


# Analysis of Community Behavior Change Strategy in Open Defecation Behavior in the Work Area of Yembekiri Health Center, Teluk Wondama Regency, West Papua

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Article Info	ABSTRACT
<p><b>Keywords:</b> Open Defecation, community behavior, behavior change strategies, sanitation, West Papua.</p>	<p>The practice of open defecation is still a serious public health problem in many areas in Indonesia, including in the Yembekiri Health Center Work Area, Teluk Wondama Regency, West Papua. This study aims to analyze strategies for changing community behavior in the practice of open defecation in the area. The research design used was qualitative research. Data collection techniques were carried out randomly by means of in-depth interviews, observation checklists and document review checklists. The sample used in this study were 2 Yembekiri Health Center officers and 70 people who would be used as informants in this study. Results: Context; healthy toilets, clean water facilities are not yet effective because healthy facilities / toilets are still lacking in the Yembekiri Health Center work area as well as clean water facilities do not meet the needs of the local community. input component; inadequate community human resources, facilities and infrastructure are not yet effective The lack of toilets in various villages is the main complaint of the community even though clean water facilities are still sufficient and so in various other villages there are private toilets but clean water facilities are lacking so that people prefer to defecate on the beach. Process Component; Environmental pollution is still a problem in the work area of Yembekiri Health Center. Open Defecation Behavior has become a habit of the community, especially children. The emergence of disease outbreaks, the scope of diarrhea cases is the most common case found in the work area of Yembekiri Health Center after cases of ARI and malaria.</p>
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## INTRODUCTION

Open defecation behavior is a serious problem in many countries, especially in densely populated urban areas. Such actions are not only detrimental to public health and the environment, but also reflect a lack of awareness of the importance of good sanitation. Raising awareness about the negative impacts of open defecation behavior has been carried out through various outreach and education campaigns, but there are still major challenges in changing people's behavior significantly. Factors such as habits, culture, inadequate

availability of sanitation facilities, lack of clean water facilities and the level of public knowledge and perception about sanitation play an important role in determining defecation behavior. (Agus Triyono, 2020)

In this context, research on community behavior change strategies is crucial. Through this research, it is hoped that effective strategies can be identified to change community behavior in terms of defecation, either through an outreach approach, regulation, or the development of better sanitation infrastructure. Thus, this research will not only provide a deeper understanding of the dynamics of community behavior related to sanitation, but can also make a real contribution to efforts to improve overall environmental health and cleanliness. (Sukrisdiyanto 2023)

The practice of open defecation is still common, especially in residential areas such as in the Yembekiri Health Center work area, Rumberpon District. Rumberpon District is the northernmost district in Teluk Wondama Regency, West Papua and borders South Manokwari. The area of Rumberpon District is 2,948.2 km<sup>2</sup> with a population of 2,128 people and 279 families. There are 191 families who have toilets, 88 families who do not have toilets and 35 public toilets. Rumberpon District is divided into 7 villages, namely: Yembekiri I Village, Yembekiri II, Watitindau, Isenebuai, Yomakan, Iseren and Yari-yari. Factors such as lack of access to proper sanitation facilities, lack of knowledge about the importance of hygienic behavior, lack of clean water facilities and habit factors are some of the main causes of this problem. (Yembekiri Health Center, 2024)

The achievement of the indicator percentage of villages/sub-districts that have declared SBS nationally reached 57.01% in 2022, slightly lower than the national target of 60%. However, there has been positive development in reducing the gap in access to proper sanitation between urban and rural areas and between upper and lower economic groups. This indicates an improvement in the distribution of more equitable access to sanitation, although there are still significant challenges that must be overcome to achieve higher safe sanitation targets and ensure that all levels of society have equal and proper access to sanitation facilities (Directorate General of P2P, Ministry of Health, 2023).

The policy of the Wondama Bay Regency government, West Papua in reducing the practice of Open Defecation, namely by implementing strict regulations and significant fines for violators, the government can encourage public awareness and compliance with good sanitation practices. Meanwhile, providing subsidies and financial incentives to build decent sanitation facilities is important, especially for the less fortunate, education and counseling on the importance of good sanitation behavior, and changing cultural norms that support cleaner and healthier sanitation practices.

Based on the above, the specific objectives of this research are: Knowing the context (background) of government policies in the strategy of changing community behavior in the practice of open defecation in the work area of the Yembekiri Health Center, West Papua, in 2024; Knowing the input (human resources, infrastructure, and funding) in the strategy of changing community behavior in the practice of open defecation in the work area of the Yembekiri Health Center, West Papua, in 2024; Knowing the process (planning,

implementation, monitoring and evaluation) in the strategy of changing community behavior in the practice of open defecation in the work area of the Yembekiri Health Center, West Papua, in 2024; Knowing the Product (environmental pollution, spread of disease outbreaks) in the strategy of changing community behavior in the practice of open defecation in the work area of the Yembekiri Health Center, West Papua, in 2024; Knowing the results of the evaluation of the strategy of changing community behavior in the practice of open defecation in the work area of the Yembekiri Health Center, West Papua, in 2024; Designing recommendations related to strategies for changing community behavior in the practice of open defecation in the work area of the Yembekiri Health Center, West Papua, 2024.

