

**Analysis of Human Resources, Infrastructure, Budget, and Procedures on the Implementation Process of the PHBS Program in South Kalimantan**

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**ABSTRACT**

The Clean and Healthy Living Behavior Program (PHBS) is a strategic initiative of the Indonesian government aimed at improving the population's health status through promotive and preventive approaches. In South Kalimantan, its implementation still faces tangible challenges, such as the high incidence of acute respiratory infections (ARI) and dengue hemorrhagic fever (DHF), as well as the low coverage of household PHBS practices. This study aims to evaluate the supporting and inhibiting factors affecting the implementation of PHBS in the region. The study employed a qualitative descriptive method with a purposive sampling technique. Eight informants were involved, consisting of officials from the Provincial Health Office, PHBS coordinators at the district/city level, health center staff from areas with the highest and lowest coverage, and community representatives. Data were collected through in-depth interviews, observation, and documentation, and then analyzed thematically. The results show that PHBS implementation is influenced by the interaction of supporting and inhibiting factors. Supporting factors include the availability of regulations, the commitment of health workers, and community participation. This condition results in the program's implementation not yet being optimal, despite the existence of a policy framework. Therefore, improvements are needed in human resource capacity based on local needs, more stable funding mechanisms, and updated technical guidelines to ensure that PHBS implementation becomes more adaptive and effective in supporting community health development.

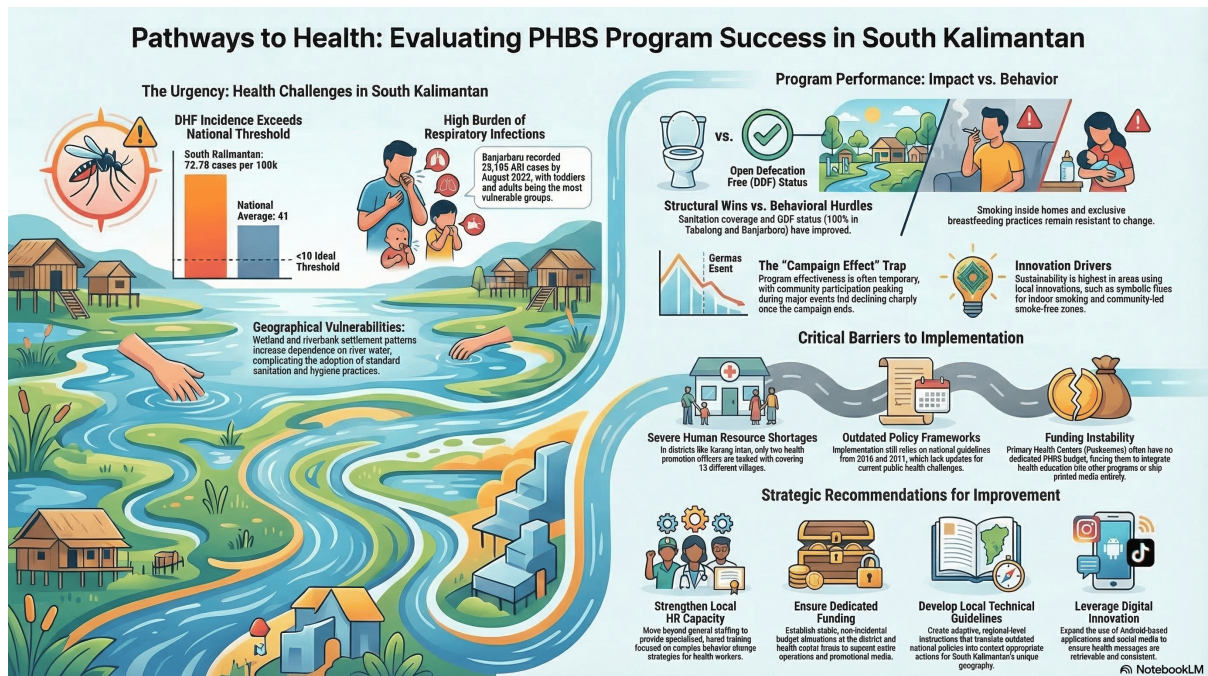
**Key Messages:**

- The implementation of PHBS in South Kalimantan is influenced by the interaction of supporting and inhibiting factors, with limitations in human resources, inconsistent funding, and outdated technical guidelines being the most dominant barriers
- Although a regulatory framework is in place, program implementation has not yet been optimal due to gaps in health workforce capacity and insufficient operational support.
- Strengthening locally tailored human resource capacity, dedicated funding mechanisms, and innovative community empowerment strategies is needed to improve the effectiveness of PHBS implementation in South Kalimantan.

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## GRAPHICAL ABSTRACT



## INTRODUCTION

Public health is a fundamental foundation for sustainable development. Efforts to improve health status do not rely solely on curative services but also on the adoption of healthy behaviors at the individual, family, and community levels. The Clean and Healthy Living Behavior Program (PHBS) is a key strategy developed by the Indonesian government to enhance public awareness and capacity in maintaining health through simple behaviors, such as handwashing with soap, consuming nutritious food, and maintaining environmental hygiene. Thus, clean and healthy living behaviors function as promotive and preventive instruments that support the achievement of the Sustainable Development Goals (SDGs) in the health sector (1).

