

UTILIZATION OF THE *E-KESCATIN* APPLICATION BY PROSPECTIVE BRIDES: A REVIEW OF DEMOGRAPHIC, SOCIO-CULTURAL, AND ORGANIZATIONAL SUPPORT PERSPECTIVES

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ABSTRAK : EMANFAATAN APLIKASI E-KESCATIN OLEH CALON PENGANTIN: TINJAUAN DARI SUDUT PANDANG DEMOGRAFI, SOSIAL BUDAYA, DAN DUKUNGAN ORGANISASI

Latar Belakang: Pengetahuan tentang kesehatan reproduksi pada remaja usia nikah dan calon pengantin masih tergolong rendah. Pendidikan kesehatan reproduksi memegang peranan penting bagi calon pasangan pengantin sehingga harus dipersiapkan dengan baik. Kesehatan reproduksi menjadi titik awal perkembangan kesehatan ibu dan anak yang dapat dipersiapkan sejak dini, bahkan sebelum seorang perempuan hamil dan menjadi ibu. Aplikasi E-Kescatin merupakan inovasi digital dari Kementerian Kesehatan Republik Indonesia yang ditujukan untuk meningkatkan kesiapan calon pengantin dalam aspek kesehatan reproduksi. Keberhasilan implementasi aplikasi ini dipengaruhi oleh berbagai faktor yang bersifat individu, sosial, organisasi, hingga budaya.

Tujuan: Penelitian ini bertujuan untuk mengidentifikasi dan menganalisis faktor-faktor yang memengaruhi pemanfaatan aplikasi E-Kescatin oleh calon pengantin di wilayah kerja Dinas Kesehatan Kabupaten Pringsewu.

Metode: Penelitian ini menggunakan pendekatan deskriptif kuantitatif dengan sampel sebanyak 13 calon pengantin yang telah menggunakan aplikasi E-Kescatin. Data dikumpulkan melalui kuesioner dan wawancara terstruktur, kemudian dianalisis secara tematik.

Hasil: Hasil penelitian menunjukkan bahwa faktor demografi seperti usia dan tingkat pendidikan memengaruhi pemahaman dan kemudahan penggunaan aplikasi. Dukungan sosial dari tenaga kesehatan, keluarga, serta komitmen organisasi terbukti memperkuat adopsi aplikasi. Pengetahuan, motivasi pribadi, dan persepsi manfaat juga menjadi faktor penting dalam keberlanjutan penggunaan. Faktor budaya memiliki pengaruh beragam, di mana norma budaya cenderung mendukung, namun mitos dan kepercayaan tradisional masih menjadi hambatan bagi sebagian responden.

Kesimpulan: Pemanfaatan aplikasi E-Kescatin dipengaruhi oleh kombinasi faktor demografi, sosial, pengetahuan, dan budaya. Penelitian ini merekomendasikan penguatan edukasi oleh tenaga kesehatan, peningkatan sosialisasi kebijakan, serta kolaborasi lintas sektor untuk memperkuat penerimaan dan efektivitas program secara berkelanjutan.

Kata Kunci: E-Kescatin, Calon Pengantin, Kesehatan Reproduksi, Inovasi Digital, Faktor Sosial Budaya

ABSTRACT

Background: Knowledge about reproductive health among adolescents of marriageable age and prospective brides is still relatively low. Reproductive health education plays an important role for prospective bridal couples so that it must be well prepared. Reproductive health is the starting point for the development of maternal and child health that can be prepared early, even before a woman becomes pregnant and becomes a mother. The E-Kescatin application is a digital innovation from the Ministry of Health of the Republic of Indonesia aimed at improving the readiness of prospective brides in the aspect of reproductive health. The successful implementation of this application is influenced by various individual, social, organizational, and cultural factors.

Objective: This study aims to identify and analyze the factors that influence the utilization of the E-Kescatin application by prospective brides in the working area of the Pringsewu District Health Office.

Methods: This study used a descriptive quantitative approach with a sample of 13 prospective brides who had used the E-Kescatin application. Data were collected through questionnaires and structured interviews, then analyzed thematically.

Results: The results showed that demographic factors such as age and education level influenced the understanding and ease of use of the app. Social support from health workers, family, and organizational

commitment were shown to strengthen app adoption. Knowledge, personal motivation and perceived benefits were also important factors in continued use. Cultural factors had a mixed influence, with cultural norms tending to be supportive, but myths and traditional beliefs still posing barriers for some respondents.

Conclusion: E-Kescatin application utilization is influenced by a combination of demographic, social, knowledge, and cultural factors. This study recommends strengthening education by health workers, increasing policy socialization, and cross-sector collaboration to strengthen program acceptance and effectiveness in a sustainable manner.