## METHOD

The research design used in this study is qualitative research. Data collection techniques are carried out randomly by means of in-depth interviews, observation checklists and document review checklists. This study uses primary and secondary data types. Primary data is a data source that directly provides data to data collectors. Primary data is obtained from the results of interviews given to respondents. while secondary data is obtained through Pk pis data. The sample used in this study was 2 Yembekiri Health Center officers and 70 community members who will be used as informants in this study. This research was conducted in the Yembekiri Health Center working area which consists of 7 villages namely: Yembekiri I, Yembekiri II, Watitindau, Isenebuai, Yomakan, Iseren and Yari-yari villages.. The time of this research was conducted in August 2024.

This study uses purposive sampling technique. Because the researcher feels that the sample taken is the most knowledgeable about the problem to be studied by the researcher. The informants who will be used as samples are: Main Informant: Person in Charge of Health at Yembekiri Health Center. Supporting Informants: Head of Yembekiri Health Center, Community (10 families from each village). The components studied consist of 4 components:

- a. Context components include background, needs and objectives of government policies in strategies for changing community behavior in the practice of Open Defecation in health centers in the Yembekiri Health Center working area, as well as the objectives to be achieved in overcoming 100% BABS.
- b. Input components include The available Human Resources include infrastructure, facilities and infrastructure as well as funding in strategies to change community behavior in the practice of Open Defecation.
- c. Process Components include *Process* (process) is the planning, implementation, monitoring and evaluation of strategies for changing community behavior in the practice of Open Defecation.
- d. Output/Impact components include The impacts caused by the practice of open defecation include: environmental pollution and the spread of disease outbreaks.

Next is the data analysis stage. Qualitative research design by conducting in-depth interviews with related parties. Qualitative data analysis using the triangulation method.

Triangulation is a process of testing the validity of data that utilizes something outside the data for the purpose of checking data or comparing data (Meleong, 2017). Researchers combine free interview methods and structured interviews. Researchers also use different informants to check the truth of the information. Through various perspectives or views, it is hoped that results will be obtained that are close to the truth.

## RESEARCH RESULT

From the results of in-depth interviews and observations with document reviews on Open Defecation Behavior (BABS) in the Yembekiri Health Center Work Area Factors such as habits, culture, inadequate availability of sanitation facilities, lack of clean water facilities and the level of community knowledge and perception of cleanliness play an important role in determining open defecation behavior in the Yembekiri Health Center work area.. Open Defecation Behavior in the Yembekiri Health Center work area has become a habit of the community, especially children, and from the results of the interview stated that defecating on the beach is more comfortable than defecating in a healthy toilet. The public perception states that defecating on the beach is more effective and cleaner than defecating in a healthy toilet. From the results of in-depth interviews and observations with document reviews of Open Defecation Behavior (BABS) in the Yembekiri Health Center Work Area is divided into evaluations of the Context, input, process and output components.

### Context Components

The results of in-depth interviews and observations with document reviews show that the main factors underlying the behavior of Open Defecation (BABS) in the Yembekiri Health Center work area are:

a. Lack of healthy toilets

From the results of interviews and observations with document reviews, one of the main factors causing open defecation is the lack of healthy toilets so that people prefer to defecate in the open. From the results of interviews and surveys in 7 villages in the Yembekiri Health Center work area, with 10 informants in each village, 26 families were found to have private toilets, 25 families did not have toilets and 19 families used public toilets.

b. Lack of clean water facilities

From the results of interviews and observations with document reviews on private toilet ownership but the lack of clean water facilities is one of the causes of indiscriminate defecation so that people choose to defecate indiscriminately. Some people in the Yembekiri Health Center work area already have private toilets but the availability of clean water facilities is lacking so that people prefer to defecate indiscriminately, the source of clean water for the community comes from river water which is quite far from the community's settlement so that to get clean water by pumping water using solar power. And if the sun is not hot, the water will not flow automatically so that the community will lack clean water, and another problem is that the clean water reservoir / tank is only 1 point and is not sufficient for the community's needs. The procurement of clean water comes from village funds budgeted by the Village Empowerment Service of Teluk Wondama Regency.

c. Habit factor

From the results of interviews and observations of document reviews, the behavior of defecating on the beach has become a habit, and it feels more comfortable to defecate on the beach, especially small children. The behavior of defecating carelessly in the work area of the Yembekiri Health Center has become a habit of the community, especially children, and from the results of the interview it was stated that defecating on the beach is more comfortable than defecating in a healthy toilet. Some people already have private toilets but are not used properly and are even used as storage for goods, and feel that defecating on the beach is more practical.