Several studies indicate that Clean and Healthy Living Behavior (PHBS) is a key determinant in the occurrence of infectious diseases, particularly acute respiratory infections (ARI) and diarrhea. A study by Rahmat NN et al. (2025) found that PHBS implementation plays a role in preventing ARI and can reduce the risk of ARI by up to 30%, while research by Pratimi and Nugraheni (2024) showed that inadequate handwashing practices and poor sanitation increase the incidence of diarrhea by 42% (2,3). These findings are consistent with conditions in South Kalimantan, where ARI data from the South Kalimantan Provincial Health Office in 2025 indicate a high disease burden, particularly in Banjarbaru with 25,105 cases recorded up to August 2025, and in Banjarmasin, which reported 751 cases in the 10th week, with toddlers (0–5 years) and adults (19–59 years) as the largest contributing age groups (4). Meanwhile, based on Statistics Indonesia (BPS) data from 2024, the average incidence rate of dengue hemorrhagic fever (DHF) in South Kalimantan reached 72.78 per 100,000 population, far exceeding the national average of approximately 41 per 100,000 population and surpassing the national ideal threshold (<10 per 100,000). The combination of high ARI cases and elevated DHF incidence indicates that PHBS implementation in this region remains suboptimal, making it a highly plausible contributing factor to the high prevalence of these diseases (4,5).

Several previous studies have emphasized the importance of internal and external support for the successful implementation of PHBS. Arislan (2018) showed that limited human resources and minimal training reduce the effectiveness of health promotion personnel (6). Listiawaty (2020) highlighted that the lack of dedicated funding slows the achievement of program indicators, while Luthfia (2021) underscored the need for sustainable policies to ensure consistency in program implementation. Nevertheless, a research gap remains, particularly regarding evaluations of PHBS implementation at the regional level,

especially in South Kalimantan, where the adaptation of national policies to local contexts has not been extensively examined (7,8).

The geographical characteristics of South Kalimantan, which are dominated by wetlands, riverbanks, and dispersed settlements, influence community behaviors related to the use of clean water and basic sanitation. This condition results in a high level of dependence on river water, which in turn affects household hygiene practices and PHBS behaviors related to water and sanitation (Sanitation Handbook). In line with this, a previous study by Noviana (2014) demonstrated significant differences in the achievement of PHBS indicators across several areas in South Kalimantan, particularly those related to environmental hygiene and sanitation. The study emphasized that reliance on river water, dispersed settlement patterns, and certain cultural practices are factors influencing the success of the program (9).

In addition, Ainy and Pertiwi (2021), through an evaluation of health programs, emphasized that regions with challenging geographical conditions tend to have lower PHBS achievements due to limited outreach and inadequate promotional media. This is supported by Arifin et al. (2020), who stated that the socio-cultural characteristics of Kalimantan communities, including the Banjar and Dayak populations, influence the acceptance of health messages, particularly those related to water, sanitation, and household practices. Consequently, adaptation of PHBS policies is crucial yet has not been widely evaluated in a specific manner. This study aims to evaluate the supporting and inhibiting factors in the implementation of the Clean and Healthy Living Behavior (PHBS) program in South Kalimantan, focusing on human resources, infrastructure, budget, and procedures that influence the program implementation process. The findings are expected to provide a comprehensive overview of actual field conditions and serve as input for policymakers in formulating more effective, adaptive, and sustainable strategies to improve community health status (10,11).

## **METHODS**

This study employed a qualitative design with a descriptive approach to explore the factors that support and hinder the implementation of the Clean and Healthy Living Behavior (PHBS) program in South Kalimantan. This design was considered appropriate as it allows for an in-depth exploration of experiences, perceptions, as well as policy dynamics and the implementation of public health programs across different levels of government (12). The study was conducted in South Kalimantan Province, focusing on three levels of health program implementation: the Provincial Health Office, the Banjar District Health Office, and the Banjarbaru City Health Office, as well as two primary health centers, Cempaka Health Center and Karang Intan Health Center. These locations were purposively selected to represent urban and rural contexts as well as variations in the achievement of Clean and Healthy Living Behavior indicators (Rofiq, 2019) (13).

Data collection was carried out using several techniques, including in-depth interviews guided by a semi-structured interview protocol, direct field observations to document Clean and Healthy Living Behavior (PHBS) promotion and education activities, and document analysis of program guidelines, activity reports, and health promotion media. The researcher served as the primary research instrument, supported by interview guides, audio recording devices, and detailed field notes (7). The collected data were analyzed using thematic analysis. The analysis process began with verbatim transcription of the interviews to preserve the authenticity of participants' perspectives. This was followed by open coding to identify key ideas, axial coding to organize these codes into broader categories, and selective coding to synthesize the findings and generate major themes. The analysis was conducted iteratively, supported by source triangulation to enhance the validity and reliability of the research findings (14).