Keywords: E-Kescatin, Bride-to-be, Reproductive Health, Digital Innovation, Socio-Cultural Factors

INTRODUCTION

Knowledge about reproductive health in adolescents of marriageable age and prospective brides is still relatively low. Reproductive health education plays an important role for prospective bridal couples so that it must be well prepared. One of the efforts that can be done is through premarital guidance (Hasanah et al., 2022). Reproductive health is the starting point for the development of maternal and child health that can be prepared early, even before a woman becomes pregnant and becomes a mother. Preconception health is part of the overall health of women and men during their reproductive period (Yulivantina et al., 2021). Every individual needs to know about sexuality and reproductive issues during the premarital period, so reproductive health education is important to be given to prospective brides (Mayasari et al., 2020). The premarital period is a crucial time in determining the physical, mental, and social readiness of the bride and groom before entering married life and preparing for pregnancy. Studies show that many couples of childbearing age do not have optimal knowledge and readiness related to reproductive health, which potentially increases the risk of unhealthy pregnancy and complications of pregnancy and childbirth (Pringsewu District Health Office, 2023; Simarmata et al., 2022).

The role of media is an important component in health promotion activities. Making media must match who the target will be the subject of education. In the target bride-to-be, in addition to considering obstacles that have been identified, it is necessary to consider that brides-to-be are currently part of generation Z who prefer to search for information and communicate digitally (Wulandari & Tariskah, 2022). To answer these challenges, the Ministry of Health of the Republic of Indonesia developed the *E-Health of Prospective Brides* application (E-Kescatin) as a medium for educating and monitoring the health of prospective brides digitally. This application aims to provide access to

reproductive health information, assist early detection of pregnancy risk factors, and increase the involvement of health workers in premarital assistance. However, the effectiveness of using the E-Kescatin application is not only determined by the availability of the technology, but also by various factors such as demographic characteristics, social and organizational support, knowledge, and local culture (Putri et al., 2021). *The Social Ecological Model* approach emphasizes that health behavior is influenced by interactions between individual, interpersonal, organizational, community, and policy factors (Gasper et al., 2025; Glanz et al., 2015).

This study was conducted in the working area of the Pringsewu District Health Office, one of the districts in Lampung Province with a high rate of young marriage. Using a quantitative descriptive approach, this study aims to identify factors that influence the utilization of the E-Kescatin application by prospective brides, including demographic aspects, social environment, organizational policies, knowledge and awareness, and cultural norms and values that develop in the community.

The results of this study are expected to provide useful information for policy makers, health workers, and application developers to improve the effectiveness of E-Kescatin implementation. Thus, this application can be a supporting instrument in realizing healthy pregnancies and quality families (Ministry of Women's Empowerment and Child Protection, 2020).

RESEARCH METHODS

This study uses a quantitative descriptive approach, aiming to describe the factors that influence the effectiveness of the utilization of the E-Kescatin application by prospective brides. The focus of the research is an exploration of the perceptions, experiences, and social support received in using the application, based on technology adoption theory (Rogers, 2003) and the social ecological model (Glanz et al., 2015)

The research was conducted in the working area of the Pringsewu District Health Office, specifically at several Puskesmas that have implemented the E-Kescatin application. The implementation time was April to October 2024. The sample consisted of 13 prospective brides who had received services through the E-Kescatin application and were accompanied by Puskesmas health workers.

The sampling technique was carried out by purposive sampling, with the criteria that subjects who have actively used the application and are willing to participate in the study. The instruments used were structured interview guides and open-ended questionnaires, prepared based on the innovation adoption model by (Rogers, 2003) and the dimensions of social support (House, 1981).

Data were collected through direct interviews and questionnaires, then thematically analyzed to identify patterns of demographic, social, cultural, knowledge, and organizational factors that influence the utilization of the E-Kescatin application.

This research has obtained ethical approval from the Poltekkes Kemenkes Tanjungkarang based on the Director's Decree Number: HK.02.03/1.2/1583/2024. All participants were given an explanation of the purpose and benefits of the study, and signed an informed consent form. Confidentiality and identity of respondents were maintained, and participation was voluntary.

RESEARCH RESULTS

Demographic Factors of Prospective Brides

The data showed that most respondents were in the age range of 20-29 years (84.6%), which is a productive age that is in early adulthood. Based on the theory of early adult development (Santrock JW, 2011), individuals in this age range have the readiness to accept new information including related to reproductive health, which is in line with the finding that the majority of respondents felt that their age made it easier to use the application.