**Input components**

a. HR

The results of in-depth interviews and observations with document reviews show that the community's human resources are inadequate, from the results of observations, the average community's work is farmers and fishermen where the community's income level is less than IDR 1,000,000 per month. From the results of interviews and surveys in 7 villages in the Yembekiri Health Center working area, with 10 informants in each village, the average income level was obtained, including 9 families earning  $\geq$  Rp 2,000,000, 16 families earning Rp 1,000,000, and 45 families earning  $\leq$  Rp 1,000,000. The income level of the community is still below the UMR limit, so that private toilet ownership is still lacking in the Yembekiri Health Center work area.

b. Infrastructure

The results of in-depth interviews and observations with document reviews show that the lack of infrastructure in this case healthy toilets and MCKs is the main cause of the behavior of Open Defecation. Of the 7 villages, there are several villages that already have adequate MCKs, but there are also several villages that have MCKs that are lacking so that people prefer to Defecate on the Beach. From the survey results, there are 35 MCKs in the Yembekiri Health Center working area, namely 8 MCKs in Yari-Yari village, 5 MCKs in Iseren village, 5 MCKs in Watitindau village, 3 MCKs in Yembekiri 1 village, 4 MCKs in Yembekiri II village, 5 MCKs in Yomakan village and 5 MCKs in Isenebuai village, but of the 35 MCKs, only a few are still actively used by the community, and some others are no longer suitable for use/damaged. The procurement of MCKs comes from village funds.

c. Funding

The results of in-depth interviews and observations with document reviews show that the source of funds for the procurement of public toilets comes from village funds. Village funds have a budget for the provision of public toilets, but in some villages village funds have not been used properly so that the procurement of toilets has not been realized.

d. Facilities and infrastructure

From the results of in-depth interviews and observations with document reviews, it was found that the lack of healthy toilets, MCKs and clean water facilities is one of the main factors in the behavior of Open Defecation in the Yembekiri Health Center Work Area. The lack of MCKs in various villages is the main complaint of the community even though clean water

facilities are still sufficient, From the survey results there are 35 MCKs in region. The work of the Yembekiri Health Center is 8 MCKs in Yari-Yari village, 5 MCKs in Iseren village, 5 MCKs in Watitindau village, 3 MCKs in Yembekiri 1 village, 4 MCKs in Yembekiri II village, 5 MCKs in Yomakan village and 5 MCKs in Isenebuai village, but of the 35 MCKs, only a few are still actively used by the community, and some of the others are no longer suitable for use/damaged. and in various other villages there are adequate private toilets and MCKs but there are obstacles with clean water facilities. The source of clean water for the community comes from river water which is quite far from the community's settlements so that to get clean water by pumping water using solar power. And if the sun is not hot, the water will not flow automatically so that the community will lack clean water, and another problem is that the clean water reservoir / tank is only 1 point and is not sufficient for the community's needs

### Process Components

#### a. Planning

The results of in-depth interviews and observations with document reviews found that planning related to the behavior of Open Defecation was carried out in accordance with the problems in the Yembekiri Health Center work area, namely the lack of healthy toilets/ MCK, lack of clean water facilities and habit factors. Planning carried out related to the behavior of Open Defecation was to coordinate with the village head in terms of adding public MCKs and procuring clean water and increasing counseling from the Yembekiri Health Center team in providing counseling about changing community behavior in an effort to achieve 100% proper sanitation related to the habit of defecating in the Yembekiri Health Center area, Teluk Wondama Regency, West Papua.

#### b. Implementation

The results of in-depth interviews and observations with document reviews found that the implementation was carried out in stages, namely coordinating with the village head and holding a Village Community Deliberation (MMD) in preparing the Village Fund budget for the addition of public MCKs and the provision of clean water. The decision of the Village Community Deliberation (MMD) regarding the addition of MCKs will be proposed to the Village Empowerment Service.

#### c. Monitoring and Evaluation

The results of in-depth interviews and observations with document reviews showed that the process hierarchical supervision is carried out in stages. The Village Head will monitor the budget plan that has been proposed to village empowerment.

