAM) posits that individuals' adoption of technology is determined primarily by perceived usefulness and perceived ease of use (Davis, 1989). In health contexts, technology is more likely to be adopted when users perceive it as beneficial for meeting health needs and manageable within daily routines. Among pregnant women, the perception that digital media can provide timely and relevant pregnancy-related information influences the decision to engage with online resources (Davis, 1989).

Studies applying TAM in maternal health contexts report that perceived usefulness of pregnancy-related applications is associated with intentions to continue their use, while ease of use predicts sustained engagement among women with lower digital literacy (Zhang et al., 2021). External factors such as social support, previous technological experience, and trust in information sources further shape

technology acceptance in maternal health settings (Hasibuan et al., 2022). These findings suggest that patterns of digital media use during pregnancy reflect both individual evaluations of technology and broader contextual influences.

Health information-seeking behavior among pregnant women represents an active process aimed at understanding pregnancy progression, preventing complications, and guiding self-care practices. This behavior often emerges in response to uncertainty and concern regarding maternal and fetal well-being (Hou et al., 2022). Women seek information to interpret bodily changes, evaluate symptoms, and determine whether professional consultation is required.

Information-seeking practices are influenced by knowledge levels, previous pregnancy experience, and accessibility of sources (Hou et al., 2022). Social networks, health professionals, and digital platforms contribute to information environments that shape women's perceptions and decisions. Digital sources offer continuous availability and anonymity, which may reduce barriers associated with face-to-face consultation, especially in conservative or resource-limited settings (Hou et al., 2022).

Digital media use during pregnancy encompasses engagement with mobile applications, health-related websites, and social networking platforms as sources of health information. These media provide rapid and flexible access to content without dependence on clinic visits (Lupton, 2016). Pregnant women frequently consult search engines and video-based platforms to obtain explanations of pregnancy symptoms and fetal development processes (Conrad, 2022).

Despite their convenience, online sources vary widely in quality and credibility. Misinformation and inconsistent recommendations remain challenges in digital health environments (Chen et al., 2022). Limited health literacy may exacerbate difficulties in evaluating information reliability, potentially leading to a misunderstanding of pregnancy-related risks (Chen et al., 2022). Consequently, digital media use during pregnancy constitutes both an opportunity for health empowerment and a potential source of confusion.

International research indicates that pregnant women increasingly rely on digital platforms to supplement professional advice. Conrad (2024) reported that search engines frequently serve as the initial point of inquiry for pregnancy-related concerns due to accessibility and adaptability to specific questions (Conrad, 2024). Video content has been associated with enhanced comprehension of physiological changes through visual representation (Conrad, 2022).

Mobile health applications have been linked to improved awareness of pregnancy danger signs and adherence to antenatal care schedules (Gayesa al., 2023). However, adoption of such applications is uneven and influenced by literacy, trust, and technological familiarity (Giacometti et al., 2024). Economic constraints and limited digital skills remain barriers in low-resource settings (Ningrum et al., 2024).

In Indonesia, studies have primarily examined application preferences or urban user groups (Kurniawati et al., 2023). District-level investigations remain scarce, particularly in areas with mixed urban–rural characteristics. Evidence describing how pregnant women integrate digital information

into everyday pregnancy management at the district level is therefore limited.

The reviewed literature indicates that digital media have become prominent sources of pregnancy-related information. However, patterns of use differ according to technological access, individual characteristics, and contextual factors. In districts such as Garut Regency, geographic heterogeneity and infrastructure variability may influence how pregnant women engage with digital media.

A descriptive investigation of digital media use during pregnancy in Garut Regency can provide empirical insight into prevailing behavioral patterns. Such evidence may inform maternal health promotion strategies that integrate digital tools while acknowledging local conditions. Understanding how women seek and utilize digital information contributes to the development of targeted interventions that support informed pregnancy-related decisions and enhance maternal health outcomes (Andersen & Davidson, 2007; Kurniawati et al., 2023).

RESEARCH METHODS

This study employed a quantitative approach with a descriptive research design using secondary data. A descriptive design was selected to provide a systematic and objective overview of digital media use behavior among pregnant women during pregnancy. This design is appropriate for documenting patterns of behavior and distribution of variables without testing causal relationships. The study focused on describing how pregnant women in Garut Regency utilize digital media as a source of health information based on predefined indicators related to digital media use.

