Conference Paper

Analysis of Sand Mineral Health Status in Batang Kuranji River Kota Padang Th 2018

Mahaza and Awaluddin

Abstract

According to Hendrik L, there are four factors that affect the health status of the public and individual. These factors can be described as follows: (1) Environment, (2) Behavior, (3) Health services, and (4) Descendants. Rivers usually are the main source of water for residents' daily needs such as bathing and washing. Batang Kuranji has been a source of livelihood for the community for decades, such as mining sand, stone, and gravel as materials for development. From the initial survey that the author did on three sand miners, it turned out that two of them were 55 years old, have five children, of which three are toddlers; another person is a 16-year-old teenager who does not continue school anymore and has only completed elementary school (SD). This determination aims to describe the health status of the sand miners of the Batang Kuranji River in Padang City. The results of the study showed that the condition of the environmental health of the sand fishermen was still poor because 75% of the sand miners did not have sanitary toilets, and 80% did not have a proper understanding of personal hygiene. So, 95% of sand miners smoke in their homes, 75% like to stay up late. Health Service Factors Ownership of BPJS cards and health counseling Ownership of BPJS cards: 55% of the miners did not have BPJS and 62% of the cardholders have never received health counseling from health workers. Heredity/Heredity factor of 35% has been the second generation and 10% of the third generation has worked in sand mining. As a suggestion for Puskesmas Parties to further improve the health service programs, health agencies provide guidance programs to government officials such as RT/RW to pay more attention to the sand mining community by providing and involving these community groups in improving improve their health status such as livestock and other businesses to support the family economy. Further research needs to be done on more complete variable health variables.

Keywords: Health Status, Sand Miner, Batang Kuranji River

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1. Preliminary

Factors that affect the status of the health status of the public or individual. These factors can be described as follows: (1) Environment, Environment has an influence and the biggest role is followed by behavior, health facilities and offspring. The environment varies greatly, generally classified into three categories, namely those relating to physical and social aspects. Environment related to physical aspects such as garbage, water,

air, land, engineering, housing, and so on. Whereas the social environment is the result of interactions between humans such as culture, education, economy, and so on

(2) Behavior, Behavior is the second factor that influences the degree of public health because the health or non-health of the environment of the individual, family and community is very dependent on human behavior itself. In addition, it is also influenced by habits, customs, habits, beliefs, socio-economic education, and other behaviors inherent in him.

(3) Health services, Health services are the third factor that influences the health status of the community because the existence of health facilities is crucial in health recovery services, prevention of diseases, treatment and nursing as well as groups and communities that need health services. Availability of facilities is influenced by location, whether it can be reached or not. The second is the health service provider, information and motivation of the community to come to the facility in obtaining services and health service programs themselves, whether it is in accordance with the needs of the community in need. (4) Descendants, descendants (genetic) are factors that have existed in humans who were born from birth, for example from a group of hereditary diseases such as diabetes mellitus.

Watershed (DAS) is a rainwater catchment area that functions to receive, store and drain rainwater into a river network system.

Upstream river is the highest part of the river channel and is the beginning of the source of water entering the river. Downstream is the lowest part of the river channel and is closest to the river mouth. The river regime is the difference in the maximum river water level in the rainy season and the minimum limit of river water in the dry season. River water discharge is the amount of water flowing at a certain location on a river per unit time (m3 / second).

A number of sand and stone miners took stones to put in trucks at the base of the Batang Kuranji river which is currently dry in Korong Gadang, Padang, West Sumatra, Monday (16/2). Entering the dry season, sand and stone miners have difficulty finding sand mixed with gravel for building materials.

After the flash flood, the waters of the Batang Kuranji River in Pauh District, Padang City, West Sumatra, were very dirty on Wednesday (7/25). Flash floods have brought rubbish and eliminated the usual rocks that adorn the river. In fact, this river is usually the main source of water for residents' daily needs such as bathing and washing. Batang Kuranji has been a source of livelihood for the community for decades, such as mining sand, stone and gravel as material for development. From the initial survey that the author did on 3 sand miners, it turned out that 2 people were 55 years old. have

5 children and 3 from their children are toddlers, one more person is a 16-year-old teenager who does not continue school anymore and only completes elementary school (SD). Judging from the physical condition of the skin. Already a heavy smoker and physically looking older than his age.