### Product Components

#### a. Environmental pollution

The results of in-depth interviews and observations with document reviews found that the dirt that spreads on the beach can pollute the environment. Residential communities around the beach, bathing and defecating on the beach has become a habit. From the results of interviews, some people, especially children, bathe and defecate on the beach so that the water around the beach will be contaminated with human waste. In addition to the pollution

of water around the beach, the impact that can be caused is the emergence of odors around the beach.

b. The emergence of disease outbreaks

The results of in-depth interviews and observations with document reviews found that apart from environmental pollution, open defecation can cause various disease outbreaks such as Gastrointestinal tract infections, such as diarrhea, cholera, parasitic infections. The scope of diarrhea cases is the most common case found in the Yembekiri Health Center work area after ARI and malaria cases. The number of diarrhea cases in January - July 2024 was 58 cases. Poor sanitation also affects the high incidence of stunting. This has an impact on increasing the burden of disease and health costs, especially in areas with limited health resources such as West Papua.

**Discussion**

1. Context Components

The context component that is evaluated is the background.

The results of data collection showed that there were various underlying factors Open Defecation (BABS) behavior in the Yembekiri Health Center work area, namely:

a. Lack of healthy toilets

The results of data collection obtained that the main factor causing open defecation is the lack of healthy toilets so that people prefer to defecate in the open. This is in accordance with research Vatera Yulizar Arifin, (2023) on Analysis of Open Defecation Behavior and Environmental Sanitation in 13 Ulu Village, Palembang City In 2023, the results of the study showed that there was a lack of knowledge about Open Defecation Behavior and a lack of ownership of healthy toilets based on SNI. From the results of interviews and surveys in 7 villages in the Yembekiri Health Center work area, with 10 informants in each village, 26 families had private toilets, 25 families did not have toilets and 19 families used MCK. From the results of the study, the number of healthy toilet ownership is still very low and additional healthy toilets are needed to improve healthy living behavior and reduce Open Defecation Behavior in the Yembekiri Health Center work area.

**Table 1** Triangulation Matrix (Lack of Healthy Toilets)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	Lack of ownership of healthy toilets in the Yembekiri health center work area	A survey in 7 villages in the Yembekiri Health Center working area, with 10 informants in each village, found 26 families who had private toilets, 25 families who did not have toilets and 19 families who used MCK.	There are documents showing the number of people who have healthy toilets in the Yembekiri Health Center work area.	In the Yembekiri Health Center work area, ownership of healthy toilets is still lacking, 26 families have private toilets, 25 families do not have toilets and 19 families use public toilets.

b. Lack of clean water facilities

The results of data collection were obtained Lack of clean water facilities is one of the causes of Open Defecation in the Yembekiri Health Center work area. This is in accordance with Agus Triyono's research, on Factors related to the Defecation Behavior of Fishermen in Garapan Village, Tanjung Pasir Regency, Tangerang Regency, Banten Province, the results of the study showed that the availability of clean water facilities greatly influenced the behavior of Open Defecation. The availability of clean water facilities is one of the important elements that are needed in everyday life. Some people in the Yembekiri Health Center work area already have private toilets but the availability of clean water facilities is lacking so that people prefer to defecate indiscriminately, the source of clean water for the community comes from river water which is quite far from the community's settlement so that to get clean water by pumping water using solar power. And if the sun is not hot, the water will not flow automatically so that the community will lack clean water, and another problem is that the clean water reservoir / tank is only 1 point and is not sufficient for the community's needs. From these problems, the local government can increase water reservoirs/tanks so that the community's need for clean water can be met, and the behavior of defecating in the open can be reduced.

**Table 2** Triangulation Matrix (Lack of Clean Water Facilities)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	lack of clean water facilities in the Yembekiri Health Center work area	There is only 1 clean water reservoir/tank and it is not sufficient to meet the needs of the community in the Yembekiri Health Center work area.	There are documents showing the lack of availability of clean water facilities.	lack of availability of clean water facilities, there is only 1 clean water reservoir/tank and it is not sufficient for the needs of the community in the Yembekiri Health Center work area

c. Habit factor

The results of data collection found that habit factors were one of the causes of open defecation in the Yembekiri Health Center work area. This is in accordance with research Anisa and Widiyanti (2020) said that habits that are continuously practiced or carried out gradually will shape behavior. Budiman and Indiyani (2022) also said that defecating indiscriminately and not using a healthy toilet is one of the habits of individuals who imitate others, many people practice defecation indiscriminately because they imitate others. The behavior of defecating indiscriminately in the Yembekiri Health Center work area has become a habit of the community, especially children, and from the results of the interview it was stated that defecating on the beach is more comfortable than defecating in a healthy toilet. Some people already have private toilets but are not used properly and are even used as storage for goods, and feel that defecating on the beach is more practical. The habit of the community in terms of defecating indiscriminately has become commonplace for the local community, therefore health workers need to increase education about the importance of clean and healthy living.



