

Clean and Healthy Toilet Campaign as an Effort to Achieve Healthy Families

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ABSTRACT

Clean and healthy toilets are an important component of household sanitation and healthy living practices. This community service activity aimed to increase community knowledge regarding the use, cleanliness, and maintenance of family toilets through health education and simulation in Atong Village, Montasik District, Aceh Besar. The activity was conducted on October 28, 2025, with 30 participants comprising heads of households and housewives. The mean knowledge score increased descriptively from 30.26 ± 7.70 before the campaign to 78.06 ± 15.60 after the campaign. Because no inferential statistical test was reported, the findings are interpreted as a descriptive increase in knowledge rather than evidence of statistical significance or behavioral change. Continued reinforcement is recommended to support the application of sanitation messages in daily household practices.

Keywords: campaign; family health; healthy toilet; sanitation; knowledge

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INTRODUCTION

Sanitation is one of the primary determinants of public health that significantly contributes to the quality of life and health status of families. Clean and healthy family toilets or latrines do not only serve as a means for excreta disposal but also play a critical role in preventing the transmission of environmental-based diseases such as diarrhea, gastrointestinal infections, skin diseases, and other parasitic infections (WHO, 2021). Nevertheless, sanitation issues, particularly regarding the cleanliness and maintenance of family toilets, remain a serious challenge in various rural areas in Indonesia.

National data in Indonesia indicates that although access to proper toilets has increased, the practices of utilizing and maintaining healthy toilets are not yet fully optimal. Many families already own toilet facilities, but have not implemented the principles of cleanliness, safety, and sanitation that meet health standards, thereby keeping the risk of environmental contamination and disease transmission high (Ministry of Health RI, 2022). This condition is further exacerbated by the low level of public knowledge concerning the importance of clean and healthy toilets, as well as the limited availability of applicable and sustainable health education.

In the context of family health, clean and healthy latrines are an integral part of Clean and Healthy Living Behaviours (PHBS) within the household setting. Unmaintained toilets can become sources of environmental pollution, breeding grounds for disease vectors, and increase the risk of infectious diseases, especially among vulnerable groups such as children and the elderly (Rasyid, et al., 2024). Therefore, efforts to improve public knowledge and awareness regarding toilet sanitation serve as a strategic step toward realizing healthy families.

Various studies demonstrate that community-based health education is effective in improving knowledge, attitudes, and sanitation behaviours. Sari and Handayani

(2021) reported that environmental sanitation counselling can significantly improve public understanding regarding the use and maintenance of healthy toilets. Other studies also affirm that an increase in sanitation knowledge does not only impact cognitive changes but is also reflected in the improvement of toilet facility conditions and daily hygiene practices (Wulandari & Dewi, 2023; Sutomo, Rokayah & Wasludin, 2025).

Education on clean and healthy toilets becomes increasingly relevant in the family context, considering that the family is the smallest unit in society acting as the primary agent for establishing health behaviours. Housewives play a central role in maintaining the cleanliness of the home environment and family toilets. Sanitation education targeting mothers has been proven to significantly increase knowledge and awareness of healthy toilets, which impacts household sanitation practices as a whole (Hikmah, 2024). Furthermore, a participatory and contextual educational approach has proven to be more effective compared to one-way information delivery. Educational programs tailored to the needs of the local community, using simple language and real-world examples, are proven capable of increasing participant engagement and facilitating more sustainable behavioural changes (Madi, Sabtu, & Sinyo, 2025).

Based on these issues, this community service activity was designed to increase community knowledge regarding clean and healthy toilets through structured, interactive, and contextually relevant education in Atong Village, Montasik District, Aceh Besar. A pre-test and post-test approach was used to describe immediate changes in knowledge before and after the activity. The evaluation focused on knowledge outcomes; therefore, the results were not intended to establish causal effects on sanitation behavior or disease prevention.

METHODS

This community service activity was conducted in the form of a campaign consisting of health education and simulations. The activity involved 30 participants from Atong Village, Montasik District, Aceh Besar, comprising heads of households and housewives.

This campaign was held on October 28, 2025. The activity began with obtaining event permits from the village head of Atong and local stakeholders.