The trustworthiness of the data in this study was ensured through the application of source triangulation and method triangulation. Source triangulation was conducted by comparing information obtained from various informants who had different roles and characteristics but were relevant to the implementation of the PHBS program, thereby achieving a more comprehensive and objective understanding. Method triangulation was carried out by employing multiple data collection techniques, namely in-depth interviews, focus group discussions (FGDs), direct observations conducted five times, and document review, to ensure consistency and strengthen the findings. In addition, data credibility was enhanced through member checking by confirming preliminary findings with the informants, as well as

peer debriefing to examine interpretations and minimize potential researcher bias.

The research informants were health workers who were directly involved in the implementation of the PHBS program, either as implementers or as individuals who understood the PHBS work context at the primary health care center and district health office levels, with a minimum of three years of work experience as an inclusion criterion. Data processing and analysis were conducted qualitatively and simultaneously from data collection to conclusion drawing. Data from in-depth interviews and FGDs were transcribed verbatim, then reduced and analyzed through the stages of open coding, axial coding, and selective coding to generate the main themes. The findings were presented in the form of descriptive narratives supported by direct quotations from informants and were concluded inductively by considering the field context and relevant theoretical frameworks.

The research process followed several systematic stages, beginning with the preparation of the research proposal and the acquisition of research permits, followed by ethical review and research approval. This was followed by coordination with the selected health offices and primary health centers prior to the data collection phase. Subsequently, the collected data were transcribed, coded, and analyzed in accordance with thematic analysis procedures. The study concluded with the preparation of a comprehensive report presenting the research findings. These systematic steps are consistent with established standards for qualitative research in the health field (6,12).

### **CODE OF HEALTH ETHICS**

This study did not involve patients or experimental animals. Ethical approval was obtained from the Health Research Ethics Committee, Faculty of Medicine, Universitas Lambung Mangkurat (No. XXX/UN8.1.28/KEPK/2025).

### **RESULTS**

The findings of this study are presented along three main dimensions of the Clean and Healthy Living Behavior (PHBS) program outcomes: impact, effectiveness, and sustainability. Data were obtained through in-depth interviews, observations, and document review, and are supported by selected quotations from informants to illustrate the key themes. The results indicate that PHBS implementation has contributed positively to several health indicators. At the community level, improvements in sanitation practices were observed, with several districts, such as Tabalong and Banjarbaru, successfully achieving 100% open defecation-free (ODF) status. Access to clean water and the use of healthy latrines were also reported to have increased. In addition, health promotion activities conducted in schools and through community health volunteers have enhanced public awareness of personal hygiene and environmental sanitation.

However, behavioral indicators such as smoking inside the home and exclusive breastfeeding showed only limited improvement. As explained by the Head of the Community Health Division of the South Kalimantan Provincial Health Office: *“The community actually understands the dangers of smoking, but changing habits is very difficult, especially when such practices are culturally accepted.”* This indicates that the PHBS program has had a greater impact on structural improvements than on deeply rooted behavioral change. These findings are consistent with the study by Arislan (2018) (6), which reported that sanitation-related indicators are more easily achieved than behavioral indicators.

Effectiveness was largely associated with campaign-driven activities. Informants described how events such as Germas campaigns and school-based nutrition programs temporarily increased public awareness and participation. However, the impact of these activities tended to decline once the campaigns ended. A Health Promotion Officer at the Banjarbaru City Health Office stated: *“After Germas activities, the community appears motivated for a while, but without follow-up, these behaviors do not last long.”* This indicates that the effectiveness of clean and healthy living behaviors is often short-term, limited to the campaign period, and lacks mechanisms for long-term reinforcement. Similar challenges were also identified in the study by Listyawati (2020), which found that the absence of structured and continuous follow-up reduced the effectiveness of PHBS interventions (7).

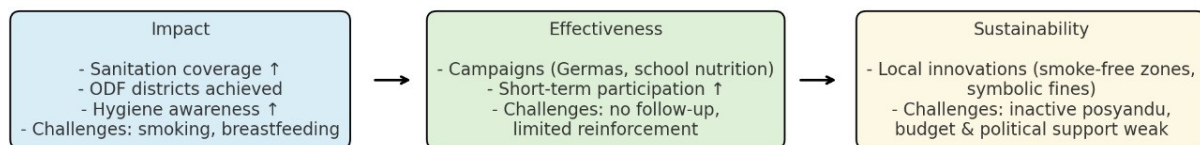
The sustainability of PHBS varies significantly across regions. In some areas, ongoing activities and

community-driven innovations were identified, including the establishment of smoke-free zones and the imposition of symbolic fines for indoor smoking. In contrast, in areas with weak financial or political support, PHBS activities experienced stagnation, with reports of inactive *posyandu* services. A health volunteer in Karang Intan stated: “We used to hold regular meetings, but now, without funding or support, activities are rarely conducted.” These differences indicate that sustainability depends heavily on governance, resources, and local leadership. Community health volunteers and cadres play a central role in maintaining PHBS sustainability; however, their efforts require consistent institutional and financial support (2,6).