**Table 3** Triangulation Matrix (Habit Factor)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	Habitual factors are one of the causes of open defecation in the Yembekiri Health Center work area.	The behavior of defecating indiscriminately in the Yembekiri Health Center work area has become a habit of the community, especially children. Defecating on the beach is more comfortable than defecating in a healthy toilet.	There are documents that show habits in BABS behavior.	BABS behavior has become a habit for people in the Yembekiri Health Center work area, especially children, and they feel more comfortable on the beach compared to defecating in healthy toilets.

## 2. Input Components

The input components evaluated include Human Resources, Infrastructure, Funding, facilities and infrastructure.

### a. Human Resources

The results of data collection showed that the community's human resources were inadequate, from the results of observations, the average community's work was farmers and fishermen where the community's income level was less than IDR 1,000,000 per month, so that ownership of private toilets was still lacking in the Yembekiri Health Center work area. This is in accordance with Nina's research (2019) which states that there is a significant relationship between human resources and open defecation behavior, lower incomes are 3.7 times more at risk for open defecation behavior. According to Zhang Et Al (2022) Biglow income will affect people's purchasing power to fulfill their living needs. Income as the ability of individuals or households to obtain goods and services, this ability is measured by the price level when obtaining goods or services. From the results of interviews and surveys in 7 villages in the Yembekiri Health Center working area, with 10 informants in each village, the average income level was obtained, including 9 families earning  $\geq$  Rp 2,000,000, 16 families earning Rp 1,000,000, and 45 families earning  $\leq$  Rp 1,000,000. The income level of the community is still below the UMR limit. so that private toilet ownership is still lacking in the Yembekiri Health Center work area, therefore it is necessary to add toilets in each village in order to improve clean and healthy living.

**Table 4** Triangulation Matrix (Human Resources)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	The human resources of the community in the Yembekiri Health Center work area are inadequate/still	The average income level of the community in the Yembekiri Health Center working area includes 9 families	There are documents showing the average occupation of the community of	The human resources of the community in the Yembekiri Health Center work area are not yet adequate for the work of the

below the minimum wage limit	with an income of $\geq$ Rp. 2,000,000, 16 families with an income of Rp. 1,000,000, and 45 families with an income of $\leq$ Rp. 1,000,000.	farmers and fishermen	community, most of whom are farmers and fishermen. 9 families have income $\geq$ Rp. 2,000,000, 16 families have income $\geq$ Rp. 1,000,000, and 45 families have income $\leq$ Rp. 1,000,000
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b. Infrastructure

The results of data collection found that the lack of infrastructure in this case healthy toilets and MCKs were the main causes of indiscriminate defecation behavior. This is in accordance with research Vatera Yulizar Arifin, (2023) on Analysis of Open Defecation Behavior and Environmental Sanitation in 13 Ulu Village, Palembang City In 2023, the results of the study showed that there was a lack of knowledge about Open Defecation Behavior and a lack of ownership of healthy toilets based on SNI. From the survey results, there were 35 MCKs in the Yembekiri Health Center work area, namely 8 MCKs in Yari-Yari Village, 5 MCKs in Iseren Village, 5 MCKs in Watitindau Village, 3 MCKs in Yembekiri Village 1, 4 MCKs in Yembekiri II Village, 5 MCKs in Yomakan Village and 5 MCKs in Isenebuai Village, but of the 35 MCKs, only a few are still actively used by the community, and some are no longer suitable for use/damaged. From the survey results, there was a lack of infrastructure, in this case healthy toilets, therefore it is necessary to add healthy toilets based on SNI,

**Table 5** Triangulation Matrix (Infrastructure)

No	In-depth Interview	Observation	Secondary Data	Conclusion
1	Lack of infrastructure in this case healthy toilets and MCK is the main cause of the behavior of defecating in the Yembekiri Health Center work area.	There are 35 MCKs in the Yembekiri Health Center working area, namely 8 MCKs in Yari-Yari village, 5 MCKs in Iseren village, 5 MCKs in Watitindau village, 3 MCKs in Yembekiri 1 village, 4 MCKs in Yembekiri II village, 5 MCKs in Yomakan village and 5 MCKs in Isenebuai village, but of the 35 MCKs, only a few are still actively used by the community, and some of the others are no longer suitable for use/damaged.	There are documents showing the lack of toilets in the Yembekiri Health Center work area.	Lack of infrastructure In the Yembekiri Health Center work area, there are 35 toilets, namely 8 MCKs in Yari-Yari village, 5 MCKs in Iseren village, 5 MCKs in Watitindau village, 3 MCKs in Yembekiri 1 village, 4 MCKs in Yembekiri II village, 5 MCKs in Yomakan village and 5 MCKs in Isenebuai village, but of the 35 MCKs

