

Digital Media-Based Health Promotion at RSIA Aisyiyah Samarinda: Implementation of the Precede-Proceed Model

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ABSTRACT

Health promotion in hospitals is an important component of health services that emphasizes not only curative and rehabilitative efforts, but also promotive and preventive approaches. At RSIA 'Aisyiyah Samarinda, the implementation of health promotion still faces several challenges, including the suboptimal use of digital media as a tool for health education, gaps in health information among patients and their families, and the frequent occurrence of minor illnesses such as common cold and Acute Respiratory Infections (ARI). In addition, the utilization of digital health services, such as the Mobile JKN application, remains limited due to a lack of public understanding regarding its functions and benefits. This study aims to design, implement, and evaluate a digital media-based health promotion program at RSIA 'Aisyiyah Samarinda using the Precede-Proceed framework with a qualitative descriptive approach through a field study. The research stages included field orientation, identification of common health problems, program planning using the SMART principle within a Plan of Action (POA), implementation through Instagram, and evaluation covering process, impact, and outcomes. The program is scheduled to be implemented in September 2025, focusing on health education related to common cold, ARI, and the use of the Mobile JKN application. The results indicate that Instagram effectively reaches a broader audience and increases engagement. Evaluations show improved health knowledge, short-term behavior changes, and better understanding of digital health services, highlighting its effectiveness in hospital-based health promotion.

Keywords : Health Promotion; Digital Media; Instagram; Hospitals

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INTRODUCTION

Hospitals have a strategic role in improving public health through comprehensive health services, including promotive, preventive, curative, and rehabilitative aspects. One of the promotive and preventive efforts that must be carried out is Hospital Health Promotion (PKRS), which aims to increase the knowledge, awareness, and ability of individuals and communities to maintain and improve health. PKRS is not only aimed at patients, but also to patients' families, hospital visitors, health workers, and the community around the hospital.

RSIA 'Aisyiyah Samarinda as a special hospital for mothers and children has a great responsibility in supporting maternal and neonatal health. Maternal and child health problems are still a priority issue, both related to infectious diseases, pregnancy complications, and low public understanding of disease prevention efforts. Therefore, RSIA 'Aisyiyah needs to develop a health promotion strategy that is effective, accessible, and in accordance with the characteristics of the target.

The development of information and communication technology has changed the pattern of delivering health information. Social media is one of the potential means for health promotion because it is able to reach a wide audience, is interactive, and allows the delivery of health messages in an attractive way. Instagram is one of the social media platforms with a high number of active users in Indonesia, especially in the productive age group and young mothers. Instagram's visual-based characteristics and short videos are considered suitable for conveying health messages in a concise, easy-to-understand, and attention-grabbing manner.

Some previous research has shown that social media has great potential in supporting health promotion. A study conducted by (1) states that social media can increase public access to health information and facilitate communication between health workers and the public. Another study by (2) also shows that social media platforms such as Facebook, Twitter, and Instagram can be used effectively to disseminate health information, increase health literacy, and encourage community participation in health programs. In addition, research by (3) revealed that the use of social media in health institutions can strengthen digital health communication strategies and increase the reach of health education to the wider community. Health content presented in the form of visuals, infographics, and short videos has proven to be easier for people to understand and has the potential to increase health behavior change.

However, based on initial observations, the use of Instagram social media at RSIA 'Aisyiyah Samarinda is still dominated by internal hospital information, such as doctors' practice schedules and

institutional activities, while health education content is still limited. This condition shows that there is a gap between the potential of digital media and the implementation of health promotion. Therefore, systematic efforts are needed to design and implement a structured and measurable digital media-based health promotion program.

This study aims to design, implement, and evaluate a digital media-based health promotion program at RSIA 'Aisyiyah Samarinda using the Precede–Proceed framework, focusing on the effectiveness of Instagram as a means of hospital health communication. The novelty of this research lies in the implementation of digital health promotion strategies that are tailored to the local context, namely special maternal and child hospitals, as well as the main target characteristics in the form of mothers, mothers-to-be, and patients' families. This approach allows the integration of health education that is specific to maternal and neonatal issues, so as to not only improve access to health information and literacy, but also support measurable health behavior change in the hospital environment and the surrounding community. Thus, this study offers an additional contribution in the form of a relevant and replicable digital health promotion implementation model for other maternal and child hospitals in Indonesia.

