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Socialization of the Dangers of Disposable Diaper Waste and Reusable Diaper Making Workshop

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ABSTRACT

No less than 1.1 million tons of diaper waste is thrown into the river and pollutes the river which is 98% of the source of drinking water for residents. There is one village that is crossed by a creek, and the problem of diaper waste is also encountered here. To help overcome these problems, the service held a Socialization of the Dangers of Disposable Diaper Waste and a Reusable Diaper Making Workshop. The method used goes through several stages, namely: distribution of questionnaires, socialization, workshops, documentation, making tutorial books making reusable diapers and preparing the final report. As a result of the activity, the community gained knowledge about the dangers of diaper waste for the environment and health, and was able to make their own reusable diapers from cloth.

Keywords: Popok Reusable; Socialization; Workshop.

INTRODUCTION

Waste, especially plastic waste, is an endless problem discussed. Although various efforts have been made ranging from education carried out by small groups in the community to the issuance of local regulations on the ban on the use of plastic bags in some regions, but apparently these efforts have not brought significant results. In fact, Thailand is still listed as the country with the most polluted rivers in the world (Lebreton, et.a., 2017), and especially on four rivers. This river, 98% of the source of drinking water for residents is one of the four rivers. It flows through several major cities. The river alone generates about 40,000 tons of plastic waste into the ocean every year. In research conducted by Common Seas, an NGO from the UK, in this region in November 2018, among the amount of plastic waste pollution that pollutes rivers in rivers is diaper waste. The large amount of diaper waste found in the river is partly due to local beliefs. who believe that burning diapers that have been used will bring bad luck, such as the appearance of rashes on the baby's skin or known as Suluten. Currently, it is estimated that every year, 1.1 million tons of diaper waste is thrown into rivers directly, and it is estimated that this figure will continue to increase as the market grows. In addition, diapers

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have limited recycling value (unlike bottles), so when diapers go through unauthorized garbage collection and when diapers are collected, they have a considerable amount of volume in landfill, where diapers will take hundreds of years to decompose in their environment. Diapers clog waterways and diapers will be digested by fish or become breeding grounds for disease, or flow into the ocean, accumulate on pristine beaches, and damage coral reefs that sustain fisheries and tourism.

Mentioned by Rahat et.al (2014) diaper waste is still a big problem, especially for developed countries. Some things that are specific factors to the problem of diaper waste in this region, as explained by Moelyaningrung (2018), some of which are: a) There is still a belief in the community that there will be spirits that will make babies contract skin diseases if diapers are burned. So they chose to throw diaper waste in the river. b) The impact of the onslaught of disposable diaper advertisements also has an impact on the emergence of the perception that diapers are a symbol of modern lifestyle. Those who use it feel more accepted because they follow the trend and also feel considered to be from high economic groups. c) There is no information about how the baby's diaper waste should be treated before it is disposed of. If you pay attention, the packaging of diaper waste on the market so far only provides information about how to put disposable diapers on babies, but does not explain how diapers should be disposed of. The same condition also occurs in other rivers.

The village traversed by this tributary also has the same problem related to handling diaper waste. From the observations, there are still many villagers who throw diaper waste in the river, instead of trash cans. The strongest reason given by local people regarding their choice to wear disposable diapers is the practicality provided by these disposable diapers. This fact makes devotees see that the phenomenon of diaper waste in the village requires several approaches to resolve, namely: 1) The need for socialization about the dangers of disposable diaper waste for the environment. 2) The need to correct myths related to diaper waste and baby health in the community. 3) A solution is needed that can reduce the number of disposable diapers used. From mapping these problems, it is necessary for the village to get guidance in the form of socialization of the dangers of diaper waste for the environment and health, as well as the need for training in making reusable diapers. The purpose of this activity is to build awareness of the local community regarding the importance of preserving the environment from the dangers of diaper waste, as well as providing solutions to their needs for diapers by teaching reusable diaper making skills.

RESEARCH ELABORATIONS

At this stage, the community service began by distributing questionnaires to mothers in the village who have sons / daughters under five years old and still use diapers to find out several things, namely: the behavior of using disposable diapers and also their understanding of alternatives to disposable diapers. From the questionnaire data, it will then be the initial data for the service to compile socialization materials and also design a workshop on making reusable diapers for village mothers, until finally the expected output is obtained which is reusable diapers produced by the mothers themselves.

