

Protestant religious leaders' role in supporting reduce-reuse-recycle community practices in Kupang City

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Abstract

Purpose: Local leaders become the potential stakeholders who can encourage and increase community participation. This study was aimed to explore the role of the Protestant religious leaders in Kupang City in supporting 3R based waste management. **Method:** This was a mixed-method study. Quantitative data related to knowledge, attitudes, 3R-based waste management practices, and the role of religious leaders in supporting waste management efforts were obtained from 271 religious leaders, using a structured questionnaire. Quantitative data collection regarding community compliance was obtained from 229 congregations through an online survey. While the qualitative data to assess the self-efficacy of religious leaders in mobilizing community participation had been done through in-depth interviews. **Results:** Most of the religious leaders (42,1%) had a good level of knowledge about 3R-based waste management, but their attitudes (36,5%) and waste management practices (43,2%) were moderate. Besides, most of the congregation (40,4%) had moderate compliance with religious leaders. Religious leaders collaborated with various stakeholders to improve community participation in the 3R-based waste management. In addition, religious leaders had high self-efficacy for empowering communities on the 3R-based waste management. **Conclusion:** Religious leaders had a potential role in empowering the community on the program 3R-based waste management. Therefore, health providers need to engage religious leaders to support the health program, especially in waste management.

Keywords: Religious leader; 3R-based waste management; self-efficacy; community participation

INTRODUCTION

Indonesia has confronted environmental problems due to municipal solid waste management (1). Kupang City, East Nusa Tenggara Province, is considered the dirtiest and has a poor waste manage-

ment system among medium-sized cities in Indonesia (2). On the other hand, Indonesian regulation Number 18/2008 suggested that the community participate in reducing waste production, reusing waste, and recycling waste (3).

The preliminary assessment that had been conducted by researchers in Kupang City using an online survey from 103 respondents showed that most of the community (67%) carried out waste management by collecting and disposing of it as a temporary waste disposal site. They threw the trash into the temporary garbage collection point improperly. They neglected the rules of waste management.

Community participation is the key to success and is considered the most significant driving factor in the sustainability of community-based waste management (1,4). Thus, the role of the various local leaders such as community leaders, religious leaders, environmental cadres, and RT/RW is needed to encourage and increase community participation (4). In addition, local leaders have an important role in motivating, mediating, and bridging government-to-community communication.

The role of religious institutions in Genteng Kulon Village, Banyuwangi Regency, has led to the growth of high community participation. Religious leaders are obeyed and considered role models by society so that they can motivate people around them (5). In Kupang City, most religious leaders become influencers for the surrounding community. The role of religious leaders is still quite strong in the Rote and Sabu communities, which are two ethnic groups living in Kupang City (6). Places of worship and meetings in religious forums can be a place for learning and discussion, one of which is to support the resolution of the waste problem, which is the responsibility of all parties (2). These studies show that empowering local leaders in the health sector was challenging. Unfortunately, the evidence of the religious leader's empowerment in the health environment is still limited. This study was aimed to explore the role of the protestant religious leader in empowering the community on the 3R-Based Waste Management (Reduce, Reuse, Recycle).

METHODS

This study used a mixed-method with a convergent parallel design, collected qualitative and quantitative data simultaneously, and interpreted it as a whole (7). The questionnaire assesses the level of knowledge, attitude, and practice of the 3R-based waste management among religious leaders and the role of religious leaders in supporting the waste management program. Besides, this study assessed the level of compliance and closeness of the community (congregation members) with religious leaders through online surveys. Qualitative data explored religious

leaders' self-efficacy in mobilizing community participation in 3R-based waste management.

A cluster random sampling technique chose 271 religious leaders and 229 congregants for quantitative data collection. Furthermore, 6 out of 12 priests and 2 out of 5 targeted categorical UPP representatives have participated in the qualitative data collection. This study only used valid and reliable questions items of the questionnaire after testing 30 religious leaders and 36 church members (8).

RESULTS

Socio-demographic characteristics

Table 1 shows that most religious leaders were more than 40 years old, and 16.23% were more than 60 years old. A total of 156 (57,6%) respondents were women, and most of the respondents (48,3%) had graduated from the undergraduate program. Most of the religious leaders (57.20%) were elderly. The period of service of religious leaders varies. As many as 97 people (35.79%) had served for 1-5 years, while 62% had served church members for more than 15 years. Religious leaders can serve more than a category of worship services.

Knowledge, attitudes, and practices

Table 2 shows most religious leaders (57.94%) had a poor level of knowledge, a moderate level of attitudes (36.53%), and adequate 3R-based waste

Table 1. Sociodemographic characteristics

Variable	Frequency (n=271)	Percentage (%)
Age (Years)		
< 29 Years	21	7,75
30-39 Years	45	16,61
40-49 Years	71	26,20
50- 59 Years	90	33,21
60-69 Years	38	14,02
≥ 70 Years	6	2,21
Gender		
Male	115	42,44
Female	156	57,56
Education		
Basic level	20	7,39
Medium level	120	44,28
High level	131	48,34
Occupation		
Lecturer/teacher	29	10,70
Housewife	71	26,20
Church employees & priest	14	5,17
Retired	33	12,18
Civil servants	28	10,33
Private & entrepreneur	54	19,92
Not working	15	5,54
Others.	27	9,97

Table 2. The level of knowledge, attitudes, waste management practices, religious leadership roles, and congregation members' compliance with religious leaders

Variable	Respondents Rel. Leaders (n=271)	(%)
Knowledge related to 3R based waste management		
Poor	157	57,94
Good	114	42,07
Attitude towards 3R based waste management efforts		
Negative	78	28,78
Positive	193	71,22
3R based waste management practices		
Poor	78	28,78
Enough	117	43,17
Good	76	28,04
Supporting role in 3R based waste management efforts		
Less	78	28,78
Enough	107	39,48
Good	86	31,73
Variabel	Respondents Cong. members (n=229)	(%)
Community Compliance with Protestant Religious Leaders		
Less	70	30,43
Enough	93	40,43
Good	66	28,82

management practices (43.17%), as well as sufficient roles in supporting waste management programs (39.48%). Moreover, most congregation members (40.43%) have a moderate level of obedience to religious leaders.