METHODS

This study uses a qualitative descriptive approach with a field study method which was carried out at RSIA 'Aisyiyah Samarinda in September 2025. The research activities began with a field orientation through an introduction to the hospital environment, an assessment of PKRS units, and the identification of health problems that are often encountered in outpatient and inpatient services. At RSIA 'Aisyiyah Samarinda, there are as many as 120 employees who support various health services at the hospital. The informants in this study were selected using purposive sampling techniques by considering their involvement in Hospital Health Promotion (PKRS) activities. The research informants consisted of two people who were PKRS officers at RSIA 'Aisyiyah Samarinda. The characteristics of the informant include their position as PKRS officers and work experience in the unit.

Data collection was carried out through direct observation, in-depth interviews with PKRS officers, and analysis of hospital secondary data. Health promotion program planning is carried out by preparing a Plan of Action (POA) based on the principles of SMART (Specific, Measurable, Achievable, Relevant, and Time Bound). The health promotion program is carried out through the creation and publication of educational content in the form of Instagram Reels videos. Program evaluations are conducted using a

Precede–Proceed framework that includes process evaluation, impact evaluation, and outcome evaluation. Evaluation data was obtained from observations, activity documentation, and Instagram insight analysis which included reach, number of impressions, likes, comments, and shares.

RESULTS

Profil RSIA 'Aisyiyah Samarinda

RSIA 'Aisyiyah Samarinda is a special maternal and child hospital that focuses on maternal and neonatal health services, providing outpatient, inpatient, maternity, emergency room, and specialist poly services. This hospital also carries out health promotion and education activities through the PKRS unit, but the use of social media, especially Instagram, is still not optimal and is more used for internal information than public education, so it is necessary to strengthen digital health promotion strategies so that information reaches the public more widely and effectively.

Table 1
Profil of RSIA 'Aisyiyah Samarinda

Components	Description
Types of hospitals	Maternal and child hospitals
Main services	Inpatient, maternity, emergency room
Service targets	Pregnant women, lactating mothers, infants and children
PKRS Units	Available
Digital promotional media	Instagram

Source: Primary Data, 2025

Observation Results

Based on the results of field observations, the use of Instagram social media at RSIA 'Aisyiyah Samarinda has not been maximized as a means of health education. Hospital Instagram accounts are more widely used to convey internal information such as doctors' practice schedules and institutional activities. Health education content is still limited both in terms of number and variety of topics, even though the need for health information for patients and hospital visitors is quite high.

Interview Results

The results of the interview with PKRS officers showed that RSIA 'Aisyiyah Samarinda had carried out health promotion activities directly in the hospital environment. However, the use of digital media as

a means of health promotion still faces obstacles, especially limited human resources and the lack of structured content planning. The informant also said that diseases that are often found in outpatient services are ISPA and common cold, while inpatient is dominated by cases of pregnancy complications.

Characteristics of Respondents/Informants

The main informant in this activity is an officer of PKRS RSIA 'Aisyiyah Samarinda who plays the role of the person in charge of health promotion activities. The target of the health promotion program is the community who use RSIA 'Aisyiyah Samarinda's services, especially mothers and children, as well as productive age groups who actively use Instagram social media.

Problem Identification

Based on the results of field observations and interviews with PKRS officers, the main problem found at RSIA 'Aisyiyah Samarinda is the lack of optimal use of Instagram social media as a means of promotion and health education. Hospital Instagram accounts are still dominated by internal information content, while health education content that suits the needs of the community is still limited. Problem identification is also strengthened by the analysis of the most disease data in outpatient and inpatient services.