The study was conducted in Garut Regency, West Java Province, Indonesia. Garut Regency is characterized by diverse geographical conditions, including urban, rural, and mountainous areas, which may influence access to health services and digital technology. This setting provides a relevant context for examining digital media use behavior among pregnant women at the district level.

The study population consisted of all pregnant women recorded in the Ultralight Project dataset in 2024 who resided in Garut Regency. The Ultralight Project is a collaborative maternal health research initiative that collects structured data on maternal health behaviors and service utilization. The population included pregnant women across different gestational ages and parity groups who had participated in the data collection process during the project implementation period.

The sample analyzed in this study comprised 355 pregnant women who met the inclusion criteria. A total sampling technique was applied, whereby all eligible respondents from the Ultralight Project dataset who resided in Garut Regency were included in the analysis. This approach was chosen to maximize data utilization and to avoid sampling bias within the defined population frame. Inclusion criteria were defined as pregnant women registered in the Ultralight Project database in 2024 and domiciled in Garut Regency. Records with incomplete or inconsistent data on key variables related to digital media use were excluded from the analysis.

Secondary data were obtained from the Ultralight Project dataset

collected in 2024. The original data were gathered using a structured questionnaire administered by trained field enumerators. The questionnaire was designed to capture demographic characteristics, pregnancy-related information, and patterns of digital media use during pregnancy.

For the purposes of this study, the researchers extracted data specific to respondents who resided in Garut Regency. Data extraction was conducted through a multistep procedure. First, records were filtered by geographic location to identify eligible respondents. Second, variables relevant to the study objectives were selected. Third, the dataset was examined for completeness and logical consistency before statistical analysis. These procedures were conducted to ensure that the analyzed dataset accurately reflected the characteristics and behaviors of the target population.

The instrument used in the Ultralight Project was a structured questionnaire measuring digital media use behavior among pregnant women.

The instrument underwent validity and reliability testing as part of the Ultralight Project protocol. Content validity was established through expert review by maternal health and public health specialists. Construct validity was assessed by examining the coherence of items within each domain. Reliability testing indicated acceptable internal consistency across the questionnaire domains.

characteristics such as age, education level, employment status, marital status, parity, and gestational age were included as descriptive variables to characterize the study population.

Data processing involved several stages: editing, coding, and cleaning. Editing was conducted to identify missing values and inconsistencies. Coding was performed to convert categorical responses into numerical formats suitable for statistical analysis. Cleaning involved the removal of duplicate records and verification of logical consistency across variables.

Statistical analysis was carried out using the Statistical Package for the Social Sciences (SPSS). The analytical approach consisted of univariate analysis to describe the distribution of respondent characteristics and patterns of digital media use. Results were presented in the form of frequency distributions and percentages to illustrate the prevalence of specific behaviors and categories.

Univariate analysis was selected to align with the study objective of providing a descriptive overview of digital media use behavior among pregnant women in Garut Regency. No inferential statistical tests were conducted, as the study did not aim to assess associations or causal relationships between variables.

This study obtained ethical approval from the Research Ethics Committee of Universitas Padjadjaran with approval number 1068/UN6.KEP/EC/2024. The Ultralight Project ensured that all respondents provided informed consent prior to participation in the original data collection. Personal identifiers were removed from the dataset prior to secondary analysis to protect respondent confidentiality. All research procedures were conducted in accordance with ethical principles for health research involving human subjects.