Table 1
Demographic Factors of Prospective Brides

Variables	Category	n	%
Age	< 20 years	2	15.4
	20-29 years old	11	84.6
The effect of age on usage	Very influential	7	53.8
	Influence	6	46.2
Ease by age	Easy	7	53.8
	Easy enough	6	46.2
Education	SMP	1	7.7
	HIGH SCHOOL	8	61.5
	PT	4	30.8
The influence of education	Very influential	7	53.8
	Influence	5	38.5
	Not too influential	1	7.7
Monthly Income	< IDR 1,000,000	5	38.4
	IDR 1-3 million	6	46.2
	IDR 3-5 million	2	15.4
Economic influences on access	Very influential	6	46.2
	Influence	5	38.4
	Does not affect	1	7.7

The education level of the majority of respondents was at the high school (61.5%) and college (30.8%) levels. Respondents with higher education tend to state that education greatly affects the ease of use of the application (53.8%).

This reinforces the opinion that digital literacy is strongly related to education level (Putri et al., 2021).

From an economic perspective, although most respondents were in the lower-middle income category (<Rp 3 million), they were still able to

access and utilize the apps. A total of 46.2% stated that the economy greatly affects access, but is not a major barrier, indicating that the app is quite affordable and relevant in the economic context of the local community.

Social, Policy, and Organizational Environmental Factors

Most respondents received active support from health workers and family. 61.5% stated that they often or very often received support from health workers, mainly in the form of socialization (69.2%). This support was rated as effective by 84.6% of respondents, indicating the important role of health workers as mediators of information.

Table 2
Social and Organizational Environmental Factors

Variables	Category	n	%
Health Worker Support	Frequent-Very Frequent	8	61.5
Form of support	Socialization	9	69.2
Effectiveness of support	Effective-Very Effective	11	84.6
Family Support	Large-Very Large	8	61.5
Community Support	Big Enough	9	69.3
Government Policy	Not aware of the policy	8	61.5
Organizational Commitment	Large-Very Large	9	69.3

Family and community support was also significant; 61.5% stated that family support was great to very great, and the community (69.3%) was also quite supportive. This is in line with *social support* theory, which states that social support increases the likelihood of successful behavior change, including the adoption of health technologies.

However, 61.5% of respondents were not aware of any government policies related to applications, indicating a gap in the dissemination of policy information. However, respondents' perceptions of organizational commitment were high (69.3%), indicating that the implementing agency has carried out its role technically although it has not been optimal in policy communication.

Knowledge and Awareness Factors

Most respondents cited personal motivation and health professional recommendation as the main reasons for using the app (76.9%). In fact, after initial use, 92.3% stated that their motivation increased, indicating that direct experience of the app's benefits can strengthen intention to use. The majority of respondents also rated the app as effective or very effective (92.3%) in supporting reproductive health goals. The perceived benefits were mainly related to increased knowledge (46.1%), with 69.2% stating that these perceptions influenced their decision to continue using the app. This supports the *Health Belief Model* theory that perceived benefits and external encouragement influence health behaviors.

Table 3
Knowledge and Awareness Factors

Variables	Category	n	%
Motivation	Personal health & recommendations	10	76.9
Changes in motivation	Increased	12	92.3
Application effectiveness	Effective-Very Effective	12	92.3
Perceived benefits	Knowledge improvement	6	46.1
Perceptual influence	Influence	9	69.2

Cultural Factors

Table 4
Cultural Factors

Variables	Category	n	%
Cultural Norms	Support	10	76.9
Norm Influence	Influential-Very Influential	9	69.3
Beliefs/Myths	No effect	7	53.8
The influence of myths	Positive	5	38.5

Most respondents stated that the cultural norms in their environment support the use of apps (76.9%), and about 69.3% rated these norms as influencing to strongly influencing their behavior. This reflects that digitization of healthcare has been accepted in the local culture, at least by younger groups such as brides-to-be.

However, there are still beliefs and myths circulating, although they are not dominant. 53.8% stated that myths did not influence them, but 38.5% stated that there was a positive influence from myths that reinforced the importance of marriage readiness. This suggests that in counseling, it is important to accommodate culture and integrate local values to support technology acceptance.

DISCUSSION

This study shows that the utilization of the E-Kescatin application by prospective brides is influenced by various factors, both individual, social, and structural. This finding is in line with the *Social-Ecological Model* approach which states that health behavior is influenced by interactions between individuals and their environment (McLeroy et al., 1988) in (Glanz et al., 2015).

Demographic Factors

The age and education level of prospective brides and grooms proved to have an effect on the ability and ease of accessing the application. Most respondents were in the age range of 20-29 years and had a minimum education level of high school. According to early adult development theory, this age is a vulnerable phase, but also a time when individuals are ready to receive information about reproductive health (Rogers, 2003). Education itself plays an important role in shaping the knowledge of prospective brides, because it influences their perspective in receiving and understanding health information (Adyani et al., 2023). This finding is reinforced by a study (Putri et al., 2021), which shows that digital literacy is strongly influenced by the level of education and age of users. Therefore, it

is important to ensure that the educational materials in the app are organized in a language and presentation that is easily accessible and understood by groups with diverse educational backgrounds.