Table 2
Identification of Health Promotion Problems at RSIA 'Aisyiyah Samarinda

Aspects	The Findings
Promotional media	Instagram
Dominant content	Hospital internal information
Health education content	Limited content
Content management HR	limited
The impact	The impact of health education is not optimal

Source: Primary Data, 2025

Table 3
The Ten Biggest Diseases of Outpatient Services at RSIA 'Aisyiyah Samarinda in 2025 (January-July)

No	Code ICD.10	Disease Names	Total
1.	J06.9	Acute upper respiratory infection, unspecified	193
2.	A09.0	Other unspecified gastroenteritis and colitis of infectious origin	67
3.	J06.8	Other acute upper respiratory infections of multiple	41

No	Code ICD.10	Disease Names	Total
		sites	
4.	R50.9	Fever, unspecified	40
5.	J00	Acute nasopharyngitis [common cold]	35
6.	J02.9	Acute pharyngitis, unspecified	35
7.	R11	Nausea and vomiting	32
8.	P59.9	Neonatal jaundice, unspecified	24
9.	N93.9	Abnormal uterine and vaginal bleeding, unspecified	19
10.	R10.4	Other and unspecified abdominal pain	18

Source: SIMRS Khanza Secondary Data, 2025

Table 4
Ten Biggest Diseases of RSIA 'Aisyiyah Samarinda Inpatient Services in 2025
(January-July)

No	Code ICD.10	Disease Names	Total
1.	O14.1	Severe pre-eclampsia	47
2.	A09.0	Other unspecified gastroenteritis and colitis of infectious origin	34
3.	O68.0	Labour and delivery complicated by fetal heart rate anomaly	29
4.	O41.0	Oligohydramnios	27
5.	O02.0	Blighted ovum and nonhydatidiform mole	26
6.	O62.2	Other uterine inertia	21
7.	O63.0	Prolonged first stage of labour	19
8.	O60.0	Preterm labour without delivery	18
9.	O99.0	Anaemia complicating pregnancy, childbirth and the puerperium	18
10.	J18.9	Pneumonia, unspecified	15

Source: SIMRS Khanza Secondary Data, 2025

Based on these data, the most common diseases in outpatient services are acute ISPA and common cold, while inpatient services are dominated by pregnancy complications. These findings are the basis for prioritizing the problem and focusing the digital health promotion materials developed.

Plan of Action (POA)

The program planning was formulated in the form of a Plan of Action (POA) based on the results of health problem prioritization and the identified needs of the target audience. The POA outlines the objectives, target groups, strategies, activities, media, and implementation timeline of the health promotion program.

Tabel 5

Plan of Action (POA) Digital Health Promotion

Objective	Target	Media	Content Format	Time
Increase knowledge of Acute Respiratory Infection (ARI) and common cold	Mothers and the general public	Instagram	Educational Reels videos	September 2025
Improve understanding of Mobile JKN	RSIA visitors	Instagram	Short educational videos	September 2025

Source: Primary Data, 2025

Program Implementation

The implementation of health promotion programs is carried out through the creation and publication of health education content in the form of Instagram Reels videos. The content created includes education about common cold myths and facts, brief facts about ISPA, and guidelines for using Mobile JKN. Each piece of content is designed to be concise, visual, and informative so that it is easy for the audience to understand.

Program Evaluation

Evaluation of health promotion programs is conducted using a Precede–Proceed framework that includes process evaluation, impact evaluation, and outcome evaluation. The evaluation of the process shows that all planned educational content can be produced and published according to the set schedule. Impact and outcome evaluations are analyzed based on the characteristics of Instagram goals and insights.

Table 6
Characteristics of Health Promotion Program Respondents

Characteristics	N	%
Gender		
Male	10	25
Female	30	75
Age		
14-16 years	20	50
17-19 years	20	50

Source: Primary Data, 2025

Table 7
Instagram Insight of the Health Promotion Program of RSIA 'Aisyiyah Samarinda

Educational content	Views	Likes	Comments	Share
JKN Mobile	2.345	320	45	60
Common cold	1.876	280	38	52
ISPA	2.765	410	62	75

Source: Primary Data, 2025

Based on the results of the impact evaluation, educational content about ISPA had the highest number of impressions and interactions compared to other content, indicating that the topic was relevant to the audience's information needs. The evaluation of the results showed an increase in the understanding of the target for health education materials delivered through Instagram media, which was characterized by positive responses and active interaction from the audience.