**Table 1. Summary of the PHBS Program in South Kalimantan**

Dimension	Supporting Evidence	Challenges/Limitations
<b>Impact</b>	Increased sanitation coverage, open defecation-free (ODF) districts/cities, improved hygiene awareness	Behavioral indicators (smoking, exclusive breastfeeding) remain weak
<b>Effectiveness</b>	Campaigns (Germas, school-based nutrition programs) increase short-term participation	Effects do not persist after campaign activities end
<b>Sustainability</b>	Local innovations (smoke-free zones, symbolic fines) support continuity	Inactive activities in some areas; limited budgetary and political support

The table and flowchart together illustrate that the outputs of the PHBS program show a consistent pattern: structural indicators, such as sanitation and access to clean water, are more easily improved than behavioral outcomes, such as reducing smoking and increasing exclusive breastfeeding.



**Figure 1. PHBS program in South Kalimantan: impact, effectiveness, and sustainability**

This indicates that public health programs tend to be more effective when they focus on tangible environmental issues rather than efforts to change deeply rooted cultural habits. In addition, interregional comparisons reveal disparities in program sustainability, where innovative local practices support continuity in some areas, while limited funding and weak political commitment hinder implementation in others. This variation underscores the importance of adaptive strategies that integrate national policy support with context-specific local innovations.

**DISCUSSION**

The implementation of the PHBS program in South Kalimantan is influenced by input factors, particularly the availability of human resources and work processes operating at the provincial, district/city, and primary health care (*puskesmas*) levels. Although most health offices and *puskesmas* formally assign personnel for health promotion, the adequacy of training and technical skills remains very limited. This is reflected in the statement of a Provincial Health Office official: “Policies already exist, but technical-level staff often lack adequate training to implement them properly,” along with confirmation that no recent specialized training has been conducted: “For the newer staff, there hasn’t been any training lately.” These capacity limitations are also evident at the Banjarbaru City Health Office, which faces staff shortages: “There are two health educators, and one is about to be transferred, leaving only one,” and at the *puskesmas* level, such as Cempaka and Karang Intan Health Centers, each of which has only two health promotion officers. This situation forces them to rely heavily on community health volunteers, as stated by a Health Promotion Officer at Cempaka Health Center: “For surveys, we mostly rely on cadres,” and to cope with a

high service coverage burden: *"The two of us cover 13 villages, so it's quite demanding,"* as noted by a Health Promotion Officer at Karang Intan Health Center

The impact of these limitations is reflected in the community's low level of knowledge regarding PHBS, as acknowledged by an informant: *"I didn't know only just found out,"* (Banjarbaru City resident). This situation indicates that the implementer's capacity is not commensurate with the complexity of the tasks required by the policy. In line with Notoatmodjo (2012), the quality of health promotion is determined not only by the number of personnel but also by continuous competency development (12). Without adequate capacity building, health workers are unable to properly design, implement, and evaluate PHBS activities, resulting in inconsistent implementation at the field level. In the context of PHBS, not all behaviors present the same level of difficulty. Behaviors such as reducing smoking inside the home and practicing exclusive breastfeeding are particularly challenging to change because they are influenced by family norms, environmental support, and traditional beliefs. In contrast, behaviors such as handwashing or using toilets are easier to change when facilities are available. Limited human resources prevent health workers from differentiating strategies for simple versus complex behaviors, leading to generalized and less effective interventions (1).

Facilities and infrastructure are important components that determine the effectiveness of PHBS implementation at various levels. Conceptually, facilities refer to instructional tools used in health education activities, such as session plans (SAP), while infrastructure includes supporting media such as leaflets, posters, banners, and other materials that help clarify messages and encourage behavior change (6). At the provincial level, the Health Office utilizes a wide range of media, from outdoor media to digital platforms. An official explained: *"Outdoor media include banners, billboards, and x-banners... For social media, we are active on Instagram... We also use radio broadcasts and podcasts"* (Provincial Health Office). The use of these media reflects efforts to expand information reach through a combination of print, electronic, and digital channels. At the district/city level, similar media utilization is also implemented, including collaboration with mass media. An informant stated: *"So far, we use Instagram, Facebook, and TikTok... sometimes we collaborate with radio and television"* (Banjarbaru City Health Office). However, the availability of promotional media is highly dependent on budget availability. *"It depends on their budget... x-banners from us can be distributed to health centers, but in limited quantities"* (Banjarbaru City Health Office). A similar view was expressed by the Provincial Health Office: *"Each district/city health office plans its own activities, depending on the budget they have."*

This condition is more evident at the *puskesmas* level. Cempaka Health Center acknowledged that promotional media are available but limited: *"Education is delivered through posters, flip sheets, banners, and billboards,"* yet self-printing is rarely carried out due to the absence of funding: *"There is currently no budget for printing leaflets"* (Health Promotion Officer, Cempaka Health Center). As a result, health education activities within the health center are often conducted verbally because of the limited stock of printed media. Karang Intan Health Center faces a similar situation. Promotional media are rarely updated and largely depend on support from the provincial level: *"The last time we received a health promotion kit was from the province... There is still no budget for printing"* (Health Promotion Officer, Karang Intan Health Center). Media support from the district level is also limited: *"There hasn't been any recently; previously there were banners and leaflets, but this year there have been none"* (Karang Intan Health Center).