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Further details regarding each stage of community service activities for making reusable diapers in the Village are as follows::

a. Questionnaire Distribution Stage In the early stages, devotees take data in the village. Those who were respondents were mothers who had sons / daughters under five years old who were also active users of disposable diapers. This questionnaire is a closed question about how much disposable diapers are consumed per day; The reasons for the use of disposable diapers; Knowledge of alternatives to disposable diapers (popok reusable); Exposure to information related to the dangers of disposable diapers; and their willingness to attend workshops on making disposable diapers.

b. Socialization Stage At this stage, the devotee provides socialization related to the dangers of diaper waste for the environment, and also straightens out the myth of basic waste and rashes that are often experienced by babies, or in the local language called suluten. Socialization is carried out in two ways, namely first using audio-visual media, in the form of short films produced by the service team about diaper waste and its dangers. Second, by using interview and discussion methods.

c. Workshop Stage At this stage, devotees conduct workshops on making cloth diapers that can be used and rewashed. This workshop was attended by mothers in the village, from the ranks of PKK cadres, Posyandu activists, and local village tailors.

d. Documentation Phase The documentation stage is carried out by archiving activities through photo and video documentation. Furthermore, photos and videos of the results of activities in addition to being uploaded on personal social media from the service, were also uploaded on the official Instagram of the Study Program, and uploaded on the YouTube channel.

e. Tutorial Book Making Stage As a form of output of this activity, the devotees compile material for workshop activities in the Reusable Diaper Making Tutorial Book. This tutorial book will later be registered to get IPR.

f. As the final stage of this series of community service activities, the service team will compile a report on the entire series of activities, as well as convey the financial accountability of this activity. The first is to use audio-visual media, in the form of a short film produced by the service team about diaper waste and its dangers.

RESULTS AND DISCUSSIONS

This service activity aims to provide understanding to the community in the village about the dangers of disposable diaper waste and also provide solutions to reduce the amount of diaper waste by teaching them how to make reusable diapers. The implementation of this

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activity starts from November – December 2021 which is divided into several activities. The initial activity carried out was to collect data by distributing questionnaires to the target target of this activity, namely mothers in the village who have children aged 5 years and under and use disposable diapers. From this questionnaire data, information was obtained which then became the initial data of the next activity, namely socialization. Given the level of education of the majority of mothers in the village only received basic education, the socialization was carried out using audio-visual media in the form of a short film entitled Sukarsa which was set in Sidoarjo and made in the local language, making it easier for them to understand the content of the message conveyed. After the screening, socialization continued with presentations from devotees and partners. The service conveyed from the health side by taking the theme "Diapers and Rashes in Babies". This material is given considering that from the questionnaire data it is known that people still believe in the existence of the suluten myth. Suluten is an occurrence of rashes on the baby's skin which was later attributed by the local community as a result of diaper waste being thrown in the trash and then burned in the landfill.

The shape of the rash in babies that at first glance is similar to burns makes them believe that there is a connection between the waste burned with wounds on their babies. Actually suluten itself medically is actually a rash due to the use of disposable diapers (diaper rash) which makes contact between the skin and urine / feces prolonged. The socialization was then continued with material from partners, namely from the NGO Common Seas who conveyed about "The Dangers of Diaper Waste for the Environment". This information was conveyed following up on the results of a questionnaire which showed that to avoid diaper waste being burned in the Landfill (TPA), the village community then disposed of diaper waste in the river. Diaper material containing plastic is certainly a problem for the environment when it is just thrown into the river. Here, CommonSeas, which is engaged in environmental sustainability, explains the dangers of microplastics produced from diaper waste.