Identify Health Promotion Issues

The results of observations and interviews show that the use of Instagram as a health promotion medium is not optimal.

Table 8
Identification of Health Promotion Problems at RSIA 'Aisyiyah Samarinda

Aspects	The Findings
Promotional media	Instagram
Dominant content type	Doctor's schedule and internal activities
Health education content	Limited
Media management HR	Limited
The impact	The impact of health education is not optimal

Source: Primary Data, 2025

Health Issues Priority

Based on the data on the most diseases and the results of discussions with PKRS officers, the priority of health problems was determined.

Table 9
Health Issues Priority

Health Issues	Priority Reasons
ISPA	The most outpatient cases
Common cold	Often experienced by children
JKN Mobile	There are still many people who don't understand

Source: Primary Data, 2025

Program Evaluation

Table 10
Evaluation of Health Promotion Programs

Types of Evaluation	Indicators	Outcome
Process	Number of content	5 reels video
Impact	Audience interaction	Likes, comments, shares increased
Results	Knowledge	Increased understanding of targets

Source: Primary Data, 2025

DISCUSSION

The results of the study show that the use of Instagram as a health promotion medium at RSIA 'Aisyiyah Samarinda is able to increase audience reach and interaction. Health education content in the form of short videos has proven to be more effective due to several factors. First, Instagram's algorithm tends to prioritize attention-grabbing visual content and short videos, thereby increasing the likelihood of audiences seeing and interacting with that content. Second, the demographic characteristics of Instagram users, especially young mothers and productive age groups, prefer concise, visual, and easy-to-digest content over long texts or conventional educational materials. Third, the varying levels of people's digital health literacy make the information conveyed through visual and short video formats easier to understand, as messages can be presented directly, engagingly, and contextually with everyday life.

Although interactions such as the number of likes, comments, and shares increased, it should be noted that this does not necessarily fully reflect improved understanding or long-term changes in health behaviors. This limitation shows the potential for bias in assessing the effectiveness of the program based solely on social media interaction metrics. Therefore, program evaluations should consider additional measurements, such as knowledge questionnaires, in-depth interviews, or behavioral observations, to ensure true educational impact.

These findings are in line with previous research. (1) show that social media can improve access to

health information and interactivity, but its effectiveness depends on the suitability of the content format to the audience. (2) emphasizes that visual and interactive content tends to be more easily accepted by users. (3) also found that the systematic use of social media can improve public health literacy, especially when content is tailored to the needs of the target audience. In the local context, this study adds new value by focusing on RSIA 'Aisyiyah Samarinda, a maternal and child hospital, so that the educational content can be adjusted to maternal and neonatal health issues, in contrast to previous studies that were general or cross-institutional.

In addition, the success of the program is still influenced by limited human resources and consistency in content management. The number of informants limited to PKRS officers is also a factor that limits the validity of the data, so the interpretation of the results must be done carefully. To strengthen the impact of the program, an ongoing digital health promotion strategy is needed, including human resource capacity building, scheduled content planning, and social media analytics integration to assess the effectiveness of each type of content. Overall, the study shows that Instagram is an effective means for maternal and child health promotion, but critical evaluation and continuous improvement are needed to ensure real behavioral change in society.

CONCLUSIONS AND RECOMMENDATIONS

The use of Instagram as a health promotion medium at RSIA 'Aisyiyah Samarinda has proven to be effective in increasing public knowledge and involvement in maternal and child health issues. Health promotion programs designed using the Precede–Proceed framework are able to identify problems, plan interventions, and evaluate results systematically. It is recommended that RSIA 'Aisyiyah Samarinda develop a sustainable digital health promotion strategy, increase the capacity of media management human resources, and integrate digital media-based PKRS activities into hospital policies.

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