Before the session, participants completed a questionnaire on clean and healthy living practices with a specific focus on latrine hygiene. The service team then provided education and simulation on clean and healthy toilets, followed by a question-and-answer session. The same questionnaire was administered again after the session. Detailed information on the number of questionnaire items, scoring procedures, and psychometric testing was not available in the activity documentation used for this manuscript; therefore, the pre-test and post-test scores are interpreted as internal program indicators and are reported descriptively.

Once the education session concluded, the same questionnaire was redistributed to the participants to be answered again. The documentation of the activity is shown in Figure 1.



Figure 1. Clean and Healthy Toilet Education Activity in Gampong Atong, Montasik District, Aceh Besar.

RESULTS AND DISCUSSION

The mean age of the 30 participants was 45.27 ± 12.34 years. Most participants were female (80%), had completed senior high school (76.7%), and worked as farmers (60%). These characteristics describe the community group reached by the campaign and provide context for tailoring sanitation education to the participants' everyday circumstances.

Table 1. Characteristics of Respondent

Characteristic	Category/Statistic	n / Mean	%
Age	Mean $\pm$ SD	45.27 ± 12.34	-
Sex	Man	6	20.0
	Woman	24	80.0
Education	Junior high school	5	16.6
	Senior high school	23	76.7
	University	2	6.7
Occupation	Housewife	4	13.3
	Farmer	18	60.0
	Entrepreneur	8	26.7

The mean participant age was 45.27 ± 12.34 years. This age distribution is reported as a descriptive characteristic of the group and was not analyzed as a determinant of knowledge change.

Female participants constituted 80% of the sample. Because the activity was not designed to compare knowledge or information-seeking behavior by sex, this distribution should be interpreted only as the composition of participants who attended the campaign.

Most participants had completed senior high school (76.7%). Educational attainment was recorded to describe the target group and to support the use of clear, accessible educational materials; no subgroup analysis by education level was conducted.

Farmers represented 60% of participants, reflecting the occupational composition of this local sample. Occupation was not examined as a predictor of baseline knowledge or response to the educational activity.

Knowledge scores increased descriptively after the campaign, from a pre-campaign mean of 30.26 ± 7.70 to a post-campaign mean of 78.06 ± 15.60 , as shown in Table 2.

Table 2. Knowledge about clean and healthy toilets

Knowledge score	Mean	SD
Pre-test	30.26	7.70
Post-test	78.06	15.60

Table 2 shows a descriptive increase in mean knowledge score from 30.26 ± 7.70 before the campaign to 78.06 ± 15.60 afterward. No inferential statistical test was reported; therefore, the change should not be described as statistically significant. The findings indicate an immediate improvement in the knowledge score measured by the program questionnaire. They do not, by themselves, demonstrate changes in sanitation behavior, toilet conditions, or disease occurrence.

The direction of the knowledge change is consistent with community education reports indicating that structured and participatory sanitation education can improve understanding of toilet hygiene and sanitation (Ginting et al., 2025; Madi, Sabtu, & Sinyo, 2025; Wulandari & Dewi, 2023). In the present activity, however, only immediate knowledge was measured, so comparisons with studies reporting behavioral or environmental outcomes should be interpreted cautiously.

Previous community service activities have also reported improved knowledge after environmental sanitation counseling (Sari & Handayani, 2021; Wulandari & Dewi, 2022). These studies support the relevance of direct education as a promotive approach, while the current findings remain limited to a short-term descriptive change in questionnaire scores.

Education on family latrine sanitation remains relevant because household practices require repeated reinforcement and support (Sutomo, Rokayah, & Wasludin, 2025; Hikmah, 2024; Herawati et al., 2024). Future activities should evaluate whether knowledge is retained and translated into observable maintenance and sanitation practices over time.

CONCLUSION

The clean and healthy toilet campaign was followed by a descriptive increase in mean knowledge score from 30.26 to 78.06 among 30 participants. Because the activity used a one-group immediate pre-test and post-test evaluation without an inferential analysis and the questionnaire's psychometric properties were not documented in the available activity report, the findings should be interpreted as an initial program evaluation rather than proof of effectiveness. Follow-up education and evaluation are recommended to assess knowledge retention and the application of sanitation practices in households.

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