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MIDWIVES' READINESS TO USE DIGITAL APPLICATIONS: A NEEDS ANALYSIS FOR AN APPLICATION-BASED MATERNAL AND CHILD HEALTH EDUCATION MODEL IN SOUTH SUMATRA

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ABSTRACT

Digital transformation of primary health services requires readiness among health workers, including midwives, who act as both users and facilitators of technology in infant and toddler health services. This study aimed to analyze midwives' needs and readiness to use digital applications, as part of the analysis stage of developing an application-based education and counseling model for meeting infants' and toddlers' basic needs. A descriptive-analytic, cross-sectional design was used, based on the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model. The population consisted of midwives working in South Sumatra Province, with a sample of 225 respondents. Data were collected from 17 April to 27 July 2026 using an electronic questionnaire tested for validity and reliability (Cronbach's Alpha 0.856–0.979), following ethical approval from the Health Research Ethics Committee of Poltekkes Kemenkes Palembang. Data were analyzed using univariate and bivariate (Chi-Square) analysis. Results showed that 51.6% of midwives had good readiness, while 48.4% had insufficient readiness. Significant associations were found between readiness and mothers' behavior in meeting children's basic needs ($p=0.001$), service barriers ($p<0.001$), need for digital applications ($p<0.001$), need for application features ($p<0.001$), length of work ($p=0.022$), and frequency of smartphone use for seeking health information ($p=0.028$), but not with education, smartphone type, daily smartphone-use duration, prior application experience, or workplace internet access ($p>0.05$). More than half of midwives already show good readiness to use digital applications, closely related to their perceived need for the application and its features, providing an empirical basis for the application's design and development stages.

Keywords: digital readiness; mobile health application; midwife; needs analysis; infant and toddler health

INTRODUCTION

Digital transformation of primary health care systems has become a strategic national policy direction, including in maternal and child health services that have traditionally relied on face-to-face visits to health facilities. The use of digital applications for education and counseling on infant and toddler health has the potential to broaden access to information, facilitate growth-and-development monitoring, and strengthen communication between families and health workers (Susanti *et al.*, 2022; Kachimanga *et al.*, 2023; Aisyah *et al.*, 2024). However, the success of digital health technology implementation does not depend solely on how

sophisticated an application is, but largely on the readiness of health workers who will operate, recommend, and assist families in using it.

Midwives are the health workers with the highest intensity of contact with mothers and families in infant and toddler health services, making their readiness a key determinant of successful adoption of digital health applications at the primary-care level (Susanti *et al.*, 2022). Prior studies indicate that primary health workers' intention and readiness to use mobile health (mHealth) are influenced by self-efficacy toward technology, compatibility of the application with daily practice, device ownership, and prior experience or training in digital technology (Wondimu *et al.*, 2025). A study among midwives in Belgium reported that 58% had already used digital technologies in their practice and expressed high confidence toward such technologies, although use remained largely confined to electronic health records rather than more interactive tools (Akalin *et al.*, 2024). Similarly, a study among midwives in West Java, Indonesia, emphasized that midwives' competency and readiness are essential aspects to map before developing a continuity-of-care mHealth application (Susanti *et al.*, 2022).

A recent systematic review of health workers' digital readiness identified performance expectancy, effort expectancy, facilitating conditions, and social influence as the main determinants of technology acceptance among health professionals, as described in the Unified Theory of Acceptance and Use of Technology (UTAUT) framework (Venkatesh *et al.*, 2003; Alotaibi *et al.*, 2025). Availability of training and organizational or facility support emerged as critical facilitating factors, whereas inadequate infrastructure and training were the main barriers (Alotaibi *et al.*, 2025). A similar pattern was reported among rural community health workers in India, whose readiness for mobile-phone-based telemedicine was associated with knowledge, attitude toward technology, and smartphone ownership (Gandhi *et al.*, 2022). In Indonesia specifically, nurses have shown varying levels of digital-health readiness, with digital literacy and hands-on training identified as key needs for scaling up digital health engagement (McKenna *et al.*, 2025); an assessment of digital literacy among health workers at a regional hospital in Indonesia likewise documented varying levels of digital literacy across staff groups (Choerunnisa *et al.*, 2026), while national assessments of information and communication technology (ICT) maturity across primary health care facilities in nine provinces found human-resource capability to still be the weakest component of digital readiness (Aisyah *et al.*, 2024).