RESEARCH RESULT

Table 1. Characteristics of Respondents

Characteristics	n (%)
Age (years)	
≤20	37 (10.4%)
20 – 35	274 (77.2%)
>35	44 (12.4%)
Highest Educational Attainment	
No formal education	0 (0%)
Primary school	57 (16.1%)
Junior high school	131 (36.9%)
Senior high school	150 (42.3%)
Higher education	17 (4.8%)
Employment status	
Employed	40 (11.3%)
Unmployed	315 (88.7%)
Type of occupation	
Civil servant	5 (1.4%)
Private-sector employee	6 (1.7%)
Self-employed	29 (8.2%)
Housewife	315 (88.7%)
Marital status	
Married	355 (100%)
Unmarried	0 (0%)
Parity	
First pregnancy	97 (27.3%)
Second to fourth pregnancy	224 (63.1%)
More than four pregnancies	34 (9.6%)
Gestational age	
First trimester	68 (19.2%)
Second trimester	138 (38.8%)
Third Trimester	149 (42.0%)

A total of 355 pregnant women from Garut Regency were included in the analysis. The majority of respondents were within the biologically optimal reproductive age group of 20–35 years (77.2%), while 10.4% were younger than 20 years and 12.4% were older than 35 years. These age groups represent populations with differing levels of obstetric risk, indicating the presence of both low-risk and higher-risk pregnancies within the study population.

In terms of educational attainment, most respondents had completed secondary education. Approximately 36.9% had completed junior high school and 42.3% had completed senior high school, while

16.1% had primary education. A smaller proportion had attained higher education (4.8%). No respondents reported having no formal education. This distribution suggests that the majority of pregnant women had at least basic formal education, which may influence their ability to access and interpret digital health information.

With respect to employment status, 88.7% of respondents were not formally employed and primarily identified as housewives, while 11.3% reported having paid employment. Among those who were employed, the largest subgroup was engaged in informal or self-employed work (8.2%), followed by private-sector employment (1.7%) and civil service (1.4%). These findings indicate that most respondents spent a substantial amount of time in the home environment, where access to mobile phones and internet-based information may play a significant role in daily health-related decision-making.

All respondents were married at the time of data collection. Regarding parity, 63.1% were in their second to fourth pregnancy, 27.3% were experiencing their first pregnancy, and 9.6% had been pregnant more than four times. This distribution reflects a predominance of multiparous women, suggesting that many respondents had prior experience with pregnancy and childbirth.

In terms of gestational age, most respondents were in the second or third trimester. Specifically, 38.8% were in the second trimester and 42.0% were in the third trimester, while 19.2% were in the first trimester. This pattern indicates that the majority of respondents were in stages of pregnancy associated with increasing informational needs related to fetal development, pregnancy complications, and preparation for delivery..

Table 2. Patterns of Digital Media Use

Digital media use behavior	n (%)
Type of digital media	
Search Engine	125 (35.2%)
Video-based media	93 (26.2%)
Health applications	26 (7.3%)
Search Engine + video-based media	50 (14.1%)
Search Engine + health applications	24 (6.8%)
Media Video + health applications	12 (3.4%)
Search engine + video-based media + health applications	25 (7.0%)
Purpose of digital media use	
Maternal health	87 (24.5%
Fetal health monitoring	81 (22.8%)
Maternal health + fetal health monitoring	187 (52.7%)
Intensitas penggunaan mingguan (n) (%)	
≤ 1 day per week	81 (22.8%)
2–3 days per week	109 (30.7%)

4-5 days per week	33 (9.3%)
Almost every day	32 (7.2%)

The distribution of digital media platforms used by pregnant women in Garut Regency demonstrated a predominance of single-platform use, particularly search engines and video-based media. Search engines were the most frequently used single source of pregnancy-related information, reported by 35.2% of respondents. Video-based media platforms were used by 26.2% of respondents, while health applications alone were used by 7.3%. A substantial proportion of respondents reported using more than one type of digital platform. Combined use of search engines and video-based media was reported by 14.1% of respondents. Smaller proportions reported combining search engines with health applications (6.8%) or video-based media with health applications (3.4%). Use of all three platform types search engines, video-based media, and health applications was reported by 7.0% of respondents. These findings indicate that a segment of the study population relied on multiple digital sources to obtain pregnancy-related information.

The purposes for which digital media were accessed varied across respondents. More than half of the participants (52.7%) reported using digital media to obtain information related to both maternal health and fetal condition monitoring. A smaller proportion used digital media exclusively for maternal health information (24.5%), while 22.8% used digital media primarily to monitor fetal conditions. This distribution suggests that digital media were commonly used to address multiple dimensions of pregnancy-related information needs. The concurrent focus on maternal health and fetal monitoring reflects an integrated approach to information seeking during pregnancy.