c. Funding

The results of data collection showed that the source of funds for the procurement of MCK came from village funds. Village funds have a budget for the provision of public MCKs. This is different from Rati Alpita's research, (2021) on the MCK (Bathing, Washing, Toilet) facility procurement program for Bago mustahik in Zakat Village, Sido Mulyo Village, Seluma Selatan District, Seluma Regency, Bengkulu Province. In 2021, the results of the study showed that funding for the procurement of MCKs was collected from related institutions, sponsors and Seluma District, Seluma Regency, Bengkulu Province, community self-help around Zakat Village, Sido Mulyo Village. However, in several villages in the Yembekiri Health Center working area, village funds have not been utilized properly so that the procurement of MCKs has not been realized, therefore supervision is needed from related parties in checking the procurement of MCKs.

**Table 6** Triangulation Matrix (Funding)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	The source of funds for the procurement of toilets and washrooms comes from village funds.	In several villages in the Yembekiri Health Center working area, village funds have not been utilized properly so that the provision of toilets and bathrooms has not been realized.	There is a document stating that the source of funds for the procurement of toilets and washrooms comes from village funds.	The source of funds for the procurement of toilets in the Yembekiri Health Center work area comes from village funds, but in several villages the village funds have not been utilized properly so that the procurement of toilets has not been realized.

d. Facilities and infrastructure

The results of data collection obtained that the lack of healthy toilets, MCK and clean water facilities are one of the main factors in the behavior of Open Defecation in the Yembekiri Health Center Work Area. The lack of MCK in various villages is the main complaint of the community even though clean water facilities are still sufficient. This is in accordance with the study Vatera Yulizar Arifin, (2023) on Analysis of Open Defecation Behavior and Environmental Sanitation in 13 Ulu Subdistrict, Palembang City. In 2023, the results of the study showed that there was a lack of knowledge about open defecation behavior and a lack of ownership of healthy toilets based on SNI. In various other villages, there are adequate private toilets and MCKs but there are obstacles with clean water facilities. This is in accordance with Agus Triyono's research on Factors related to the Defecation Behavior of Fishermen in Garapan Village, Tanjung Pasir Village, Tangerang Regency, Banten Province, the results of the study showed that the availability of clean water facilities greatly influences the behavior of defecating in the open. The availability of clean water facilities is one of the important elements that are very much needed in everyday life, therefore the importance of

adding facilities and infrastructure to improve healthy and clean living behavior and can reduce community behavior in terms of defecating in the open

**Table 7** Triangulation Matrix (Facilities and Infrastructure)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	The lack of healthy toilets, MCK and clean water facilities is one of the main factors in the behavior of open defecation in the Yembekiri Health Center Work Area.	The lack of toilets in various villages is the main complaint of the community even though clean water facilities are still sufficient.	There are documents showing the lack of toilets in the Yembekiri Health Center work area.	The lack of healthy toilets, MCK and clean water facilities is one of the main factors in the behavior of open defecation in the Yembekiri Health Center Work Area.

### 3. Process Components

The process components that are evaluated include planning, implementation, monitoring and evaluation.

#### a. Planning

Planning begins with the preparation stage by conducting a survey and direct interviews with the community about toilet ownership and other factors that influence the behavior of Open Defecation. Continued with the situation analysis stage by studying Pis-Pk data or documents about the problems in the Yembekiri Health Center work area, especially regarding the behavior of Open Defecation which is still relatively high. After that, it continued to the problem formulation stage. Then coordination was carried out with the village head regarding the high cases of Open Defecation and the lack of public toilets. Continued with the Village Community Deliberation (MMD) and the results of the Deliberation were proposed to the Village Empowerment Service. According to Ro'is Alfauzi (2019) regarding the use of village funds in underdeveloped areas Based on the Regulation of the Minister of Villages, Development of Underdeveloped Regions and Transmigration Number 19 of 2017 concerning the priority use of Village Funds, the results of the study show that the problem of using village funds in underdeveloped areas has a level of priority scale of human needs. According to researchers, planning at the village level has been effective because it is in accordance with the stages and is based on existing problems.

**Table 8** Triangulation Matrix (Planning)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	Carrying out structured and mature planning to reduce BABS behavior	Coordinate with the village head about the high level of BABS behavior and continue with MMD, and the results of the MMD are proposed to the relevant	There are documents showing that there was a Village Community deliberation that discussed the high level of BABS	There is a Village Community Deliberation that discusses the high behavior of BABS and planning for the procurement of MCK and the results of the MMD are

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agency? Village Empowerment Agency behavior and proposed to the relevant Agency? Village Empowerment Agency planning for the provision of MCK.