In South Sumatra Province, meeting infants' and toddlers' basic needs for care, affection, and stimulation (*asuh*, *asih*, and *asah*) remains a challenge in family health services, while the use of digital media as a tool for family health education and counseling has rarely been examined from the perspective of health workers, particularly midwives. This study is part of a broader effort to develop a web-based, application-based education and counseling model for meeting infants' and toddlers' basic needs, using a Research and Development approach based on the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model.

This article specifically reports the results of the needs-analysis stage, focusing on a single dependent variable, namely midwives' Readiness to Use Digital Applications, together with its associations with mothers' behavior in meeting children's basic needs, service barriers, need for digital applications, need for application features, and midwives' characteristics. The other dependent variables generated from this needs analysis (mothers' behavior, service barriers, need for digital applications, and need for application features) are reported separately by the research team. This study aimed to analyze the description of, and factors associated with, midwives' readiness to use digital applications to support infant and toddler health services in South Sumatra Province, providing an empirical basis for the subsequent design and development stages of the application in further research.

MATERIALS AND METHODS

This study used a descriptive-analytic design with a cross-sectional approach, conducted as part of the analysis phase of a Research and Development study developing a web-based application for education and counseling using the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model (Sugiyono, 2016). The analysis phase of this development study comprised problem analysis, needs analysis, and analysis of the application's development objectives, part of which was explored through a survey of midwives as prospective users and facilitators of the application.

The study population consisted of all midwives working at health facilities (hospitals, community health centers/*Puskesmas*, independent midwife practices, primary clinics/maternity homes, district health offices, and educational institutions) in South Sumatra Province. The sample comprised 225 respondents who met the inclusion criteria, namely actively working as a midwife in South Sumatra Province and willing to participate as indicated by an electronic informed consent statement. Midwives who did not provide consent

or did not complete the questionnaire were excluded from the analysis. Data were collected from 17 April to 27 July 2026 using an electronic questionnaire distributed to midwives across South Sumatra Province. This study obtained ethical approval from the Health Research Ethics Committee of Poltekkes Kemenkes Palembang (No. DP.04.03/F.XXXII.10/2506/2026, dated 16 April 2026), and all respondents electronically signed an informed consent form before completing the questionnaire.

The research instrument was a needs-analysis questionnaire developed by the research team, comprising nine sections: (1) informed consent; (2) respondent characteristics; (3) Mothers' Behavior in Meeting Children's Basic Needs (variable A); (4) Service Barriers (variable B); (5) Need for Digital Applications (variable C); (6) Need for Application Features (variable D); (7) Readiness to Use Digital Applications (variable E); and (8) closed, multiple-response questions on perceived problems, features, benefits, and expectations toward the application (variable F). Variables A through E were measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) and summed into a total score for each variable. Variable E (Readiness to Use Digital Applications) measured midwives' willingness, capability, and attitude toward using digital applications in child health services, including statements on the ability to use the application, willingness to provide consultation through the application, perceived benefit for service effectiveness, interest in using the application, and the need for training and facility support prior to application use.

Before use in the main data collection, the instrument was piloted among 30 midwives who were not included in the main study sample, to assess validity and reliability. Validity was assessed using the corrected item-total correlation, and all items in the final version of the instrument were declared valid. Reliability was assessed using Cronbach's Alpha, ranging from 0.856 to 0.979 across all variables, indicating excellent internal consistency.

