

Overview of Ownership and Access of Latrines with Spatial Applications in Kalumbuk Village of Kuranji Health Center Work Area Year 2020

Mahaza Mahaza¹, R.Firwandri Marza², Sri Lestari Adriyant², Ichlasul Arby²

¹Department of Enviromental Health, Poltekkes Kemenkes Padang, Indonesia

²Department of Environmental Sanitation, Poltekkes Kemenkes, Padang, Indonesia

*Corresponding : Email : mahaza1972@gmail.com

ABSTRACT

The National Community Based Total Sanitation Strategy (STBM) is an integrated action to reduce the incidence of diarrhea and improve Indonesian people's hygiene and quality of life. Toilet ownership and use is one indicator of the Clean and Healthy Behavior (PHBS) program in the household setting. This study aims to determine access, ownership and spatial ownership of restrooms in the working area of the Kuranji Community Health Center, especially Kalumbuk in digital form. To establish 100% ODF in the Kalumbuk Kelurahan, the Kuranji Community Health Center. This type of research is descriptive. The population is 201 families in Kalumbuk Sub-district, the Kuranji Community Health Center, Kuranji District, Padang City in the 01 Community Pillars and the 02 Community Pillars. Digitizing techniques are used to determine the distribution of pit latrine and latrine access. In the results of this study, 75% of families had restrooms in Rukun Warga 01, and Rukun Warga 02 as many as 89% of families had a toilet. All residents in Kalumbuk Urban Village in the 01 Community Pillars and the 02 Community Pillars have access to the toilet 100%. Spatial data of people who already have a toilet are marked with a blue dot. Those who have access to the bathroom are marked with a purple dot with classification to the Mosque / Mushalla, and Red is a family that has access to the house of relatives/sharing. on the Spatial Map of the Distribution of Latrine Ownership and Access in Kalumbuk Village, the Work Area of the Kuranji Health Center in 2020

Keywords: *Spatial, Toilet*

1. INTRODUCTION

Spatial Application of Latrine Ownership with the Concept of Geographic Information System (GIS) is an essential role in spreading disease and others. Geographic Information System (GIS) is a facility that provides a mapping program that it can use to record various conditions and so on. However, in this study, the Spatial Application was used to determine the ownership of the restroom in the working area of the Kuranji Health Center, namely Kalumbuk Village. Based on the 2019 Community-Based Total Sanitation (STBM) data, West Sumatra is in position 17 of 34 provinces in Indonesia with access 79.78% and non-access 20.22%, from 11 Districts in Padang City, Kuranji District is in position 6 with 96.21% access and non-access 3.79% [1,2,3]

Access and Padang City has 19 Puskesmas; Kuranji Health Center is in 14th position with 95.81% access and 4.19% non-access. Kuranji District has three health centres: Ambacang Health

Center, Belimbing Health Center, and Kuranji Health Center. Based on data, Ambacang Health Center has 97.03% access and 2.97% non-access, Belimbing Health Center has 95.4% access and 4.6% non-access, Kuranji Health Center has 95.81% access and 4.19% non-access.¹² Based on the results obtained, Kuranji Health Center is in second place after Ambacang Health Center. The working area of the Puskesmas consists of 2 Kelurahan, namely Kelurahan [4,5]

Based on data, Ambacang Health Center has 97.03% access and 2.97% non-access, Belimbing Health Center has 95.4% access and 4.6% non-access, Kuranji Health Center has 95.81% access and 4.19% non-access.¹² Based on the results obtained, Kuranji Health Center is in second place after Ambacang Health Center. The working area of the Puskesmas consists of 2 Kelurahan, namely Kalumbuk and Korong Gadang Villages, and the author is interested in research in one of the Kuranji Health Center work areas, namely Kalumbuk Village. Judging from the Kuranji District Health Center data in 2019, there were 839 families in Kalumbuk Village.

Those who already have access to closed latrines are 444 families, while those with open latrine access are 272 families, and those who do not have latrine ownership are 123 families [6,7,8]. The Padang City Health Office has announced to the entire Padang City Health Center working area for 100% Open Defecation Free (ODF) in 2020, including Kalumbuk Village, the Kuranji Health Center working area, to support the implementation of the 100% ODF mapping. Geographic Information Systems (GIS) has been used to map diseases such as Diarrhea, Dengue Hemorrhagic Fever (DHF), Malaria, etc [8,9,10,11]. However, there has never been researched that aims to map latrine ownership and access to restrooms, even though it is beneficial as a supporter of Open Defecation Free (ODF) activities, which aims to describe which areas have not been Open Defecation Free (ODF) and where to access restrooms. It will be useful for the success of the Open Defecation Free (ODF) activity launched by the Padang City Health Office, especially the working area of the Kuranji Health Center, namely Kalumbuk Village. Based on the description of the background above, the author is interested in researching "Ownership and Access to Toilets with Spatial Applications in Kalumbuk Village, Kuranji Health Center Working Area in 2020".

2. METHODS

This type of research is descriptive, and it was conducted in Kalumbuk Village Kuranji district of Padang city in May 2020. Population as many as 201 KK from Rukun Warga 01 and Rukun Warga 02. Sampling-based on the Simple Random Sampling method with plotting techniques. Data processing uses ArcGIS spatial program applications.