Weekly frequency of digital media use demonstrated variability among respondents. The most common pattern was accessing digital media 2–3 days per week, reported by 30.7% of participants. Approximately 22.8% reported using digital media for pregnancy-related information one day per week or less. Higher levels of use were observed among a smaller proportion of respondents. Specifically, 9.3% accessed digital media 4–5 days per week, while 7.2% reported near-daily use. These findings indicate that digital media use among pregnant women in Garut Regency generally occurred repeatedly within a weekly cycle, rather than as a daily routine for most respondents.

DISCUSSION

The present study provides empirical evidence on patterns of digital media use among pregnant women in Garut Regency, Indonesia. The findings indicate that digital media constitute an important source of pregnancy-related health information in this district context. The predominance of search engines and video-based platforms reflects a preference for easily accessible and flexible sources of information, which aligns with contemporary models of health-seeking behavior that emphasize perceived accessibility and convenience as key

determinants of information use (Andersen & Davidson, 2007).

The predominance of search engines as the main source of pregnancy-related information observed in this study is consistent with previous research showing that search engines serve as the primary entry point for health information seeking among pregnant women (Conrad, 2024). Search engines allow users to input personalized queries and retrieve large volumes of information rapidly, which supports individual problem-solving during pregnancy (Conrad, 2024). Similar patterns have been documented among Indonesian women, where Google is frequently used prior to consultation with health professionals (Damayanti, 2024). These findings suggest that the use of search engines represents a pragmatic strategy for managing uncertainty and perceived health risks during pregnancy (Damayanti, 2024).

The use of video-based platforms also emerged as a prominent pattern in this study. This finding is in line with evidence indicating that visual and audiovisual formats enhance comprehension of complex health concepts, including fetal development and obstetric warning signs (Conrad, 2022). Video-based content offers explanatory narratives and demonstrations that may be easier to understand than text-based material alone, particularly for users with limited health literacy (Conrad, 2022). The preference for audiovisual content observed in this study may therefore reflect an adaptive response to cognitive and informational demands during pregnancy (Conrad, 2022).

In contrast, the use of health applications as a sole source of information was less frequent. This pattern supports prior research demonstrating that adoption of health applications depends strongly on digital literacy and trust in technology (Giacometti et al., 2024). Women who lack familiarity with mobile health platforms may be less inclined to rely on applications as their primary information source (Giacometti et al., 2024). Barriers related to device compatibility, internet stability, and perceived complexity of applications have also been reported as limiting factors for application-based health information use (Ningrum et al., 2024).

The combined use of multiple digital platforms suggests that pregnant women employ diversified strategies for information seeking. This behavior is consistent with studies reporting that users cross-check information across platforms to enhance perceived credibility and understanding (Conrad, 2022). The use of multiple media types may therefore represent an attempt to reduce uncertainty by triangulating information from different digital sources (Conrad, 2022).

The dominant purpose of digital media use in this study was to obtain information related to both maternal health and fetal condition monitoring. This finding is consistent with the design of pregnancy-related digital platforms, which typically integrate maternal symptom tracking with fetal development information (Lazarevic et al., 2023). Integrated use of digital media reflects a holistic perception of pregnancy, where maternal and fetal health are viewed as interconnected domains (Lazarevic et al., 2023).

The use of digital media for maternal health information aligns with previous research demonstrating that pregnant women frequently seek guidance on physical symptoms, nutrition, and daily activities through digital platforms

(Lazarevic et al., 2023). Such practices support self-monitoring and reinforce personal responsibility for health management during pregnancy (Hou et al., 2022). Digital platforms may thus function as tools for reinforcing health awareness rather than replacing professional care (Hou et al., 2022).

The use of digital media for fetal condition monitoring is also supported by earlier studies indicating that applications and websites facilitate understanding of gestational milestones and fetal growth patterns (Nissen et al., 2024). Tracking fetal development digitally has been shown to strengthen maternal engagement with pregnancy-related health behaviors (Frid et al., 2021). Digital tools that visualize fetal progress may therefore contribute to increased attentiveness to antenatal care needs (Frid et al., 2021).