Data were analyzed in stages. Univariate analysis was used to describe respondent characteristics and the distribution of study variables, presented as frequencies, percentages, and measures of central tendency and dispersion (mean, median, standard deviation, minimum–maximum). Normality was tested using the Kolmogorov-Smirnov and Shapiro-Wilk tests. All variable scores (A, B, C, D, and E) were found not to be normally distributed ($p<0.001$); therefore, each variable was dichotomized into two categories (low/insufficient and high/good) using the median as the cut-off point. Based on this cut-off, the Readiness to Use Digital Applications (E) variable was categorized as Insufficient (score ≤ median) and Good (score > median). Bivariate analysis used the Chi-Square test (with continuity correction for 2×2 tables, and Fisher's Exact Test as an alternative when the expected cell count was below 5) to examine associations between the Readiness to Use Digital Applications (E) variable and variables A, B, C, D, and relevant respondent characteristics. Associations were considered statistically significant at $p<0.05$. All data were analyzed using SPSS statistical software.

RESULTS AND DISCUSSION

Respondent Characteristics

This study involved 225 midwives working at various health facilities in South Sumatra Province. Respondent characteristics are presented in detail in **Table 1**.

Table 1 Distribution of respondent characteristics (n=225)

Characteristic	Category	n	%
Age	< 30 years	29	12.9
	31–39 years	110	48.9
	40–49 years	66	29.3
	> 50 years	20	8.9
Education	Diploma/Bachelor's Degree in Midwifery (D3/D4/S1)	143	63.6
	Professional/Master's Degree in Midwifery	82	36.4
Length of work	≤ 15 years	125	55.6
	> 15 years	100	44.4
Workplace	Non-hospital	167	74.2
	Hospital	58	25.8

Characteristic	Category	n	%
Employment status	Civil servant (ASN)	194	86.2
	Non-civil servant	31	13.8
Work area	Rural/non-urban	122	54.2
	Urban	103	45.8
Regency/city of workplace	Regency/non-urban	149	66.2
	Urban	76	33.8
Smartphone type	Android	192	85.3
	iPhone	33	14.7
Daily smartphone-use duration	< 3 hours	20	8.9
	3–6 hours	97	43.1
	6–8 hours	62	27.6
	> 8 hours	46	20.4
Frequency of seeking health information via smartphone	Low	69	30.7
	High	156	69.3
Prior experience using health applications	Never	132	58.7
	Ever	93	41.3
Internet access at workplace	Poor	70	31.1
	Good	155	68.9

Note: Source of data: primary data, 2026

Most respondents were aged 31–39 years (48.9%), held a Diploma/Bachelor's degree in Midwifery (63.6%), and had worked for ≤15 years (55.6%). The majority worked outside hospitals (74.2%) with civil-servant status (86.2%), and more were based in rural/non-urban areas (54.2%). In terms of technology use, nearly all respondents used Android smartphones (85.3%) for 3–6 hours per day (43.1%), with a high frequency of seeking health information (69.3%). Most respondents had never used a health application before (58.7%), yet already had good internet access at their workplace (68.9%). The digital media most frequently used by midwives in providing infant and toddler health information are presented in **Figure 1**.