From the community perspective, perceptions also indicate unequal access to information. Some residents in Banjarbaru reported minimal exposure: *"No one really hears about it, only this,"* while residents in Banjar District perceived greater exposure: *"There is a lot on social media discussing PHBS."* Attractive and well-designed promotional media have been shown to improve information retention and the effectiveness of behavior change interventions (15,16). When media availability is limited, health education shifts toward verbal communication, causing messages to be more easily forgotten and not retrievable by the community.

Overall, PHBS promotion facilities and infrastructure in South Kalimantan are available but unevenly distributed. The provincial government tends to play a coordinating role, while media production is carried out at the district/city and *puskesmas* levels, making it vulnerable to budget constraints. To strengthen PHBS implementation, more equitable provision of promotional media, innovative use of digital

media, and adequate budgetary support are required. The insufficiency and unequal distribution of facilities and infrastructure directly reduce the effectiveness of PHBS promotion, as messages are not delivered consistently, cannot be revisited by the community, and fail to foster sustained behavioral habituation.

Funding support for the PHBS program is available at all levels of government; however, the amounts are limited and the distribution remains uneven. At the provincial level, the Health Office stated that a dedicated budget allocation is consistently provided through the regional budget (APBD), although the amount is relatively small. An official noted: *“Yes, in terms of support, it is actually quite good... we always allocate a budget for PHBS activities, even though it is limited”* (Provincial Health Office). This budget is generally used for supervision activities and PHBS award programs, as explained: *“The source is the Provincial APBD... around tens of millions... including prizes, certificates, and development funds”* (Provincial Health Office). This indicates that provincial-level funding tends to strengthen competitive and incentive-based aspects rather than direct field-level operational activities.

In contrast, at the district/city level, budgetary support is considered inadequate. An informant from Banjarbaru stated: *“In my opinion, it’s still insufficient... the media are still lacking”* (Banjarbaru City Health Office). These budget limitations affect empowerment activities and promotional media, which are core components of behavior formation. A similar situation occurs in Banjar District, where APBD funds are available but often reduced during the planning process. *“We propose based on needs... but there are always budget cuts... so we just maximize what is available”* (Banjar District Health Office).

Budget constraints are even more apparent at the *puskesmas* level. Cempaka Health Center reported that they have no dedicated funds for health education activities: *“There is no specific budget for PHBS... gathering community members requires refreshments... so it’s not possible without funding”* (Health Promotion Officer, Cempaka Health Center). A similar condition was experienced by Karang Intan Health Center: *“There is no specific allocation... even the BOK no longer has a PHBS-specific component”* (Health Promotion Officer, Karang Intan Health Center). As a result, PHBS activities are often combined with other programs to save costs, preventing them from being designed as systematic behavior change interventions.

These findings are consistent with the study by Arislan (2018), which stated that limited budget allocations result in suboptimal PHBS implementation. Salma et al. (2024) also emphasized that increased funding is a crucial factor in strengthening the quality of health promotion services. In addition, Luthfia (2021) noted that the success of PHBS development depends heavily on the continuity of funding rather than incidental activities. Limited funding has a direct impact on the low quality of PHBS implementation, as activities tend to be short-term socialization efforts and lack sustainability. The absence of dedicated budget allocations also forces *puskesmas* to integrate PHBS into other programs, resulting in unfocused interventions. Therefore, more consistent funding is required, including support for promotional media, empowerment activities, and cadre operations, to ensure that PHBS is implemented in a systematic and sustainable manner (6,8,17).

The implementation of PHBS in South Kalimantan follows the existing procedural and regulatory framework; however, it still relies on outdated national guidelines. In Banjar District, PHBS is integrated into the *Germas* program through a Regent’s Decree, as stated: *“Because PHBS is part of Germas... the decree is the Regent’s Germas decree”* (Banjar District Health Office). Both provincial and district/city levels fully refer to guidelines issued by the Ministry of Health. Informants confirmed: *“We refer to the Ministry of Health”* (Banjar District Health Office) and *“There are certainly technical guidelines from the Ministry of Health... it’s just a matter of how they are implemented”* (Banjarbaru City Health Office). The provincial level also does not have additional guidelines: *“The province also refers to the central level, it’s the same”* (Provincial Health Office). The main guidelines used are Minister of Health Decree (KMK) No. 6619 and Minister of Health Regulation No. 2269/Menkes/Per/XI/2011, both of which have not been updated. An informant from Banjar District stated, *“The guideline referred to is KMK number 6619.”* Meanwhile, Cempaka Health Center explained that the guideline in use dates back as far as 2010: *“There is a very old guideline book... from around 2010... it has never been updated by the Ministry of Health”* (Health Promotion Officer, Cempaka Health Center).