Studies on fetal movement monitoring further suggest that digital tools can enhance recognition of abnormal patterns and prompt timely health-seeking actions (Piron-Dumitrascu et al., 2025). The present findings reinforce the view that digital media may serve as supportive instruments for maternal perception of fetal well-being, although clinical validation remains necessary (Piron-Dumitrascu et al., 2025).

Variation in weekly frequency of digital media use observed in this study corresponds with patterns reported in international research. Muskens et al. (2024) documented that pregnant women commonly access digital media multiple times per week rather than daily, reflecting periodic rather than constant engagement (Muskens et al., 2024). This pattern suggests that digital media use is triggered by specific informational needs rather than habitual browsing alone (Muskens et al., 2024).

Findings from Bağrici Bozan et al. (2023) similarly indicate moderate-to-high levels of digital media use during pregnancy, with usage distributed across several days per week rather than concentrated in daily routines (Bağrici Bozan et al., 2023). The present results align with these observations, indicating that digital media use among pregnant women in Garut Regency follows a comparable rhythm (Bağrici Bozan et al., 2023).

Lower-frequency use has also been reported in other populations. Nabovati et al. (2023) observed that some pregnant women access digital platforms sporadically, primarily when new symptoms or concerns arise (Nabovati et al., 2023). This episodic pattern suggests that digital media function as situational resources rather than constant companions throughout pregnancy (Nabovati et al., 2023).

The relationship between higher frequency of digital media use and autonomous health information seeking has been highlighted by Zhang et al. (2021). Their findings suggest that frequent users tend to demonstrate greater initiative in managing health-related uncertainty (Zhang et al., 2021). The present study supports this interpretation, as a subset of respondents reported frequent weekly use, which may reflect heightened informational needs or greater familiarity with digital tools (Zhang et al., 2021).

El Ayadi et al. (2025) further reported that weekly access to digital health content constitutes a meaningful indicator of engagement with digital health resources during pregnancy (El Ayadi et al., 2025). The range of intensities observed in this study suggests heterogeneous patterns of engagement that correspond with varying levels of

perceived need and technological comfort (El Ayadi et al., 2025).

The findings of this study underscore the importance of digital media as a supplementary source of maternal health information. Digital platforms appear to complement formal health services by providing immediate access to information outside scheduled antenatal visits (Kurniawati, 2023). This function may be particularly relevant in district-level settings where geographic and infrastructural barriers affect access to continuous professional guidance (Kurniawati, 2023).

However, the variability in information quality across digital sources raises concerns regarding potential misinformation. Previous research has demonstrated that online health information is not consistently aligned with clinical guidelines (Chen et al., 2022). The reliance on search engines observed in this study, therefore, highlights the need for digital health literacy initiatives that promote critical appraisal of online content (Chen et al., 2022).

The present findings support the integration of digital health education into antenatal care programs. Health professionals may play a key role in directing pregnant women toward credible digital resources and in clarifying discrepancies between online information and professional advice (Conrad, 2024). Such integration may enhance the positive impact of digital media on maternal health knowledge and decision-making (Conrad, 2024).

Garut Regency is characterized by mixed urban and rural settings, which may influence access to stable internet connections and digital devices. Previous studies have identified infrastructural disparities as determinants of digital health engagement (Ningrum et al., 2024). The patterns observed in this study should therefore be interpreted within the context of uneven technological access across communities (Ningrum et al., 2024).

Educational attainment may also shape digital information use. Although most respondents had secondary education, a smaller proportion had higher education, which may influence the capacity to evaluate health information critically (Chen et al., 2022). These contextual factors suggest that digital media use behavior is embedded within broader social and technological environments (Andersen & Davidson, 2007).

CONCLUSION

This study demonstrates that digital media use among pregnant women in Garut Regency constitutes an integral component of health information–seeking behavior during pregnancy. Digital platforms are used as sources of information that support women in understanding maternal health conditions and fetal development. These findings indicate that digital media have become a reference point in the process of pregnancy-related decision-making.

With regard to digital media sources, pregnant women in Garut Regency show a predominant reliance on search engines, accompanied by the use of video-based platforms and health applications. This pattern reflects a preference for easily accessible media that allow flexible and immediate retrieval of pregnancy-related information according to perceived needs.

