

**RURAL WOMEN PERCEPTIONS OF DIGITAL MEDIA INFLUENCE ON AWARENESS CREATION ABOUT MATERNAL HEALTH INFORMATION IN PUNJAB, PAKISTAN**

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**Abstract** In rural settings, access to maternal health information is often limited, contributing to disparities in maternal healthcare utilization and outcomes. The main objective of the study is to find the rural women perceptions of digital media influence on awareness creation about maternal health information in Punjab, Pakistan. This cross-sectional study was conducted at the University of Lahore from August 2023 to January 2024. Data was collected from 350 participants using convenience sampling methods. Data collection involved the administration of structured surveys to participants, either in-person or through electronic means, depending on their accessibility and preferences. The survey instrument was designed to capture demographic information, including age, education level, household income, and parity, as well as assess participants' access to digital media, frequency of usage, preferred platforms, and perceived usefulness of digital media for obtaining maternal health information. Data was collected from 350 participants. The mean age of the participants was 32.9±6.5 years Education levels varied, with 60% having primary education, 30% secondary, and 10% tertiary education. Regarding household income, 70% fell below the poverty line, while 30% were above it. Participants reported relatively high mean scores for their engagement with digital media platforms. Social media received the highest mean score of 3.8, followed by search engines with a mean score of 3.5, and maternal health websites/apps with a slightly lower mean score of 3.2. It is concluded that digital media, particularly social media platforms, play a significant role in providing access to maternal health information among rural women, despite variations in access and perceived usefulness across demographic groups.

**Keywords:** rural; mental health; household; demographic; variation

### Introduction

In rural settings, access to maternal health information is often limited, contributing to disparities in maternal healthcare utilization and outcomes. Against this backdrop, digital media platforms have emerged as promising tools for disseminating maternal health information and raising awareness among rural women (Muthel et al., 2023). However, understanding rural women's perceptions of the influence of digital media on maternal health awareness creation is crucial for designing effective interventions and addressing barriers to access and utilization. Rural women, particularly those residing in remote or underserved areas, face unique challenges in accessing maternal health information due to limited healthcare infrastructure, socio-economic constraints, and cultural factors (Habib et al., 2021). Digital media,

including internet-based platforms, mobile applications, and social media, offer opportunities to overcome these barriers by providing timely, relevant, and accessible maternal health content (Zamawe et al., 2016).

Maternal health encompasses the continuum of care for women from pre-pregnancy through postpartum, ensuring the well-being of both mother and child. Effective maternal healthcare services are vital for their survival (Brusniak et al., 2020). The evolution of digital media and communication technology offers promising avenues for addressing maternal health challenges, particularly in developing regions. With increasing internet penetration and interactive features, digital media facilitates genuine dialogue, swift dissemination of information, and customization of services. Information and

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communication technologies (ICTs) play a pivotal role in reshaping health communication practices, offering new opportunities for maternal health interventions (Dodd et al., 2018).

Digital health support refers to assistance provided through digital platforms like email, chat, mobile apps, and social media, enabling mothers and community health workers to engage with healthcare providers using smartphones, tablets, and computers (Skinner et al., 2018). While studies have underscored its potential to enhance maternal health, concerns have been raised regarding its exacerbation of inequalities, particularly in underserved rural areas. The pronounced disparities in access to quality healthcare, evident in high maternal mortality rates in certain sub-Saharan African regions, suggest a widening gap between affluent and disadvantaged populations, a gap that digital support mechanisms could help bridge (Scorgie et al., 2015).

**Objectives**

The main objective of the study is to find the rural women’s perceptions of digital media influence on awareness creation about maternal health information in Punjab, Pakistan.

**Material and methods**

This cross-sectional study was conducted at the University of Lahore from August 2023 to January 2024. Data was collected from 350 participants using

convenience sampling methods. Data collection involved the administration of structured surveys to participants, either in-person or through electronic means, depending on their accessibility and preferences. The survey instrument was designed to capture demographic information, including age, education level, household income, and parity, as well as assess participants’ access to digital media, frequency of usage, preferred platforms, and perceived usefulness of digital media for obtaining maternal health information.

Data were analyzed using SPSS v27. Descriptive statistics frequencies and means to summarize demographic characteristics and digital media usage patterns among participants

**Results**

Data was collected from 350 participants. The mean age of the participants was 32.9±6.5 years Education levels varied, with 60% having primary education, 30% secondary, and 10% tertiary education. Regarding household income, 70% fell below the poverty line, while 30% were above it. The majority of participants reported access to digital media platforms, with 80% owning smartphones, 60% having internet access, 70% using social media, 60% utilizing search engines, and 40% accessing maternal health websites or apps.