The Provincial Health Office supported this finding, noting: *“The policy is still the old one... PHBS is*

*even said to no longer be a priority*" (Provincial Health Office). Efforts to revise the national guideline were also described as unclear: *"It is still only at the discourse stage... so we are still using the latest Ministerial Regulation"* (Provincial Health Office). At the implementation level, these outdated guidelines create a gap between policy and field needs. *Puskesmas* are required to adjust targets based on local agreements, as observed in Banjar District: *"That is an agreement among us... at the district level"* (Karang Intan Health Center). Reliance on outdated guidelines without updates reduces the program's adaptability to current public health challenges. This situation highlights the need for regulatory revision, the development of updated guidelines, and strengthened technical training to ensure that PHBS implementation at the local level is more responsive and effective (18).

Overall, the core issue is not only the delay in updating national guidelines, but also the absence of internal mechanisms at the regional level including at *puskesmas* to translate national guidelines into more current and context-appropriate technical instructions. Therefore, the development of local technical guidelines, strengthened technical training, and more flexible operational adaptations are necessary to ensure that PHBS implementation can respond effectively to evolving community health needs and challenges.

At the *puskesmas* level, program development is carried out through advocacy and health education activities. As stated by Karang Intan Primary Health Center: *"Mostly advocacy to village heads and health education in the village"*; *"In schools, it is called healthy school development"*; *"There are activities such as toddler classes and antenatal classes."* Cempaka Primary Health Center expands its activities through school-based health education, *Germas* campaigns, and policy advocacy: *"Health education in schools..."*; *"Germas campaign at one of the elementary schools in Cempaka"*; *"Advocacy to the village administration so that they issue decrees related to PHBS."*

Local innovations have also emerged, such as women farmer groups, *"planting melons... present in every village"* (Cempaka PHC), as well as integrated activities including group exercise, waste segregation, home visits, and exclusive breastfeeding promotion: *"There are innovations such as group exercise... waste segregation... home visits... exclusive breastfeeding"* (Cempaka PHC).

Cadre strengthening is an important component, implemented through activities such as *"training PHBS cadres to conduct surveys"* (Cempaka PHC). Community support is reported to be high, as reflected in statements such as *"The community in Sungai Alang Village already has a progressive mindset"* (Banjar District community member) and *"There is cooperation between neighborhood leaders (RT) and the community"* (Banjarbaru City community member). Local governments also reinforce implementation through policy support, for example, *"This can be seen from the Mayor of Banjarbaru's Decree on Germas"* (Banjarbaru City Health Office).

Overall, the implementation of the Clean and Healthy Living Behavior (PHBS) program in South Kalimantan follows a tiered approach. At the provincial level, activities primarily focus on guidance, assessment, and appreciation for villages and schools that successfully implement PHBS. As noted by a provincial informant: *"The main activities include guidance, assessment, and awarding appreciation to villages and urban wards implementing PHBS, as well as to PHBS-oriented schools/madrasahs"* (Provincial Health Office).

However, the province faces several challenges, including limited policy support, constrained budgets, staff turnover, and sociocultural factors within the community. These challenges were described as *"Limited policy support... limited budgets... lack of or frequent changes in human resources"* and *"The most frequently mentioned issue is culture... which is difficult to change"* (Provincial Health Office). To address these constraints, health workers are encouraged to develop innovations such as the *Adventure of PHBS (AOV)* and Android-based PHBS media applications, as stated: *"As a solution... we ask them to innovate"* and *"The Puskesmas develop PHBS media through Android applications"* (Provincial Health Office). At the Banjar District level, implementation is carried out through a tiered coaching system: *"The guidance is broken down... from the province to the district, and from the district to the Puskesmas"* (Banjar District Health Office). The main constraint lies in the limited number of health promotion personnel, which varies across primary health centers. As noted by an informant, *"Some are adequately staffed, others are not... visiting households one by one takes a lot of time and does not match the available human resources"* (Banjar District

Health Office).

In Banjarbaru City, implementation relies on community mobilization, health education, and regulatory support from subdistrict and neighborhood leaders. This approach is reflected in statements such as *“The implementation takes the form of community movement, encouraging community participation”* and *“There are regulations... circular letters from the Subdistrict Head... prohibiting smoking inside the house”* (Banjarbaru City Health Office). At the *puskesmas* level, implementation is conducted through routine socialization and field activities. Karang Intan Primary Health Center conducts monthly outreach, particularly in schools, *“Routinely every month”* (Karang Intan PHC). However, village-based activities are infrequent due to difficulties in gathering community members: *“In villages it is rare... it is difficult to gather people”* (Karang Intan PHC).