So to know more clearly about the description of the health status of sand miners, this research is very important because this condition has been going on from generation to generation. This research was conducted with the title ”Analysis of the Health Status of Sand Miners on the Batang Kuranji River in Padang City”

the formula for the problem behind this research in general is

a. Batang Kuranji River is an economic source for generations of sand miners.

b. Sand miners do not pay attention to personal hygiene so that environmental-based diseases such as skin diseases, diarrhea, etc. occur

c. Environmental conditions of sand miners: weak economic conditions, social environment

2. Purpose

2.1. General purpose

The general objective in this study is the Analysis of the Health Status of the sand miners of the Batang Kuranji River in Padang City

2.2. Special purpose

While specifically this study aims to find out an overview of the health status of sand traders on 4 factors:

1) Description of environmental factors (social, economic and cultural) sand miners in Batang Kuranji River, Padang City

2) Overview of Factors Healthy behavior and behavior of sick sand miners in Batang Kuranji River, Padang City

3) Overview of Health Service Factors (Puskesmas) for Sand Miners on the Batang Kuranji River in Padang City

4) Description of Heredity Factors to be sand miners from Generation to Generation.

2.3. Benefits of Research

This research will be useful:

1) For the Padang Ministry of Health Polytechnic especially as an area around the campus as a Patronage area.

2) For Local Governments, especially the Kelurahan as an input in activities to improve people's lives that are often forgotten.

3) For the Nanggalo Health Center for health service activities that have been forgotten frequently

While the scope of this study is a description of environmental factors (social, economic and cultural), healthy behavioral factors and pain behavior of sand miners on the Batang Kuranji River in Padang City, Health Service Factors (Puskesmas) and heredity factors to become sand miners from Generation to Generation Sand Miners along the Batang Kuranji River in Padang City

3. Research Methods

The method used in the research is Descriptive Method to see and analyze environmental, behavioral, service and offspring factors to become sand miners on the Batang Kuranji River

Time and Place of Research

In accordance with the predetermined Schedule of the Ministry of Health's Polytechnic Calendar in 2017, this research will be carried out from June to November 2017 (the six-month schedule attached). The research was conducted in 3 locations for mining sand, stone and gravel in the Batang Kuranji River, Padang City.

C. Population and sample

The population is that all people who work as sand miners in the river flow of the Kuranji stem according to the survey amounted to 40 people, all populations were used as research samples.

3.1. Data Collection Techniques

3.1.1. Data Types

a. Primary data

Primary data is data obtained or collected directly from the source through a questionnaire about the condition of the river environment and the health conditions of the sand miner

b. Secondary Data

Data obtained by the Health Office or Puskesmas in accordance with the river flow work area on environmental-based diseases, Water Resources Office of Padang City Research Instrument

The conceptual framework is a continuation of the theoretical framework adapted to the specific objectives of the research to be achieved, which is in accordance with what has been written in the formulation of the problem (Machfoeds, 2009)

Chart 3.1 Theoretical Framework. Hedriq L. Bloum.

4. Results

4.1. Characteristics of Respondents

4.1.1. Age

Table 1

NO.	Age	Amount	Percentage
1.	Under 17 years old	3	7.5
2.	17 th s/d 40 years	30	75
3	Above 40 Years	7	17.5
	Amount	40	

4.1.2. Level of education

Table 2

NO.	Education	Amount	Percdentage
1	SD/SLTP	23	57,5
2	SMA/PT	17	42.5
	amount	40	100

4.1.3. Marital status

4.1.4. Number of children

Table 3

NO.	STATUS	Amount	Percentage
1	Single	3	7.5
2	Marrige	32	80
3	Widower	5	12,5
	Amount	40	100

Table 4

NO.	Number of Chlidren	Amount	Persntage
1.	1 person	11	27.5
2.	≥ 2 people	13	32.5
3	Doesnt Have	16	.40
	Amount of	40	100

4.2. Environmental Factors

Environmental Health (Sanitation Facilities at home)

4.2.1. Toilet / WC

Table 5

NO.	Toilet/WC	Amount	Persentage
1.	Do Not have	30	75
2	Have it	10	25
	Amoutn	40	100

4.2.2. Clean water

Table 6

NO.	Clean Water Source	Amount	Persentage
1.	Well Dig	20	50
2	River water	17	42.5
3	PDAM	3	7.5
4.	Other	0	
	Amount	40	100