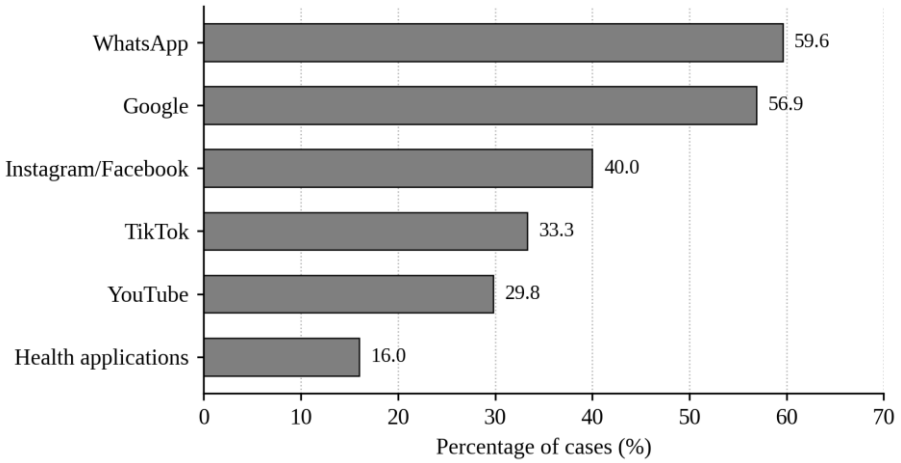

Figure 1 Digital media used by midwives in providing infant and toddler health information (n=225, multiple responses)

Figure 1 shows that general-purpose communication and search media dominated, namely WhatsApp (59.6% of cases) and Google (56.9%), followed by social media platforms such as Instagram/Facebook (40.0%), TikTok (33.3%), and YouTube (29.8%). In contrast, dedicated health applications were used by only 16.0% of respondents, indicating that purpose-built digital health media are still marginal in daily midwifery practice, even though midwives are already accustomed to using digital media in general.

Overview of Study Variables

An overview of the total scores of the study variables is presented in **Table 2**. The Kolmogorov-Smirnov and Shapiro-Wilk normality tests indicated that none of the variables were normally distributed (p<0.001); therefore, bivariate analysis used median-based categorization.

Table 2 Overview of total scores of the study variables (n=225)

Variable	Mean	SD	Median	Min	Max	p (K-S)
Mothers' behavior in meeting children's basic needs (A)	50.25	8.675	51.00	21	65	<0.001
Service barriers (B)	30.47	6.008	31.00	11	40	<0.001
Need for digital applications (C)	43.32	6.323	43.00	12	50	<0.001
Need for application features (D)	44.04	6.729	46.00	10	50	<0.001
Readiness to use digital applications (E)	52.60	7.613	53.00	12	60	<0.001

Note: K-S = Kolmogorov-Smirnov; source of data: primary data, 2026

The Readiness to Use Digital Applications (E) variable had a mean score of 52.60 (SD 7.613) out of a possible range of 12–60, with a median of 53.00. Based on median categorization, 116 respondents (51.6%) were classified as having good readiness and 109 respondents (48.4%) as having insufficient readiness. The Need for Application Features (D) and Need for Digital Applications (C) scores showed a similarly negative skewness, indicating a general tendency among respondents to agree with the need for the application and its features.

Instrument Validity and Reliability

The results of the instrument reliability test conducted on 30 midwives outside the main sample are presented in **Table 3**.

Table 3 Instrument reliability test results (pilot test, n=30)

Variable	Number of items	Cronbach's Alpha	Category
Mothers' behavior in meeting children's basic needs (A)	13	0.901	Excellent
Service barriers (B)	8	0.856	Excellent
Need for digital applications (C)	10	0.953	Excellent
Need for application features (D)	10	0.979	Excellent
Readiness to use digital applications (E)	10	0.956	Excellent

Note: All items were declared valid based on a corrected item-total correlation > 0.3; source of data: primary data, 2026

All research instruments demonstrated excellent reliability, with Cronbach's Alpha values above 0.80. The Readiness to Use Digital Applications (E) instrument had a Cronbach's Alpha of 0.956, with corrected item-total correlations ranging from 0.647 to 0.919, indicating very good internal consistency among items.

Factors Associated with Readiness to Use Digital Applications

Table 4 presents the results of the association analysis between mothers' behavior in meeting children's basic needs (A), service barriers (B), need for digital applications (C), need for application features (D), and midwives' characteristics with readiness to use digital applications (E).