The next stage is carried out in the workshop stage of making reusable diapers which is divided into several materials, namely:

a. Introduction to Fabric Types At this stage, various fabrics that can be used to make diapers are explained, including materials from used clothes that can be used. For this workshop itself, the types of fabrics used are taslan fabric, cotton fabric, and towel cloth. While other equipment needed is sewing thread, velcro as an adhesive, elastic with a width of 1cm and bisban.

b. Pattern Making Here workshop participants who are mothers of cadres, Posyandu, and also village tailors are taught how to make reusable diapers with adhesive techniques using velcro. This technique was chosen because it is the simplest, and the necessary materials are easy to buy. The making of this pattern is divided into two, namely: - Cover Pattern Is the

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outside of the diaper consisting of an outer cover made of cotton fabric, and an inner cover made of taslan fabric. - Insert Pattern Is the inside of a diaper made of towel cloth with a thickness ranging from two layers to eight layers of towel fabric.

c. Sewing Techniques At this stage, the workshop participants were taught sewing techniques to unite pieces of fabric that had been cut according to the pattern in the previous stage. On the occasion of the workshop, participants practiced sewing using electric and manual sewing machines. Some special parts that emphasize the sewing technique in this workshop are: 1. Installation of elastic rubber. 2. Installation of bisban to unite and frame the insert part. 3. Overlock technique, taught as an alternative if installing bisban is considered impractical. 4. Velcro installation. The output of the workshop was that participants succeeded in making their own reusable diapers. From this activity even one of the participants was inspired to make this reusable diaper with adult size and will be donated to several villagers who suffered a stroke and could not move their limbs, so they relied heavily on the use of disposable diapers.

In addition, another output of this community service activity is in the form of a Tutorial Book for Making Reusable Diapers which will be registered to get IPR. Parties Involved The community service activity held in Tlasi Village, Sidoarjo involved villagers, service teams, students of the Communication Science Study Program Umsida, Tepi Kain, and also the NGO CommonSeas. The Role of Participants In this activity, participants play an active role in participating in a series of Community Service activities carried out in the Village. Although not all participants had sewing skills before, they were very enthusiastic in learning until finally all participants successfully completed diaper making and were able to bring home their homemade diapers. Here, Tepi Kain as a companion in the workshop really motivated participants not to despair of finishing their homemade diapers. On the other hand, the motivation and knowledge from the service and NGO CommonSeas regarding the dangers of disposable diaper waste succeeded in motivating participants to abandon their bad habit of throwing diaper waste in the river. Applied Model Community service activities Socialization of the Dangers of Disposable Diaper Waste and Reusable Diaper Making Workshops in the Village are carried out with stages as.

Table 1: Stages of Coaching Implementation

Phase	Activities	Partner Participation
Preparation	a. Discussion with Village officials. b. MoU Signing with Village. c. Discussions with activity partners, namely CommonSeas to determine socialization materials and workshops.	Prepare materials that are in accordance with the needs and problems of the village

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	d. Internal meetings of the service team and students to explain the activities and responsibilities of each personnel.	
	e. Determine the schedule of activities.	
	f. Workshop site survey and socialization	
	g. Prepare equipment for workshop and socialization purposes.	
Implementation	a. Distribution of questionnaires involving students.	a. Provide materials for workshops and socialization.
	b. Socialization of the dangers of disposable diaper waste.	b. Provide knowledge related to the dangers of diaper waste.
	c. Workshop	c. Provide reuseable diaper making skills
Evaluation	a. Provide an evaluation of the participants' work in making diapers.	a. Provide input on the work of participants.
	b. Conduct discussions to eliminate participants' concerns about myths.	b. Motivate participants by presenting rational reasons to break myths
Follow-up	Increase the skills and knowledge of villagers	Although the community service activities have ended, the community service is committed to continuing to accompany the residents and motivate them to leave old habits and provide input on business opportunities that can be created from their ability to sew reuseable diapers

CONCLUSIONS

Based on the implementation of community service in the village, several conclusions can be drawn as follows: 1. At the survey stage, it is known that there is still an understanding related to diaper waste, this is related to myths that are believed to be true by the local community. 2. At the stage of socialization, the community finally gets enlightened about the

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truth of myths that actually have nothing to do with the myth of Suluten. Here the community was also very excited to know how to handle rashes on baby's skin due to the use of disposable diapers. 3. At the workshop stage, the community is also enthusiastic to learn how to make reusable diapers. The same spirit was seen in both participants who already had sewing skills and who still could not sew at all. 4. The problem that arises in this activity is the commitment of the participants to use. Reusable diapers, especially entering the rainy season, where reusable diapers will certainly be difficult to dry and will be difficult if they do not have sufficient stocks of reusable diapers. 5. Future plans and hopes that the service can develop this program in other villages in Sidoarjo so that this diaper waste problem can be massively handled together with producing reusable diapers which will certainly help reduce the amount of diaper waste in the river.

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