In terms of usage purpose, digital media are utilized to obtain information on maternal health and fetal condition monitoring. The

orientation toward both domains suggests that pregnant women perceive pregnancy as a continuum that involves interconnected maternal and fetal health aspects. Digital media therefore, function as informational tools that support a comprehensive understanding of pregnancy.

Concerning the intensity of use, digital media engagement varies from limited weekly use to more regular access across several days in a week. This variation reflects differences in informational needs and individual habits in utilizing digital resources during pregnancy. The observed range of use indicates that digital media engagement is shaped by situational demands rather than uniform daily routines.

Overall, digital media in Garut Regency operate as supplementary sources of pregnancy-related health information that complement formal maternal health services. Their role lies in facilitating access to information on maternal and fetal health and in supporting women's awareness of pregnancy conditions. Consequently, efforts to guide pregnant women toward credible and reliable digital health resources are essential to ensure that digital media use contributes positively to maternal health outcomes.

REFERENCE

Ahmadian, L., Khajouei, R., Kamali, S., & Mirzaee, M. (2020). Use of the internet by pregnant women to seek information about pregnancy and childbirth. *Information in Health and Social Care*, 45(4), 385–395. https://doi.org/10.1080/17538157.2020.1769106

Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*, 36(1), 1–10. https://doi.org/10.2307/2137284

APJII (Asosiasi Penyelenggara Jasa Internet Indonesia). (2025). Laporan survei penetrasi & perilaku pengguna internet Indonesia 2025. APJII.

Badan Pusat Statistik. (2023). Statistik telekomunikasi Indonesia 2023. BPS.

Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-revisiting Andersen's behavioral model of health services use: A systematic review of studies from 1998–2011. *GMS Psycho-Social-Medicine*, 9, Doc11. https://doi.org/10.3205/psm000089

Bağrici Bozan, M., & Cangöl, E. (2023). Prevalence and causes of social media usage and addiction status of pregnant women. *BMC Women's Health*, 23, Article 655. https://doi.org/10.1186/s12905-023-02787-1

Chen, C., Wang, H., Shapiro, M., Xiao, Y., Wang, F., & Shu, K. (2022). Combating health misinformation in social media: Characterization, detection, intervention, and open issues. *arXiv*. https://doi.org/10.48550/arXiv.2211.05289

Conrad, R. (2024). Digital information seeking behavior among pregnant women. *Journal of Medical Internet Research*, 26, e49521. https://doi.org/10.2196/49521

Damayanti, N. A., Wulandari, R. D., Ridlo, I. A., Kusniar, N. A. C., & Pangastuti, A. (2022). The

internet as a health information in decision making of pregnant women. *Jurnal Administrasi Kesehatan Indonesia*, 10(1), 79–88. https://doi.org/10.20473/jaki.v10i1.2022.79-88

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. https://doi.org/10.2307/249008

El Ayadi, A. M., Diamond-Smith, N. G., Schuman, M., & Weil, L. (2025). Patient-directed social media use among participants of centering pregnancy groups. *Journal of Health, Population and Nutrition*, 44, Article 430. https://doi.org/10.1186/s41043-025-01159-9

Frid, G., Bogaert, K., & Chen, K. T. (2021). Mobile health apps for pregnant women: Systematic search, evaluation, and analysis of features. *Journal of Medical Internet Research*, 23(10), e25667. https://doi.org/10.2196/25667

Gayesa, R. T., Ngai, F. W., & Xie, Y. J. (2023). The effects of mHealth interventions on improving institutional delivery and uptake of postnatal care services in low- and lower-middle-income countries: A systematic review and meta-analysis. *BMC Health Services Research*, 23(1), 611. https://doi.org/10.1186/s12913-023-09581-7

Giacometti, C. F., Galfano, G. S., Wajman, D. S., Cordioli, E., Beck, A. P. A., & Podgaec, S. (2024). Internet use by pregnant women during prenatal care. Einstein (São Paulo), 22, eAO0447. https://doi.org/10.31744/einstein_journal/2024AO0447

Hasibuan, K., Setyonugroho, W., & Astuti, D. A. (2022). Acceptance of mobile technology in antenatal care (ANC) services: A systematic review. International Journal of *Research and Review*, 9(12), 326–333. https://doi.org/10.52403/ijrr.20221236

Hou, K., & Hou, T. (2022). Investigating pregnant women's health information needs during pregnancy on internet platforms. Frontiers in Physiology, 13, Article 1038048. https://doi.org/10.3389/fphys.2022.1038048

Kementerian Kesehatan Republik Indonesia. (2023). Transformasi digital kesehatan melalui platform SATUSEHAT dan ASIK. Kemenkes RI.