Table 4 Association between variables A–D and midwives' characteristics with readiness to use digital applications (E) (n=225)

Variable	Category	Insufficient n (%)	Good n (%)	χ^2	df	p
Mothers' behavior in meeting children's basic needs (A)	Insufficient	65 (59.6)	44 (40.4)	10.597	1	0.001*
	Good	44 (37.9)	72 (62.1)			
Service barriers (B)	Low	66 (64.7)	36 (35.3)	19.755	1	<0.001*

Variable	Category	Insufficient n (%)	Good n (%)	χ^2	df	p
Need for digital applications (C)	High	43 (35.0)	80 (65.0)	88.344	1	<0.001*
	Low	89 (80.2)	22 (19.8)			
Need for application features (D)	High	20 (17.5)	94 (82.5)	109.459	1	<0.001*
	Low	92 (84.4)	17 (15.6)			
Education	High	17 (14.7)	99 (85.3)			
	D3/D4/Bachelor's	73 (51.0)	70 (49.0)	1.066	1	0.302
Length of work	Professional/Master's	36 (43.9)	46 (56.1)			
	≤ 15 years	52 (41.6)	73 (58.4)	5.275	1	0.022*
Smartphone type	> 15 years	57 (57.0)	43 (43.0)			
	Android	95 (49.5)	97 (50.5)	0.561	1	0.454
Daily smartphone-use duration	iPhone	14 (42.4)	19 (57.6)			
	< 3 hours	10 (50.0)	10 (50.0)	0.576	3	0.902
	3–6 hours	48 (49.5)	49 (50.5)			
	6–8 hours	31 (50.0)	31 (50.0)			
	> 8 hours	20 (43.5)	26 (56.5)			
Frequency of seeking health information via smartphone	Low	41 (59.4)	28 (40.6)	4.800	1	0.028*
	High	68 (43.6)	88 (56.4)			
Prior experience using health applications	Never	68 (51.5)	64 (48.5)	1.206	1	0.272
	Ever	41 (44.1)	52 (55.9)			
Internet access at workplace	Poor	31 (44.3)	39 (55.7)	0.704	1	0.402
	Good	78 (50.3)	77 (49.7)			

Note: Chi-Square test with continuity correction for 2×2 tables;

* statistically significant at p<0.05; source of data: primary data, 2026

The analysis showed that all four main variables (mothers' behavior, service barriers, need for digital applications, and need for application features) were significantly associated with readiness to use digital applications (p<0.05 for all). Midwives with a high perceived need for digital applications had a markedly higher proportion of good readiness (82.5%) than those with a low perceived need (19.8%), a similar pattern being observed for need for application features (85.3% versus 15.6%). Among respondent characteristics, length of work and frequency of smartphone use for seeking health information were also significantly associated with readiness (p<0.05), whereas education, smartphone type, daily smartphone-use duration, prior experience using health applications, and workplace internet access showed no statistically significant association (p>0.05).

Midwives' Overall Readiness to Use Digital Applications

This study found that more than half of midwives (51.6%) had good readiness to use digital applications to support infant and toddler health services, although the proportion with insufficient readiness (48.4%) remained substantial and nearly balanced. This finding is consistent with a recent systematic review showing that health workers' digital readiness generally varies and is strongly influenced by performance expectancy, effort expectancy, training availability, and health-facility support (Alotaibi *et al.*, 2025). A study among midwives in Belgium likewise reported that most midwives felt reasonably confident about digital technology, although its use remained largely confined to administrative functions such as electronic health records and had not yet extended to interactive features such as remote counseling (Akalin *et al.*, 2024). A recent qualitative review also emphasized that digital transformation in midwifery practice is not solely a matter of technology adoption, but also involves adjustments to midwives' professional and relational roles with the families they support (Sun *et al.*, 2026). A comparable pattern was observed among community midwives and lady health workers in Pakistan, most of whom expressed high willingness to adopt mHealth despite contextual barriers such as limited resources and infrastructure constraints (Baig *et al.*, 2026). Within the Indonesian context specifically, scoping-review evidence on digital health among Indonesian nurses similarly shows variable readiness alongside a clear need for further digital-literacy training (McKenna *et al.*, 2025), while a national ICT-maturity assessment across primary care facilities found human-resource

capability to still be the weakest domain of digital readiness relative to hardware and infrastructure (Aisyah *et al.*, 2024).