The data analysis in this study was done by observations obtained and then overlaid on the map and presented the coordinate points of ownership and access latrines with colour/point points.

3. RESULTS

3.1. Ownership of latrines in Kalumbuk Village of Kuranji Health Center Work Area

From the observations made in the area of Rukun Warga (RW) 01 and Rukun Warga (RW) 02 Kalumbuk Village in 2020, it was showed in table 1.

Table 1. Number of Latrines Ownership in Kalumbuk Village 2020

No	Get Along with	Akses Restroom		Total
		Toilet Masjid / Mushalla	Sharing	
1	01	3	19	22
2	02	2	10	12
Total		34		34

Table 1 showed that RW 01 and RW 02 Kalumbuk Village, the number of families who have latrines is 167 or 83% of families already have toilets. Those who don't have a restroom are 34 families.

Access latrines in Kalumbuk Village Kuranji Health Center Work Area

The observations made in Rukun Warga (RW) 01 and Rukun Warga (RW) 02 have reached 100% access because there are no more families/residents who defecate carelessly in Kalumbuk Village in 2020, as been shown in table 2.

Table 2 Number of Latrines Ownership Access Latrines in Kalumbuk Village

No	Get Along with	Latrine		Total
		Having	No	
1	01	69	22	91
2	02	98	12	110
Total		167	$\frac{3}{4}$	201

Kuranji Health Center Working Area 2020

From Table 2, it can be explained that there are no more families/residents who defecate carelessly; the intended access is the Toilet Of Mosque / Mushalla and Sharing. Sharing is access to defecation by hitchhiking to the homes of relatives/neighbours. Because there are no more families/residents who defecate carelessly, Rukun Warga 01 and Rukun Warga 02 is 100% ODF.

3.2 Spatial Ownership and Access of Latrines in Kalumbuk Village of Kuranji Health Center Work Area

a. Latrines ownership

From Table 1, the distribution of the number of latrines ownership in Kalumbuk Village of Kuranji Health Center Work Area can be explained on the following map:

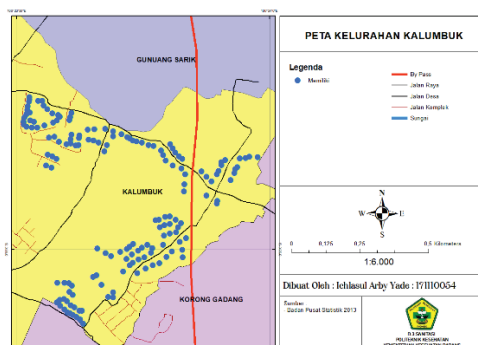


Figure 1. Spatial Map of Distribution of Ownership in Kalumbuk Village Kuranji Health Center Working Area 2020

From the picture above can be explained the blue dot indicates families who have latrines on Rukun Warga 01 and Rukun Warga 02. With a total of 167 or 83% of families who already have latrines.

Akses Lantirine

From Table 2 Distribution of the number of restrooms accessed in Kalumbuk Village Kuranji Health Center Work Area can be explained on the following map:

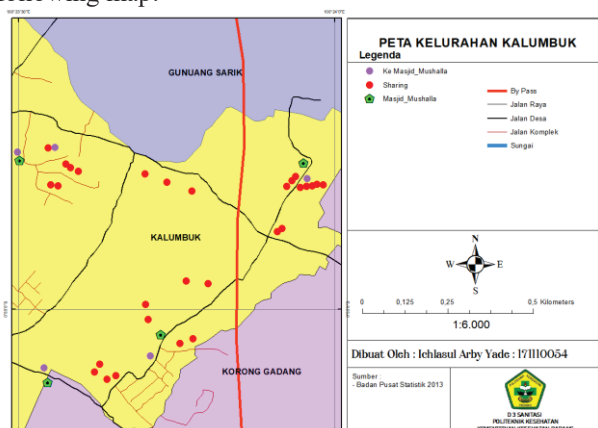
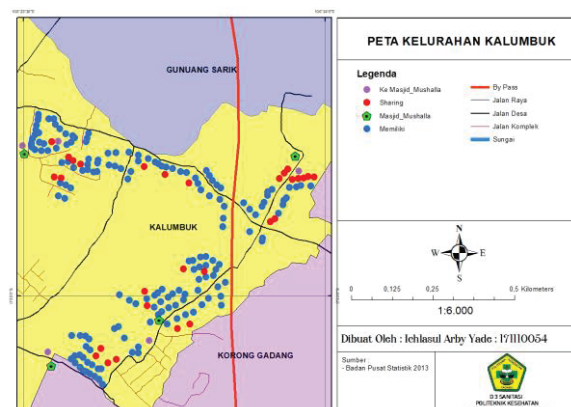


Figure 2. Spatial Map of Latrines Acces Distribution in Kalumbuk Village Kuranji Health Center Working Area 2020

The picture can explain the image above in Rukun Warga 01 and Rukun Warga 02. The purple dot indicates the family accessing the restrooms to the Mosque / Mushalla, which is marked in green with a black dot in the middle. And the colour red is a family whose access to restrooms is shared with family homes/neighbours that can be expressed with 100% ODF.

a. Spatial Ownership and Access of Latrines



A picture 3. Distribution Map of Ownership and Access latrines Kalumbuk Village in 2020

From the picture above, it can explain that families who have latrines are marked in blue. In contrast, the colours red and purple demonstrate latrines' access with purple colour indicating families whose access to the Mosque / Mushalla and the red colour shows families whose access to restrooms hitchhike/share to the family house/relatives.