Khaerani, I. N., Susiarno, H., & Adnani, Q. E. S. (2024). Analisis faktor risiko pada ibu dan pelayanan kesehatan reproduksi terhadap kematian maternal di Kabupaten Garut. *Media Informasi*, 20(1), 45–51. https://doi.org/10.37160/mijournal.v20i1.240.

Kurniawati, P., Sukihananto, & Amanah, D. A. (2023). Penggunaan mobile health (mHealth) berbasis sistem pakar pada pemantauan tanda bahaya kehamilan: Literature review. *Journal of Health and Cardiovascular Nursing*, 3(1). https://doi.org/10.36082/jhcn.v3i1.998

Lazarevic, N., Lecoq, M., Bœhm, C., Caillaud, C., & Corinne, C. (2023). Pregnancy apps for self-monitoring: Scoping review of the most popular global apps available in Australia. *International*

Journal of Environmental Research and Public Health, 20(2), 1012. https://doi.org/10.3390/ijerph20021012

Lestari, Y. (2025). Jabar targetkan penurunan angka kematian ibu dan bayi menjadi 5 persen. Dinas Kesehatan Provinsi Jawa Barat. https://diskes.jabarprov.go.id/postingan/jabar-targetkan-penurunan-angka-kematian-ibu-dan-bayi-menjadi-5-persen-684ba8723cafe86ff78fe66

Lupton, D. (2016). The use and value of digital media for information about pregnancy and early motherhood: A focus group study. *BMC Pregnancy and Childbirth*, 16, Article 171. https://doi.org/10.1186/s12884-016-0971-3

Nabovati, E., Farzandipour, M., Vahedpoor, Z., Akbari, H., Anvari, S., Sharif, R., & Fatehi, F. (2023). Pregnant women's use and attitude toward mobile phone features for self-management. *BMC Medical Informatics and Decision Making*, 23, Article 77. https://doi.org/10.1186/s12911-023-02172-w

Ningrum, E. W., Lusmilasari, L., Huriyati, E., Marthias, T., & Hasanbasri, M. (2024). Improving maternal health literacy among low-income pregnant women: A systematic review. *Narra J*, 4(2), e886. https://doi.org/10.52225/narra.v4i2.886

Nissen, M., Huang, S.-Y., Jäger, K. M., Flaucher, M., Titzmann, A., Bleher, H., Pontones, C. A., Huebner, H., Danzberger, N., Fasching, P. A., Eskofier, B. M., & Leutheuser, H. (2024). Smartphone pregnancy apps: Systematic analysis of features, scientific guidance, commercialization, and user perception. *BMC Pregnancy and Childbirth*, 24, Article 782. https://doi.org/10.1186/s12884-024-06959-1

Piron-Dumitrascu, M., Cretoiu, D., Varlas, V. N., & Suciu, N. (2025). Fetal and maternal surveillance in high-risk pregnancy: Tools, timing, and trends. *Journal of Medicine and Life*, 18(8), 745–752. https://doi.org/10.25122/jml-2025-0105

Yosef, T., & Tesfaye, M. (2021). Pregnancy danger signs: Knowledge and health-seeking behavior among reproductive age women in southwest Ethiopia. Women's Health, 17, 17455065211063295. https://doi.org/10.1177/17455065211063295

Zhang, X., Liu, J., Han, N., & Yin, J. (2021). Social media use, unhealthy lifestyles, and the risk of miscarriage among pregnant women during the COVID-19 pandemic: Prospective observational study. *JMIR Public Health and Surveillance*, 7(1), e25241. https://doi.org/10.2196/25241