Association of Mothers' Behavior, Service Barriers, and Need for the Application and Its Features with Readiness

This study found a significant association between midwives' perception of mothers' behavior in meeting children's basic needs and their readiness to use digital applications (p=0.001). Midwives who rated mothers' behavior as insufficient tended to have lower readiness to use digital applications, whereas those who rated mothers' behavior as good had higher readiness. This pattern may reflect that midwives who have witnessed successful family-level interventions tend to be more optimistic and ready to adopt supplementary educational media such as digital applications, consistent with the concept of performance expectancy within technology-acceptance frameworks, namely the belief that using the technology will enhance work effectiveness (Alotaibi *et al.*, 2025).

Service barriers were also significantly associated with readiness to use digital applications (p<0.001), with an interesting pattern: midwives who rated service barriers (e.g., limited time, insufficient staff numbers, and limited family access to information) as high actually showed a greater proportion of good readiness (65.0%) than those who rated barriers as low (35.3%). This finding is consistent with the notion that digital applications are perceived as a solution to the service barriers midwives encounter daily, as reported in an evaluation of mHealth use by community health workers in Sub-Saharan Africa, where mHealth helped address limited time and staff shortages in providing maternal and child health education and monitoring (Kachimanga *et al.*, 2023). A similar pattern was reported in the evaluation of the Hayat application in Pakistan and Afghanistan, where frontline health workers noted that the application improved communication efficiency with families and immunization-schedule monitoring amid limited service resources (Zaidi *et al.*, 2020).

The strongest associations were found between perceived need for digital applications (C) and need for application features (D) with readiness to use the application (χ^2=88.344 and 109.459; p<0.001 for both). Midwives who rated their need for a digital application and its features as high showed a markedly higher proportion of good readiness (82.5% and 85.3%, respectively) than those with a low perceived need (19.8% and 15.6%, respectively). This finding confirms that readiness to use technology is deeply rooted in perceived need and perceived usefulness, consistent with the core principle of the Technology Acceptance Model, which posits perceived usefulness as a primary determinant of technology-use intention (Davis, 1989). Research among primary health workers in Ethiopia similarly found that perceived compatibility of technology with daily practice needs was a strong predictor of intention to use mHealth in antenatal services (Wondimu *et al.*, 2025). Likewise, maternal health workers in Ghana reported high readiness to use mHealth when the technology was perceived as beneficial for improving service efficiency and quality (Ameyaw *et al.*, 2025). From an application-development perspective, this finding provides important input that acceptability of the digital health application in subsequent design and development stages should be directed toward features that midwives genuinely perceive as needed, such as child-health education, growth-and-development monitoring, and tele-consultation with midwives, which were also the features most frequently proposed by respondents in this study.

Association Between Midwives' Characteristics and Readiness to Use Digital Applications

Of the ten respondent characteristics analyzed for their association with variable E, only length of work (p=0.022) and frequency of seeking health information via smartphone (p=0.028) showed statistically significant associations. Midwives with ≤15 years of work experience had a higher proportion of good readiness (58.4%) than those with >15 years of experience (43.0%), which may reflect generational differences (digital native versus digital immigrant) in exposure to and skill with digital technology. This pattern is consistent with findings among midwives in Belgium, where younger participants showed higher comfort scores with digital technology use than older participants (Akalin *et al.*, 2024). Midwives with a high frequency of seeking health information via smartphone also showed better readiness (56.4%) than those with a low frequency (40.6%), underscoring the role of exposure and habituation in shaping technology-use readiness, consistent with the role of prior mobile-use experience as a predictor of mHealth-use intention found in Ethiopia (Wondimu *et al.*, 2025).