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b. Implementation

The results of data collection obtained that the implementation will be coordinated with the village head regarding the high cases of Open Defecation and the Lack of Public Toilets. Continued with the Village Community Deliberation (MMD) and the results of the Deliberation are proposed to the Village Empowerment Service. According to Ro'is Alfauzi (2019) regarding the use of village funds in underdeveloped areas Based on the Regulation of the Minister of Village Development of Underdeveloped Regions and Transmigration Number 19 of 2017 concerning the priority use of Village Funds, the results of the study show that the problem of using village funds in underdeveloped areas has a level of priority scale of human needs.

However, in the implementation of the use of village funds has not been used properly. This requires intensive supervision from the leadership of the Village Empowerment Service to ensure that the program runs according to plan. And for the future, a better strategy is needed so that this program can run as expected.

**Table 9** Triangulation Matrix (Implementation)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	Implementation will be carried out in coordination with the village head regarding the high number of cases of open defecation and the provision of toilets and toilets.	The use of village funds has not been used properly in terms of procuring toilets and bathrooms.	There are documents showing the lack of toilets in the Yembekiri Health Center work area.	The use of village funds has not been maximized, as well as the lack of provision of toilets and bathrooms.

c. Monitoring and Evaluation

According to researchers, the implementation of the components of the evaluation and monitoring process of Open Defecation behavior has been effective because the monitoring of the budget plan involves the village head and related agencies, namely the Village Empowerment Agency. So that the procurement of MCK can be realized and by fulfilling the needs of the community in terms of MCK procurement, it can change the behavior of Open Defecation in the Yembekiri Health Center Work area, Teluk Wondama Regency. The principle for achieving effective coordination is effective leadership and supervision. Through the leadership of the regent, it can have a direct impact on the implementation of coordination at the planning and implementation stages. Monitoring and evaluation need to be improved and supervision more effective.

**Table 10** Triangulation Matrix (Monitoring and evaluation)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	Process monitoring and evaluation are carried out in stages.	Monitoring of the budget plan involves the village head and related agencies, namely the Village Empowerment Agency.	There are no documents showing the involvement of the Village Empowerment Service	Monitoring and evaluation are carried out in stages involving the village head and related agencies, namely the Village Empowerment Agency.

#### 4. Product Components

The results of in-depth interviews and observations with document reviews obtained the following product components:

##### a. Environmental pollution

From the results of the interview, some people, especially children, bathe and defecate on the beach so that the water around the beach will be contaminated with human waste. In addition to the pollution of water around the beach, the impact that can be caused is the emergence of odors around the beach. This study is in accordance with the research of Rahma Kairun (2023) Social Construction of Society towards the Action of Open Defecation (BABS) in Tambakaji Village, Ngalyan District, Semarang City in 2023. The results of the study showed that Open Defecation Behavior can cause environmental pollution, dirt that spreads in the water can affect the quality of life. The results of the interview with the Head of Yembekiri I Village revealed that Open Defecation Behavior has become a habit of the community, especially children, so that the water around the beach will be contaminated with human waste. Therefore, health workers should increase education and provide an understanding to the community about the impact of Open Defecation Behavior.

**Table 11** Triangulation Matrix (Environmental Pollution)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	The behavior of defecating in the open can cause environmental pollution, with feces spreading in the water.	Some people, especially children, bathe and defecate on the beach so that the water around the beach will be contaminated with human waste.	There are documents that show community behavior regarding open defecation which can cause environmental pollution.	Indiscriminate defecation behavior, especially among children, can cause environmental pollution.

##### b. The emergence of disease outbreaks

The results of the study indicate that indiscriminate defecation behavior, in addition to causing environmental pollution, can also have an impact on health. Human waste that is not disposed of in its place (septic tank) can pollute the environment and can become an outbreak

of disease transmission in humans. Human waste containing pathogens and when exposed to food, drinks and flies causes diarrhea, dysentery, etc. This study is in accordance with Tarigan's research (2008) Diseases caused by human waste can be divided into three, namely: first, energetic disease or digestive tract disease that occurs due to contamination of toxic substances. Second, infectious diseases caused by viruses such as infectious hepatitis, and third, worm infections such as schistosomiasis ascariasis and ankylostomiasis. The scope of diarrhea cases is the most common case found in the Yembekiri Health Center work area after cases of ARI and malaria. The number of diarrhea cases in January - July 2024 was 58 cases. Poor sanitation also affects the high incidence of stunting. This has an impact on increasing the burden of disease and health costs, especially in areas with limited health resources such as West Papua.