KAP and religious leaders roles

Table 3 shows no significant relationship between the knowledge of religious leaders and their practices regarding 3R based waste management ($p > 0.05$) and between the knowledge of religious figures and their role in supporting 3R-based waste management efforts. However, there was a significant relationship between the attitudes and practices of 3R-based waste management ($p < 0.05$) and the attitudes and roles of religious leaders in supporting 3R-based waste management efforts ($p < 0.05$).

Community compliance with religious leaders

Figure 1 showed that more than 95% of church members agree and even strongly agree that they need figures who encourage community participation. They also liked and appreciated the existence of Protestant religious leaders in their church environment.

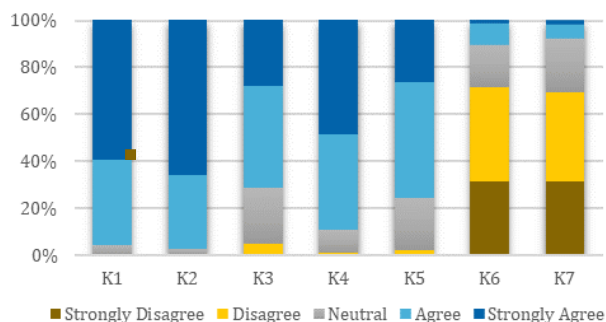


Figure 1. The compliance of church members to religious leaders

Information:

- K1: The existence of figures who encourage community participation is needed
- K2: Congregation members like and appreciate the existence of religious leaders
- K3: Religious leaders are the ones who most frequently interact with the community
- K4: church members are interested in and support innovative activities by the church
- K5: Religious leaders are the figures most able to influence and motivate congregations
- K6: congregation member look for reasons to avoid religious leaders inviting to volunteer work
- K7: Congregation members are looking for reasons to avoid religious leaders inviting to participate in discussing the waste problem in the environment

More than 95% of church members agreed and strongly agreed that they need figures who encourage community participation and appreciate Protestant religious leaders in their churches. Congregation members' experience can influence the compliance of congregation members in seeing religious leaders as role models and environmental influences.

"Our habit here is to see others, like to watch or like to find out." (Chairman of Church 4, L, 1 Period).

Religious leaders' self-efficacy

Even though religious leaders had the self-efficacy to lead the 3R-based waste management, they were

Table 3. The 3R knowledge, attitudes, practices, and religious leaders' roles

Spearman's Rho Correlations		Knowledge	Attitude	Practice	Role
Knowledge	Corr Coefficient	1.000	.218**	.041	.064
	Sig. (2-tailed)	.	.000	.503	.293
	N	271	271	271	271
Attitude	Correlation Coefficient	.218**	1.000	.131*	.140*
	Sig. (2-tailed)	.000	.	.032	.021
	N	271	271	271	271
Practice	Correlation Coefficient	.041	.131*	1.000	.417**
	Sig. (2-tailed)	.503	.032	.	.000
	N	271	271	271	271
Role	Correlation Coefficient	.064	.140*	.417**	1.000
	Sig. (2-tailed)	.293	.021	.000	.
	N	271	271	271	271

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

constrained by appropriate facilities, including the lack of cooperation and assistance efforts.

"There are no verbal efforts that can inspire us as religious leaders to get involved together." (Chairman of church 2, P, 1 Period)

"Every time we have the opportunity to meet them in large numbers, it's a force." (Chairman of Church 6, P, 2 Periods)

DISCUSSIONS

This study showed that most religious leaders had a poor level of knowledge of 3R-based waste management since they were housewives and rarely received socialization of 3R-based waste management. Therefore, they had a positive attitude toward 3R-based waste management. Attitudes can be influenced by the impression of personal experiences and the influence of others considered important (9).

Most religious leaders in Kupang City had moderate 3R-based waste management practices. There were multiple variables affected by practices, not limited to attitude [10-12]. According to the health belief model, self-efficacy was the greater factor influencing practice or behavior [11]. This study indicated that religious leaders had a good self-efficacy to mobilize the community on the 3R-based waste management. The self-efficacy of the local leader was a strong social capital needed in the community-based health promotion program [13]. In addition, religious leaders became respected local leaders in the community and potentially became change agents in health programs [14-16].

Community-based health promotion programs are considered more successful if they are built on the strengths, assets, and expertise of the community. For example, figures with expertise in related fields, prayer groups, important and honorable roles of religious leaders, religious beliefs that can support health-related efforts, and congregation ability. Collaborative partnerships can be sustainable by maintaining the religious community's common health interests [17].

CONCLUSION

Most Protestant religious leaders (GMIT) had poor knowledge of 3R-based waste management and a moderate attitude regarding 3R-based waste management practices. The self-efficacy of the religious leader was the strong factor that influenced religious leaders in the 3R-based waste management. This study suggests that the local health officers should engage

religious leaders to empower the community on community-based health programs such as 3R-based waste management.

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