

SOME SOCIAL ASPECTS OF EXCRETA  
DISPOSAL FACILITIES IN JAVA

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ABSTRAK

Pada tahun 1982, Badan Penelitian dan Pengembangan Kesehatan mengadakan suatu sampel survai guna memperoleh data mengenai pola penggunaan samijaga (sarana air minum dan jamban keluarga) di daerah pedesaan. Selain mempelajari aspek fisik dari sarana yang telah dibangun, survai tersebut mempelajari pula beberapa aspek sosial yang mungkin akan mempengaruhi pola penggunaan dan pemilikan sarana tersebut. Pengumpulan data dilakukan dengan menggunakan kuesioner dan observasi. Dalam survai ini kepala rumah tangga dipilih sebagai responden.

Dari 3153 rumah tangga yang disurvei di pulau Jawa, ternyata hanya 37,1% yang sudah menggunakan jamban. Sisanya sebesar 62,9% masih membuang kotoran di sungai, sawah, pekarangan, kolam dan di balik semak.

Alasan "kebiasaan tidak menggunakan jamban" dan "tidak ada biaya untuk membangun jamban" diberikan oleh masing-masing 34,2% dan 32,9% responden yang rumah tangganya tidak menggunakan jamban. Selain itu ada pula beberapa alasan lain yang dikemukakan oleh para responden, misalnya "lebih mudah tidak menggunakan jamban" dan "merasa tidak perlu menggunakan jamban".

Berdasarkan hasil survai, disarankan agar diberikan penyuluhan kesehatan kepada penduduk di daerah pedesaan. Dianjurkan pula untuk tidak melupakan faktor sosial dalam mewujudkan suatu program yang diperuntukkan bagi masyarakat luas.

INTRODUCTION

Program for water supply and sanitation in the rural areas of Indonesia has been conducted by the Ministry of Health for more than 13 years. However, the information on the situation of safe water supply and sanitation facilities is still very limited.

In 1982, a national sample survey on water supply and sanitation in the rural areas was carried out by the National Institute of Health Research and Development. The purpose of the survey was to obtain data on the pattern of

use of water supply and sanitation facilities in those areas. In addition, some social aspects that could influence the pattern of use and the ownership of water supply and sanitation facilities were included in the survey.

This paper presents some social aspects of sanitation in rural areas of Java including education and income of the respondents, and their attitude to the available excreta disposal facilities. Meanwhile, the pattern of use of water supply and sanitation facilities has been published in Bulletin of Health Studies vol.14 no.4, 1986.

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**MATERIALS AND METHODS**

Using several criteria such as population density and the variability of the program, 9 provinces in Indonesia were selected in the survey. They were all (three) provinces in Java and 6 provinces outside Java including Bali, Lampung, West Sumatra, North Sumatra, West Kalimantan, and South Sulawesi.

Sample of households were selected through a stratified sampling methods proportional to size. The head of the household was chosen as a respondent.

Data were collected through interviews and observations. A questionnaire, which consisted of both open and close ended questions, was used as a guideline for house to house interviews. The interview of the respondents and the observation of the facilities were done by sanitarians from each province.

Characteristics of the respondents included in this survey were education, occupation, religion, ethnic group, and income. Association between the use of latrines and these variables was examined using Chi-square test.

**RESULTS**

Of the 3153 respondents surveyed, more than 98% were Moslem, and the rest were Christian, Hindu, Budhist, and other believes. The majority of the respondents were male, and most of them were Javanese (66.3%) and Sundanese (30.1%).

Furthermore, 59.6% of the respondents were farmers, 17.8% were workers (farm workers, daily workers, seasonal workers, etc), and the remainder were public servants, merchants, private employee,

and unemployed.

The number of respondents that were illiterate and not graduated from elementary school were 39.5% and 28.2%, respectively. The remainder were graduated from elementary school (25.8%), junior high school (3.0%) and senior high school (3.1%), and others. The respondents who earned less than 25,000 rupiahs per month were 2.7%, between 25,000-100,000 were 56.9%, and 40.4% earned more than 100,000 rupiahs per month.

The Chi-square test was applied to identify the relation between some social variables and the use of latrines. The test indicated that there was a significant association between education and the use of latrines in all provinces. However, the other variables were significant only in certain provinces (Table 1).

**Table 1 : Association between the use of latrines and the social variables.**

Social Variables	Use of Latrines in Java		
	West	Central	East
Education	0.26*	0.13*	0.13*
Occupation	0.39*	0.04	0.17*
Religion	0.03	0.08	0.10*
Ethnic Group	0.11*	0.04	0.07
Income	0.25*	0.08	0.10*

Note: \*significant at p. = 0.10

Type of excreta disposal facilities used by the households were rivers or streams, latrines, rice fields, ponds, gardens or yards, bushes, beach, and

others. Of the 3153 households in Java, 37.1% used latrines and 62.9% used insanitary disposal facilities (Table 2).

In West and Central Java, more households used rivers or streams than those who used latrines. However, in East Java latrine was the most popular type of disposal facility.

Of the 1171 households that used latrines, 65.5% had their own facilities, 29.3% shared with their neighborhood,

and 5.2% used communal/public facilities.