Social and Organizational Factors

Support from health workers and families is an important factor in the successful adoption of the E-Kescatin application. Socialization and guidance provided by health workers increase understanding and trust in the application, in line with research (Simarmata et al., 2022) which states that the active involvement of health workers strengthens the effectiveness of digital interventions. Organizational commitment was also rated quite high, reflecting the importance of cross-sector involvement in ensuring the sustainability of digital health innovations (Glanz et al., 2015). However, there was a gap in respondents' knowledge of the policies underpinning app implementation. The majority of respondents were unaware of any regulations or policies underlying the use of E-Kescatin. This indicates the need to strengthen the dissemination of policies and information from implementing agencies, as also emphasized by (Ministry of Health of the Republic of Indonesia, 2021) that digital policies require effective communication strategies to reach the wider community.

Knowledge and Awareness Factors

High personal motivation and encouragement from health workers are the main drivers of app use. Knowledge is one of the keys to behavior change. The level of knowledge is influenced by several factors, including exposure to health information, age, and the role of health workers in providing health information (Nurlaela et al., 2018). This reinforces the concept of the *Health Belief Model* that perceived benefits and external cues (cue to action) can encourage positive health behavior (Rosenstock, 1974). This application is considered to help improve the understanding of

prospective brides about reproductive health and readiness to become parents, which is also supported by the results of a study by (McLeroy et al., 1988)

Cultural Factors

The cultural norms of the community generally support the utilization of the E-Kescatin application, but there is still the influence of myths or traditional beliefs that become obstacles for some respondents. In the context of technology-based interventions, cultural sensitivity must still be considered. Research (Awlia Salihah et al., 2025) states that local social and cultural norms can influence the way the community views the bride-to-be mentoring program where the community still uses the stigma of the old days and the low level of community education. This is in line with research (Kirmayer et al., 2011) mentioning that health technology must be adapted to local values and norms to encourage optimal acceptance.

Implications

This study provides some important implications for the development of digital health innovations. Participatory and cross-sectoral approaches in educating the community, especially brides-to-be, need to be strengthened. In addition, promotion of the policy and benefits of the app can be done through social media and community-based approaches, to expand the reach of information and increase acceptance.

Limitations

This study has limitations in the form of a limited number of respondents and a research location that only covers one district, so the results cannot be generalized to other regions. Further studies involving more respondents and different regions are needed to strengthen these findings.

Research Contribution

This study contributes to a comprehensive understanding of the factors that influence the adoption of the E-Kescatin application at the grassroots level. The results of this study can be used as a basis for designing technology-based health promotion strategies that are more responsive to the social and cultural context of local communities.

CONCLUSION.

This study shows that the utilization of the E-Kescatin application by prospective brides in the working area of the Pringsewu District Health Office is influenced by various factors, including demographic characteristics, social and organizational support, level of knowledge and awareness, and cultural norms and values.

Age and education played a role in the ease of use of the app, while support from health workers, family, and community was shown to strengthen app utilization. Organizational commitment and supportive policies are also important elements in the effectiveness of implementation. In addition, personal motivation and perception of the benefits of the application are the main drivers of brides-to-be in accessing this digital reproductive health service.

While most cultural norms support the use of apps, there are still influences from traditional beliefs and myths that need to be addressed with educative and local culture-based approaches.

Practical and Policy Recommendations:

1. Strengthening the role of health workers in educating and assisting the use of the E-Kescatin application on an ongoing basis.
2. Expansion of socialization of policies and application benefits to the community, including the use of local and digital media.
3. Development of application features that are more responsive to the information needs of prospective brides and grooms, including culturally friendly content.
4. Periodic evaluation and improvement of regulations are needed to support the sustainability of this technology-based program.

This study provides important insights into the acceptance and utilization of digital health apps at the community level, and can inform the development of more adaptive and sustainable intervention strategies.

Acknowledgment

The authors would like to thank the Ministry of Health of the Republic of Indonesia through the Decree of the Director of the Health Polytechnic of the Ministry of Health Tanjungkarang Number: HK.02.03/1.2/1583/2024, for the support and opportunity given to carry out this research. Thanks also go to the Pringsewu District Health Office, Health Officers at the Health Center, and all

respondents of prospective brides who have participated in this study.

The author also appreciates the assistance of colleagues and the field data collection team who have worked professionally and dedicatedly in the process of conducting this research.

Funding Statement

Source of funding (DIPA Poltekkes
Kemenkes Tanjungkarang Year 2024)

Conflict of Interest Statement

The authors declare that there is no conflict of interest in the conduct and reporting of this research. The entire research process was conducted independently, without any influence from any party that could affect the results and interpretation of the data.

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