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4. DISCUSSION

4.1. Latrines ownership

The results of table 1 study explained that the ownership of latrines in Kalumbuk Village of Kuranji Health Center is more owned by RW 02, which is as many as 98 families or 89%, and as many as 12 residents who do not have restrooms.

While in RW 01, which already has restrooms, there are as many as 69 families 75%. They don't have 22 people. The national percentage for restrooms ownership in 2020 is 100%, while in Rukun Warga 01, 75% of families have bathrooms, and in Rukun Warga 02 is, 89% of families have restrooms.

While in RW 01, which already has restrooms, there are as many as 69 families 75%. They don't have 22 people. The national percentage for latrines ownership in 2020 is 100% while in Rukun Warga 01 is 75% of families have latrines and in Rukun Warga 02 is 89% of families who have latrines.

From the above, it can be seen that, although there are still residents who do not have latrines, there are no more residents who bab indiscriminate places. Possibly because of the support of village officials, Posyandu cadres and Non-Governmental Organizations (NGOs) or Health Center officers in the form of invitations, appeals or information about environmental health so that people want to behave in a clean and healthy life [11,12,13,14,15]

Among them is to use latrines as a means of family defecation both own, together and general latrines. But Rukun Warga 01 and Rukun Warga 02 can be declared 100% ODF because there are no more families/residents who defecate [16,17,18].

1. Latrines access

The results of Table 2 research explained that access to restrooms in Kalumbuk Village of Kuranji Health Center Work Area 34 families use latrines access. In RW 01, three families use latrines access to Mosque / Mushalla, and 19 families in RW 01 have access to restrooms sharing. And in RW 02, two families have access to restrooms to Masjid/Mushalla, and ten families have access to latrines sharing. And it can be declared 100% because no family/citizen defecates. Decree No. 3 of 2014 on Community-Based Total Sanitation explained a general monitoring mechanism to achieve 100% KK has a healthy latrine. But in this case, 100% of KK has access to restrooms.

2. Spatial Distribution of Latrines Ownership and Latrines Access

Based on the study results, in Figure 5, many residents in Kalumbuk Village of Kuranji Health Center Working Area have latrines marked with blue dots. However, residents still do not have restrooms marked with red dots. Where people don't have bathrooms, the green dot with black in the middle is a family that uses latrines access to musholla or sharing / hitchhiking with relatives/relatives.

Each of the sums of latrines ownership per RW in the village is done spatial analysis processed in the application of space using ArcGis software after which overlay is done and produces a map called Spatial Map Distribution Ownership and Access of Latrines in Kalumbuk Village Of Kuranji Health Center Working Area in 2020

From the results of research conducted by researchers can be explained that the village of kalumbuk Kuranji Health Center work area is no longer a resident who defecate carelessly. However, there are still residents who do not have restrooms, but they have tried to hitchhike to the homes of relatives/relatives or musholla. So there is no longer a possibility of citizens getting diseases such as DENGUE, malaria, diarrhea, etc.

But it is still required for citizens always to maintain clean and healthy living behaviours. Citizens must remain vigilant against disease transmission by taking prevention and control of risk factors that allow the risk of disease transmission.

5. CONCLUSIONS

Based on the research, it can be concluded as follows: Most kalumbuk village communities in Rukun Warga 01 and Rukun Warga 02 already have

latrines, In Rukun Warga 01 as many as 69 families or 76%, and RW 02 as many as 98 families or 98%. Jamban Access to The Village Community of Kalumbuk Kuranji District in 2020 in Rukun Warga 01 and Rukun Warga 02 is 100%.

And it can be declared 100% ODF because there are no more residents who defecate carelessly.

Spatial data obtained in the form of access for those who do not have a restroom is to the Toilet of the Mosque / Mushalla, or the house of the temple/brother, marked by a purple dot is a citizen whose access latrines to the Toilet of the Mosque / Mushalla. The red dot indicates the residents whose access latrines were shared to the house of relatives/relatives on the Spatial Map of The Distribution of Ownership and Access Jamban in Kalumbuk Village Of Kuranji Health Center Working Area in 2020. For Puskesmas Kuranji is expected to improve the Extension Program on Latrines by Sanitarian Energy to Increase Public Knowledge and improve the triggering program, especially on the first pillar by sanitarian workers to change people's behaviour to make/establish latrines [19,20,21,22,23].

The community is expected to increase the knowledge of families/citizens to pay more attention to clean and healthy living behaviours and increase understanding about the importance of restrooms so that the community avoids various diseases.

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