For those who did not use latrines, the majority stated "that was their habits for not using latrines" and "they had no funds to build the latrines" as their main reasons. The other reasons for not using latrines were; they felt easier to use other facilities than latrines, they did not need latrines, there was no space to build latrines, and it was lack of water in their areas (Table 3).

Table 2 : Excreta disposal facilities in Java.

Type of Disposal Facilities	Java			Total
	West	Central	East	
1. Latrine	159 (14.6%)	384 (37.7%)	628 (60.0%)	1,171 (37.1%)
2. River/ Stream	494 (45.4%)	417 (41.0%)	279 (26.7%)	1,190 (37.7%)
3. Rice Fields	148 (13.6%)	92 (9.0%)	17 (1.6%)	257 (8.2%)
4. Ponds	179 (16.4%)	20 (2.0%)	8 (0.8%)	207 (6.6%)
5. Garden/ Yard	38 (3.5%)	70 (6.9%)	74 (7.1%)	182 (5.8%)
6. Bushes	66 (6.0%)	2 (0.2%)	21 (2.0%)	89 (2.8%)
7. Beach	0	32 (3.1%)	5 (0.5%)	37 (1.2%)
8. Other	5 (0.5%)	1 (0.1%)	14 (1.3%)	20 (0.6%)
Total	1,089 (100%)	1,018 (100%)	1,046 (100%)	3,153 (100%)

Table 3 : Reasons for not using latrines.

Reasons	Java			Total
	West	Central	East	
1. Community habits	418 (44.9%)	144 (23.7%)	103 (25.2%)	665 (34.2%)
2. Dit not have any funds	343 (36.9%)	213 (35.1%)	83 (20.3%)	639 (32.9%)
3. Felt easy for not using latrines	58 (6.2%)	109 (18.0%)	61 (15.0%)	228 (11.7%)
4. Did not need latrines	19 (2.0%)	51 (8.4%)	90 (22.1%)	160 (8.2%)
5. No space to build latrines	62 (6.7%)	48 (7.9%)	31 (7.6%)	141 (7.3%)
6. Lack of water	14 (1.5%)	9 (1.5%)	11 (2.7%)	34 (1.7%)
7. Other reasons	16 (1.7%)	33 (5.4%)	29 (7.1%)	78 (4.0%)
Total	930	607*	408*	1,945*

Note : \*There were some missing data.

### DISCUSSION

The respondent's characteristics were suited to the rural people's characteristics described by the Central Bureau of Statistics (1981). It was reported that most of the head of families are male, Moslem, farmers or workers in traditional home industries; they are responsible for the family welfare; they have low income; and illiterate level is still high. Although there was a significant association between the use of latrines and certain characteristics, its significancy was very low since  $C < 0.5$  (see Table 1).

Based on the respondents answers, it was obvious that the use and the ownership of the sanitation facilities

was influenced by many factors; however, community habits and economic condition were the main factors.

Some respondents stated that using latrines together with their neighbors was better than using their own latrines. Perhaps, this was a kind of the rural people's habit, since their feeling of togetherness was still very strong.

For those who did not use latrines, lack of education, short of information on the advantages of using latrines, and not accustomed to the latrines, were likely the reasons for their habit.

According to Michael G. McGarry, "It hardly needs to be stated that defecation is a very personal act; habits associated with it are learned early in life; it is an

important focal point of concern between mother and child. The rural peasant is loath to change personal habits and will resist such pressures as may be brought to bear from outside unless he is convinced of the superiority of the alternative method".

Lack of money was another major reason for not using and having latrines. Since the people did not earn much money, they spent their income for buying daily needs.

Some respondents stated that it was easier to defecate in the open air such as behind the bushes or on the rivers than using the latrines. As we know, bushes offer privacy and ample space to avoid the excreta of others, and the wind will disperse smells. Meanwhile, they can get plenty of water from the rivers or streams and ponds. For most people in Java water is very important as ablution material, although the choice of the ablution material may depend on its availability. Besides, defecating in the open air needs no efforts for cleaning and maintenance.

"No needs" suggested that a private latrine was not considered a necessary part of a house. Rural people had no motives to use and to have latrines since they could defecate in the open air. Perhaps, they did not know the health benefits of using latrines. According to Catherine Goyder, "In the countryside, when we do get people to use latrines and then are able to probe their motives in social survey, we find that their reasons are mostly to do with privacy, convenience and status, with health coming a long way behind".

From this short illustration, it does become evident that social factors and economic condition play an important

role on the use and the ownership of latrines. It means that social and economic aspects may influenced the success of the sanitation program.

Education, one of the social variables, was proved to have a significant association with the use of latrines in Java. In relation to the social factors, Catherine Goyder stated that "a final but fundamental reason why many sanitation projects fail is that the users of the system belong to different, less educated, less westernized strata of society than the planners and administrators. Latrines which may look ideal to the planner seem inappropriate and unusable to those for whom they have been provided".

The objectives of the sanitation program in the rural areas can be achieved by some approaches i.e : involving the users at program planning and implementation, educating the people of rural areas especially in the field of sanitation and health, and preparing more social-economic data before implementing the program

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