Overall, PHBS development in South Kalimantan has been implemented but remains suboptimal due to limited human resources, low coverage of village-level activities, and variations in community participation. Differences in indicators across administrative levels and the strong influence of sociocultural factors further contribute to gaps between planning and field implementation. These findings indicate the need for better synchronization of indicators, increased capacity of health promotion personnel, and more stable budgetary support. Strengthening community participation through community-based approaches, the involvement of neighborhood leaders and local figures, digital innovations, school-based activities, and cadre empowerment should be expanded to ensure more consistent and sustainable PHBS implementation.

The monitoring mechanism for the PHBS program is conducted in a tiered manner with a mentoring-oriented approach, particularly at the provincial level. Monitoring emphasizes reminders and facilitation rather than purely formal supervision, as expressed by an informant: *“Perhaps the supervision is more about reminding—monitoring, in program terms”* (Provincial Health Office). Monitoring activities are implemented through WhatsApp groups, visits to district/city health offices, and sampling visits to selected *puskesmas*: *“Besides WhatsApp groups, we visit district/city health offices... and take samples at puskesmas”* (Provincial Health Office). In Banjar District, reporting is conducted hierarchically using Google Drive: *“Puskesmas submit reports... we use Google Drive”* (Banjar District Health Office). However, implementation remains less than ideal, as quarterly monitoring is only conducted once or twice per year instead of the intended frequency: *“Ideally it should be quarterly... but in reality...”* (Banjar District Health Office).

Overall, monitoring functions as a mechanism for supervision, reporting, and routine evaluation. This finding is consistent with Utomo et al. (2023), who state that participatory monitoring enables programs to better respond to community needs and strengthens empowerment (19). Feedback mechanisms are also implemented in a tiered manner from the village to the provincial level, as expressed by an informant: *“Health center reports are prepared at the village level... district/city reports are compiled per health center... feedback is provided hierarchically”* (Provincial Health Office). Routine reports serve as the basis for evaluation and feedback, *“We provide feedback again... through the routine reports that must be submitted”* (Provincial Health Office).

Feedback sources are not limited to internal health personnel but also include community input obtained through health center reports and social media monitoring. *“Health centers collect feedback from the community... for example, on YouTube, we look at the comment section”* (Provincial Health Office). Pre-survey meetings are conducted to harmonize indicators, *“We ask whether the mother consumed fruit today...”* (Banjarbaru City Health Office), thereby ensuring consistency in field implementation.

Community responses vary across areas. Some communities demonstrate high enthusiasm, *“The people of Sungai Alang Village... are progressive in their thinking... and enthusiastic”* (Banjar District Community), while others emphasize the need for sustained socialization, *“Do not assume that because there are no extraordinary events, the activities should stop”* (Banjar District Community). There are also suggestions to provide rewards, *“Those who are truly aware should be given rewards”* (Banjar District Community), as well as calls for stricter environmental policies, *“Our hope is for stricter enforcement so that the river water can become clear again”* (Banjar District Community).

These findings align with Rofiq (2018), who emphasizes that community participation determines

program success, as well as with Jamko et al. (2024) and Sipahutar et al. (2025), who highlight the importance of cadres and incentive mechanisms in enhancing community motivation. Overall, feedback mechanisms play a crucial role in maintaining the sustainability of the Clean and Healthy Living Behavior (PHBS) program through hierarchical reporting, indicator harmonization, and community involvement. The main challenge lies in low participation levels, underscoring the need to strengthen feedback as a tool for guidance and motivation to support program effectiveness (13,20,21).

Although monitoring and feedback mechanisms for PHBS have been implemented, they are not yet optimal due to low monitoring frequency, inconsistencies in indicators, and varying levels of community participation. More consistent monitoring schedules, standardized digital reporting systems, and strengthened roles of community health cadres and the community at large are required. In addition, enhancing the capacity of primary health centers to analyze and monitor data is essential to ensure that feedback is effectively used to improve and sustain PHBS implementation.

## **CONCLUSION**

The implementation of PHBS in South Kalimantan indicates that limitations in human resources, insufficient operational funding, and inconsistencies in indicators across levels are the most dominant factors hindering program effectiveness. These conditions restrict the capacity of primary health centers and community health volunteers to adapt national guidelines to local needs, particularly for behaviors that are more difficult to change, such as smoking inside the home and exclusive breastfeeding practices. Therefore, local governments need to strengthen implementer capacity through tiered training models that focus on strategies for complex behavior change, ensure dedicated funding allocations for health promotion activities at the district and primary health care levels, and develop regional technical guidelines that are more responsive to field contexts. The optimization of digital media and integrated reporting systems is also important to improve monitoring consistency and the use of feedback. More broadly, these findings underscore the need for a more adaptive and participatory health promotion approach and open opportunities for further research on the effectiveness of media and community volunteer empowerment in strengthening PHBS practices at the community level.

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## **CONFLICTS OF INTEREST**

The authors declare that they have no known financial interests or personal relationships that could have influenced the results reported in this paper.