**Table 12** Triangulation Matrix (Emergence of Disease Outbreaks)

No	In-depth Interview	Observation	Data Secondary	Conclusion
1	Indiscriminate defecation behavior can cause various disease outbreaks such as digestive tract infections, such as diarrhea, cholera, parasitic infections.	Human waste contains pathogens and when exposed to food, drink and flies causes diarrhea and dysentery.	There are documents showing that the coverage of diarrhea cases is the most common case found in the Yembekiri Health Center work area. The number of diarrhea cases in January - July 2024 was 58 cases.	Indiscriminate defecation behavior can cause various disease outbreaks. The scope of diarrhea cases is the most common case found in the Yembekiri Health Center work area. The number of diarrhea cases in January - July 2024 was 58 cases.

## CONCLUSION

Analysis of Community Behavior Change Strategy in Open Defecation Behavior includes the components of Context, Input, Process and Product. It is known that the implementation of these components has not all been effective. This study shows in the Context component; The main factor causing open defecation is the lack of healthy toilets so that people prefer to defecate in the open. From the results of interviews and surveys in 7 villages in the Yembekiri Health Center work area, with 10 informants in each village, 26 families were found to have private toilets, 25 families did not have toilets and 19 families used public toilets. Lack of clean water facilities is one of the causes of indiscriminate defecation, so that people choose to defecate indiscriminately. Some people in the Yembekiri Health Center work area already have private toilets, but the availability of clean water facilities is lacking, so people prefer to defecate indiscriminately, input components; community human resources are inadequate, from the results of observations of community work, the average is farmers and fishermen where the level of average income among them 9 families earn  $\geq$  Rp 2,000,000, 16 families earn Rp 1,000,000, and 45 families earn  $\leq$  Rp 1,000,000. The income level of the community is still below the UMR limit so that the ownership of private toilets is still lacking in the

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Analysis of Community Behavior Change Strategy in Open Defecation Behavior in the Work Area of Yembekiri Health Center, Teluk Wondama Regency, West Papua—Herlinda Sesa

Yembekiri Health Center work area, Lack of infrastructure in this case healthy toilets and MCK is the main cause of the behavior of Open Defecation. Of the 7 villages, there are several villages that already have adequate MCKs, but there are also several villages that lack MCKs so that people prefer to Defecate on the Beach. From the survey results, there are 35 MCKs in the Yembekiri Health Center working area, namely 8 MCKs in Yari-Yari village, 5 MCKs in Iseren village, 5 MCKs in Watitindau village, 3 MCKs in Yembekiri 1 village, 4 MCKs in Yembekiri II village, 5 MCKs in Yomakan village and 5 MCKs in Isenebui village, but of the 35 MCKs, only a few are still actively used by the community, and some others are no longer suitable for use/damaged. Funding has not been effective in the use of village funds, in several villages in the Yembekiri Health Center work area, village funds have not been utilized properly so that the provision of toilets and bathrooms has not been realized, Facilities and Infrastructure have not been effective. The lack of toilets and bathrooms in various villages is the main complaint of the community even though clean water facilities are still sufficient and so in various other villages there are private toilets but clean water facilities are lacking so that people prefer to defecate on the beach, From the survey results, there are 35 MCKs in the Yembekiri Health Center working area, namely 8 MCKs in Yari-Yari village, 5 MCKs in Iseren village, 5 MCKs in Watitindau village, 3 MCKs in Yembekiri 1 village, 4 MCKs in Yembekiri II village, 5 MCKs in Yomakan village and 5 MCKs in Isenebui village, but of the 35 MCKs, only a few are still actively used by the community, and some others are no longer suitable for use/damaged. and in various other villages there are adequate private toilets and MCKs but there are obstacles with clean water facilities. Process Components; planning at the village level has been effective because it is in accordance with the stages and is based on existing problems, lack of clean water facilities and habit factors. Planning carried out related to the behavior of Open Defecation is to coordinate with the village head in terms of adding public MCKs and procuring clean water and increasing counseling from the Yembekiri health center team in providing counseling about changing community behavior in an effort to achieve 100% proper sanitation related to the habit of defecating in the open, implementation is carried out in stages, namely coordinating with the village head and holding a Village Community Deliberation (MMD) in preparing the Village Fund budget for the addition of public MCKs and the provision of clean water. The decision of the Village Community Deliberation (MMD) regarding the addition of MCKs will be proposed to the Village Empowerment Service. The components of the evaluation and monitoring process for the behavior of Open Defecation have been effective because the monitoring of the budget plan involves the village head and related agencies, namely the Village Empowerment Service. Product Component; Environmental pollution is still a problem in the work area of the Yembekiri Health Center. The behavior of Open Defecation has become a habit of the community, especially children, so that the water around the beach will be contaminated with human waste. The emergence of disease outbreaks, indiscriminate defecation behavior has a major impact on health, the scope of diarrhea cases is the most common case found in the Yembekiri Health Center work area after cases of acute respiratory infection and malaria, the number of diarrhea cases in January - July 2024 was 58 cases and poor sanitation also affects the high incidence of stunting.



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