In contrast, education, smartphone type, daily smartphone-use duration, prior experience using health applications, and workplace internet access showed no statistically significant association with readiness (p>0.05). The non-significant association of prior health-application experience with readiness is notable, given that several earlier studies reported an important role for technology experience and training in shaping

health workers' readiness (Alotaibi *et al.*, 2025; Gandhi *et al.*, 2022). A plausible explanation is that midwives' readiness in this study was shaped more strongly by perceived need and usefulness of the application (variables C and D) and by experience of service barriers (variable B) than by mere technical experience with devices or prior health applications. A qualitative study among frontline health workers in Pakistan similarly emphasized that readiness to adopt mHealth was largely shaped by belief in the application's benefit to the families being served, rather than by individual digital literacy alone (Baig *et al.*, 2026). The non-significant association of workplace internet access with readiness is also consistent with findings among rural community health workers in India, where attitude and willingness toward telemedicine were determined more by knowledge and attitude than by infrastructure alone (Gandhi *et al.*, 2022); similarly, hospital-based e-health-literacy studies in Indonesia found that acceptance and use intention were shaped more by literacy and perceived usefulness than by infrastructure readiness per se (Noeryosan *et al.*, 2025; Sanjaya *et al.*, 2023; Dinakrisma *et al.*, 2022).

Implications for Application Development

Overall, the findings of this needs-analysis stage provide an important empirical basis for the subsequent design and development stages of the application. Because midwives' readiness is closely tied to their perceived need for the application and its features, rather than to demographic characteristics or technical experience alone, the acceptability strategy for the digital health application should focus on strengthening midwives' understanding of the application's benefit for service effectiveness, alongside involving midwives from the design stage onward so that developed features genuinely match daily service needs. In addition, some midwives (particularly those with longer work experience) expressed a need for training before using digital applications in health services, so that provision of training modules and use-assistance should become an integral part of the implementation stage of this application-based education and counseling model, in line with recommendations to strengthen training and organizational support found in a systematic review of health workers' digital readiness (Alotaibi *et al.*, 2025).

Study Limitations

This study has several limitations. First, the cross-sectional design does not allow causal inference between the variables examined and readiness to use digital applications. Second, dichotomizing variables into two categories (insufficient/good) using a median cut-off, necessitated by the non-normal distribution of the data, means that some information on continuous score variation was not fully captured in the bivariate analysis; subsequent multivariate modeling (e.g., logistic regression) simultaneously controlling for confounding variables is recommended in future research to identify the most dominant determinants. Third, several respondent characteristics (midwives' age, workplace, employment status, work area, and regency/city of workplace) were not analyzed for their association with variable E in this study and may be examined in future research. Fourth, data collection relied on a self-report questionnaire, which may introduce social-desirability bias. Nevertheless, this study provides valuable preliminary evidence on the readiness of midwives as prospective professional users of digital health applications in South Sumatra Province.

CONCLUSION

More than half of midwives in South Sumatra Province (51.6%) had good readiness to use digital applications to support infant and toddler health services, while 48.4% remained in the insufficient category. Readiness to use digital applications was significantly associated with mothers' behavior in meeting children's basic needs, service barriers, need for digital applications, need for application features, length of work, and frequency of smartphone use for seeking health information, but was not significantly associated with education, smartphone type, daily smartphone-use duration, prior experience using health applications, or workplace internet access.

It is recommended that the design and development stages of the infant and toddler basic-needs education and counseling application actively involve midwives to ensure developed features match service needs, accompanied by training and use-assistance, particularly for midwives with longer work experience. For institutions and health policymakers, continued strengthening of facility support and policies for digital-technology adoption at primary health care facilities is needed. Future research is recommended to employ multivariate modeling to identify the dominant determinants of readiness to use digital applications, and to examine the characteristics of work area and facility type that were not analyzed in this study.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this article.

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