## **REFERENCES**

1. Juraidin, dkk. Perilaku Hidup Bersih dan Sehat (PHBS) Pada Masyarakat di Kelurahan Kolo Untuk Mendukung Kota Bima Bersih, Indah, Sehat dan Asri (BISA). *Journal of Innovative and Creativity*. 2025; 5(3): 28418-422.
2. Rahmat NN, dkk. Analisis Faktor Jenis Kelamin dan Perilaku Hidup Bersih Sehat (PHBS) Terhadap Kejadian Ispa pada Kalangan Santri. *Journal of Nursing and Midwifery Sciences*. 2025; 4(1): 67-78.
3. Pratimi AR, Nugraheni N. Pengenalan Kebiasaan Cuci Tangan Dengan Sabun Sebagai Inisiatif Kesehatan di Sekolah Dasar. *Jurnal Penelitian Ilmu-Ilmu Sosial*. 2024; 1(10): 25-33.

4. *Laporan Provinsi Kalimantan Selatan Tahun 2025*. Dinas Kesehatan Provinsi Kalimantan Selatan; 2025.
5. *Statistik Kesehatan Provinsi Kalimantan Selatan 2024*. Banjarmasin: BPS Provinsi Kalimantan Selatan; 2024.
6. Arislan. Evaluasi Program Perilaku Hidup Bersih dan Sehat (PHBS) rumah tangga di Wilayah Kerja Puskesmas Pematang Kandis Tahun 2017. *Jurnal Kesehatan dan Sains Terapan STIKes Merangin*. 2018; 4(1): 59-75.
7. Listiawaty R. 2020. Analisis pelaksanaan program perilaku hidup bersih dan sehat pada tatanan rumah tangga di Wilayah Kerja Puskesmas X. *Journal of Health Science and Physiotherapy*; 2(2): 134-142.
8. Luthfia Y. 2021. Evaluasi pelaksanaan program pembinaan Perilaku Hidup Bersih dan Sehat (PHBS) tatanan sekolah pada siswa sekolah dasar Kabupaten lampung Timur Tahun 2020. *Jurnal Ilmu Kesehatan Masyarakat Indonesia*; 2(1):
9. Noviana N. Studi komparatif upaya peningkatan hidup bersih dan sehat di Kalimantan Selatan dan Pemalang. *BALITBANGDA KALSEL*. 2014.
10. Ainy A, Pertiwi RD. Booklet evaluasi program kesehatan. Fakultas Kesehatan Masyarakat Universitas Sriwijaya. Palembang. 2021.
11. Arifin S, Rahman F, Pujianti N, Laily N, Wulandari A, dkk. Ilmu dan Seni Administrasi Kebijakan Kesehatan. Yogyakarta: CV Mine. 2020.
12. Notoatmodjo, S. (2018). Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta
13. Rofiq A. Partisipasi masyarakat dalam keberhasilan pengembangan program posyandu lansia di Puskesmas Jagir Surabaya. *Jurnal Kebijakan dan Manajemen Publik*. 2018; 6(2): 1-14.
14. Adiputra MS dkk. Metodologi Penelitian Kesehatan. Denpasar: Yayasan Kita Menulis. 2021.
15. Sutrisno, Sinanto RA. 2022. Efektivitas penggunaan lembar bolak balik sebagai media promosi kesehatan: tinjauan sistematis. *Jurnal Kesehatan Terpadu (Integrated Health Journal)*; 13(1): 1-11.
16. Suyasa IM, Sedana IN. 2020. Mempertahankan eksistensi media cetak di tengah gempuran media online. *Jurnal Komunikasi Budaya*; 1(1): 56-64.
17. Salma TA, Purnomo I, Irawan T. 2024. Analisis pelaksanaan program PHBS rumah tangga di Puskesmas Paduraksa Kabupaten Pemalang. *Jurnal Kesmas Prima Indonesia*; 8(1): 113-117.
18. Menteri Kesehatan Republik Indonesia. 2011. Peraturan Menteri Kesehatan Republik Indonesia Nomor 2269/MENKES/PER/XI/2011 Tentang Pedoman Pembinaan Perilaku Hidup Bersih dan Sehat (PHBS). Jakarta: Menteri Kesehatan.
19. Utomo R, dkk. 2023. Menuju monitoring dan evaluasi partisipatif program pembinaan UMKM berbasis kewilayahan yang terpadu. *Syntax Literature: Jurnal Ilmiah Indonesia*; 8(6): 4442-4452.
20. Jamko MN, Djanah SN, Handayani L. 2024. Analisis strategi promosi kesehatan terhadap implementasi Perilaku Hidup Bersih dan Sehat (PHBS) di Desa Dullah Laut Kota Tuai Provinsi Maluku. *Journal of Multidisciplinary Research and Development*; 6(6): 2363-2385.
21. Sipahutar SW, dkk. 2025. Peningkatan kesadaran dan partisipasi masyarakat melalui program rutin sabtu bersih di Kelurahan Tanjung Sari. *Jurnal Pemberdayaan Masyarakat: Jurnal Aksi Sosial*; 2(2): 49-63.