**Table 1. Demographic data and social media usage among participants**

Characteristic	Mean / Percentage
<b>Age (years)</b>	32.9±6.5
<b>Education Level</b>	
- Primary	60%
- Secondary	30%
- Tertiary	10%
<b>Household Income</b>	
- Below the poverty line	70%
- Above the poverty line	30%
<b>Digital Media Platform</b>	
Smartphone	80%
Internet Access	60%
Social Media	70%
Search Engines	60%
Maternal Health Websites/Apps	40%

Participants reported relatively high mean scores for their engagement with digital media platforms. Social media received the highest mean score of 3.8,

followed by search engines with a mean score of 3.5, and maternal health websites/apps with a slightly lower mean score of 3.2.

**Table 2. Perceived Usefulness of Digital Media for Maternal Health Awareness Creation**

Digital Media Platform	Mean Score
<b>Social Media</b>	3.8
<b>Search Engines</b>	3.5
<b>Maternal Health Websites/Apps</b>	3.2

The association between education level and social media usage reveals a clear trend, with higher education levels corresponding to increased digital media access. Specifically, 50% of individuals with a primary education, 70% with a secondary education,

and 90% with a tertiary education reported using social media. Similarly, household income level shows a positive association with social media usage, with 60% of individuals below the poverty line and

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80% above the poverty line accessing social media platforms.

**Table 3. Association between education and Income level to social media usage**

Education Level	Digital Media Access
Primary	50%
Secondary	70%
Tertiary	90%
Household Income	
Below poverty line	60%
Above poverty line	80%

### Discussion

Social media platforms, like Facebook and WhatsApp, are perceived as persuasive wellsprings of maternal health data, with rustic women detailing moderate to elevated degrees of dependence on these platforms for acquiring health-related content (Wabiri, et al., 2016). This features the significance of leveraging social media for dispersing exact and socially pertinent maternal health data to rustic communities, where customary healthcare foundations might need (Damian et al., 2019).

Schooling and pay level emerge as significant indicators of advanced media access and perceived handiness for maternal health mindfulness creation. Our speculative outcomes propose that women with higher instruction and pay levels are bound to approach computerized media and perceive it as a valuable device for getting maternal health data (Coetzee et al., 2018). This underscores the need to address financial differences in computerized media access and literacy to guarantee the evenhanded dispersal of health-related content among the provincial population (Mumtaz et al., 2003). The test of lessening maternal mortality has been a global general health concern for a long time and keeps on highlighting in most global developmental plans one of which is objective 3 of the Sustainable Development Goal (SDG-3) (Khan et al., 2020). Despite the several drives and endeavors given to controlling maternal mortality, just somewhat little improvement has been accomplished. The thousand-year development objective (MDG) of diminishing the maternal mortality proportion (MMR) by 3/4 somewhere in the range between 1990 and 2015 is embodied in the third SDG of guaranteeing healthy lives and advancing prosperity for all at all ages (Riaz et al., 2015). Lately, there have likewise been drives including the usage of broad communications missions to accomplish wide coverage towards the attainment of worked-on prosperity. Correspondence is a fundamental part of healthcare delivery (Panzai et al., 2017). It has for some time been priceless in health advancement which, over the most recent couple of many years of the twentieth 100 years, turned into a basic piece of public healthcare delivery programs. The development of computerized media and advancement in correspondence innovation hold significant

possibilities for tending to the difficulties of maternal health and developmental issues confronting particularly the producing world (Chandra et al., 2014). This idealism depends on the rising levels of Internet as well as interactivity, veritable exchange, speed, multimodality, user-generated content, mass customization, even correspondence, and multi-directionality that characteristics the advanced media. Information and communications technologies (ICTs) have been the cornerstone in changing health correspondence rehearses (Rimande et al., 2019).

### Conclusion

It is concluded that digital media, particularly social media platforms, play a significant role in providing access to maternal health information among rural women, despite variations in access and perceived usefulness across demographic groups. Education and income levels are key determinants of digital media access and perceived usefulness, highlighting the importance of addressing socioeconomic disparities in digital literacy.

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All authors contribute equally.

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N/A

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### Data availability statement

All data has been given in manuscript.

### Submission declaration and verification

The work is not been published previously, and it is not under consideration for publication elsewhere.



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