4.2.3. Waste Management

TABLE 7

NO.	Wast Management	Amount	Percentage
1.	Burnt	23	57.5
2	Thrown into the river	12	30
3	Other	5	12.5
	Amount	40	100

4.3. Ekonomic Factor

Income from sand miners

TABLE 8

NO.	Income	Amount	Percentage
1	≤ Rp. 1.000.000	25	62.5
2	2.000.000,- 3.000.000	12	30
3	>Rp.3000.000	3	7.5
4			100

Income from other businesses

TABLE 9

NO.	Type of Business	Amount	Percentage
1	Livestok	3	7,5
2	Garden	15	37,5
3	Labor/Kuli	22	55
	Amount of		100

Smocking Status

TABLE 10

NO.	Smoking status	Total	Persentage
1.	Ont Smoke	2	5
2.	Light(1 s/d 10 btg/day)	4	10
3.	Low (10 s/d 20 week)	16	40
4.	Weight (more than 20 / day	18	45
	Amount		100

Social Environment: (Gambling / Liquor / etc)

Behavior Factors

Disease risk behavior

Disease that has been suffered:

Health Service Factors

Table 11

NO.	Risk Of	Total	Percentage
1.	Risk	28	70
2.	Not Rik	12	30
	Amount	40	100

Table 12

NO.	Type of Risk Behavior Is Not Risk	Risk	Not Risk
1.	Personal Hygiene	32	8
2.	Smoking in the home	38	2
3	Stay up late	30	10

Table 13

NO.	AGE	Amount	Persentage
	Infectious diseases		
1.	Skin Deasease	18	45
2	Dengue Hemorrhagic Fever (DHF)	4	10
3	Pulmonary TB	2	5
	Non-communicable diseases		
	Heasrt	3	7.5
	Hypertension	6	15
	Cancer	2	5
	Others (Psychology)	5	12.5
		40	100

BPJS card ownership

Table 14

NO.	BPJS	Amount	Persentage
1	Got	18	45
2	Does Not Have	22	55
	Amount Of	40	100

Extension from Health Center Health Workers

Table 15

NO.	From Puskesmas	Amount	Persentage
1	Ever	15	37.5
2	Never	25	62.5
	Amount of	40	100

4.4. Hereditas Factor

Heterity factor as a Sand Miner

TABLE 16

NO.	Hereditage	AMOUNT	PERSENTAGE
1	Generation	22	55
2	Two Generation	14	35
3	Tiga Generation	4	10
	Amount of	40	100

4.5. Characteristics of Respondents

Age or age of Sand Miners is generally 17 to 40 years (75%), is a productive age, 17.5% age of sand miners over 45 years, 7.5% are still school age

4.5.1. Level of education

The education level of sand miners is 57.5% low and 42.5% higher education.

Marriage Status 80% of sand miners are married, 12.5% are widowers

Having Toddler Children 32% of sand miners have children under five years old

4.5.2. Environmental Factors

Environmental Health (Sanitation Facilities at home)

Toilet / WC

75% of respondents do not have sanitary toilets / latrines and only 25% have latrines

The respondent's clean water source is 50% well and river water 42.5%.

Waste management in general is burned as much as 50% and 30% is disposed of into the river.

4.5.3. Economic Environment

Most of the income from sand miners (62.5%) is less than IDR 1,000,000

And 30% between IDR 2,000,000 and IDR 3,000,000

Income from other businesses more than half of them (55%) became building laborers and 37.5% and 7.5% owned livestock businesses.

Smoker status of respondents 45% are classified as heavy cigarette addicts and 40% are moderate smokers.

Social Environment such as Gambling, according to the information from the RT Devices. Local

Pain Behavior

80% of sand miners do not do personal hygiene properly. So that 95% of sand miners smoke inside the house 75% of sand miners like to stay up late.

Disease that has been suffered:

The most infectious diseases suffered by sand miners are Skin Disease, and Dengue Hemorrhagic Fever. And non-communicable diseases that are diagnosed are Hypertension and mental illness.

3. Health Service Factors

Ownership of BPJS cards and health education Ownership of BPJS cards, 55% miners do not have BPJS cards 62% of sand miners have never received health counseling from health workers.

4. Heredity / Heredity Factor

Heterity factor as a Sand Miner:55% of sand miners work as first generation sand miners, 35% are second generation and 10% have been working as sand miners

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