The Training and Empowerment of Health Cadres in Early Detection of Oral Cancer with SAMURI in Margodadi Seyegan

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Abstract. Premalignant lesions are morphologically altered tissues where cancer is more likely to develop. Premalignant lesions are more commonly expressed as a general condition associated with a significant risk of cancer. These lesions can appear in the oral cavity. Oral lichen planus, submucosal oral fibrosis, and leukoplakia are premalignant mucosal lesions that have the potential to become malignant in the oral cavity in the development of oral squamous cell carcinoma.

Public health cadres are men or women selected by the community and trained to deal with individual and community health problems to work in close relationship with healthcare facilities. The lack of knowledge from the public about the risk factors for malignancy in the oral mucosa makes public awareness and concern for oral soft tissue health low. Low public awareness and concern can lead to increased failures in the treatment of malignancy cases because patients who come to health facilities with malignancy cases are already in the terminal phase so that it is difficult to overcome. Health cadres are given counseling and training on how to conduct their own oral cavity examination so that it is hoped that later it can be distributed to the community in each village.

Keywords: health cadres, incidence, oral cancer

1 Introduction

Premalignant lesions are morphologically altered tissues in which cancer is more likely to develop. Premalignant lesions are more commonly expressed as a general condition associated with a significant risk of cancer [1]. These lesions can appear in the oral cavity. Oral lichen planus, submucosal oral fibrosis, and leukoplakia are premalignant mucosal lesions that have the potential to become malignant in the oral cavity in the development of oral squamous cell carcinoma [2].

Oral cancer is one of the malignancies that can be found in the oral cavity. Until now, the latest data on oral cancer in Indonesia report that [3] Indonesia has an incidence of oral cancer of 5,329 out of a total of 18,071 cases. The number of cases causing oral cancer in Indonesia ranks 6th in Southeast Asia. The number of oral cancers continues to increase with the number of mortality which reaches half of the total incidence [4]. Oral cancer is one of the malignancies that can be prevented by looking at clinical signs referred to as pre-cancer [5].

Based on the global data, the incidence of oral cancer in 2016 ranks sixth in the number of cancers in the world. Every year, there are 300,000 new cases of oral cancer in the world and half of the people with cancer die. As many as 50 percent of the incidence is dominated by Asian countries, with Southeast Asia (which includes Indonesia) accounts for 11 percent.

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Basic Health Research (Risksdas) in 2018 recorded an increase in oral cancer which rated to 5.6 percent, mean while in 2013 Riskesdas recorded that oral cancer rated to 1.4 percent. Currently, oral cancer is proven to be increasingly lurking in the productive age group. It used to happen at the age of 40 years. But, as time went by, the age increased. A 2009 study found that 19.8 percent of oral cancers occurred between the ages of 22 and 34 years. Public knowledge of oral cancer risk factors is one of the most important parameters for successful oral cancer prevention in the community [6].

Cancer of the oral cavity is a disease that can be prevented along with increased knowledge about risk factors and signs and symptoms [7]). Media such as television, internet, radio, and magazines play an important role in increasing knowledge about risk factors and prevention of oral cancer [8]. In addition to mass media, education and socialization activities aimed at the community are also important and more effective where the government, health workers, and community leaders play an important role in the success of this program [9].

Public health cadres are men or women selected by the community and trained to deal with individual and community health problems to work in close relationship with healthcare facilities. Cadres as citizens of the local community are selected and reviewed by the community and can work voluntarily. Cadres are voluntarily willing to play a role in implementing and managing family planning activities in the village [10].

Kalurahan Margodadi is one of the Kalurahan (Villages) in Sleman Regency located in the southwest. Kalurahan Margodadi is a merger of 3 (three) former Kalurahans, namely Pete Village, Kadipiro Village, and Kandangan Village in 1946. It remains a merger until today. The government of Kalurahan Margodadi consists of 16 (sixteen) Padukuhan (Hamlet). Administratively, Margodadi Kalurahan is one of the Kalurahan located in Kapanewon Seyegan, Sleman Regency, Yogyakarta Special Region Province.

Information related to lesions abnormalities in the oral cavity that lead to cancer is still rarely found. Many people come to health facilities when lesions cause symptoms, and usually when this happens, it is in the end stage and is difficult to treat. Low public knowledge and awareness need serious attention and treatment so that life expectancy and successful treatment in cases of malignancy can increase. It is necessary to formulate a solution to overcome the problems that exist in the community related to oral mucosal abnormalities that lead to malignancy. There is a need for preventive efforts to overcome the problem of cancer in the oral cavity and to reduce community mortality and morbidity.

2 Methodology

The community Service was conducted by means of counseling, education on precancerous lesions in the oral cavity, and training on how to detect early malignancy with the SAMURI (Periksa Mulut Sendiri – Examine Your Mouth for Yourself) method to all health cadres in Margodadi Seyegan Sleman Village. Before the activity had been carried out, pre-test data was taken, and after the activity was completed, post-test data was taken. This data could be used as an evaluation in providing educational counseling whether there was an increase in knowledge from health cadres.

The cadres were also provided with educational booklets and videos that could be used to channel knowledge and understanding related to oral mucosal disorders that led to malignancy to the community in their respective villages.

3 Results and Discussions

Margodadi village is located in Seyegan sub-district, Sleman regency, Special Region of Yogyakarta, Indonesia. The history of the formation of Margodadi Village is a merger of
3 (three) former villages, namely Pete Village, Kadipiro Village, and Kandangan Village, since 1946 until today. Margodadi Village Government consists of 16 (sixteen) hamlets namely Beran, Druju, Grogol, Jagalan, Japanan, Jlegongan, Kadipiro, Kandangan, Kasuran, Kurahan III, Kurahan IV, Mranggen, Pendek, Pete, Tegalweru, and Terwilen. Margodadi Village has PKK (Pembinaan Kesejahteraan Keluarga - Family Welfare Movement) administrators appointed by the Village Head, totaling 85 people spread across 16 hamlets. Each hamlet consists of 5 cadres with the following tasks to help the village head carry out family welfare movement activities, as extension workers, motivators, and community mobilizers.

There were 76 participants who attended this activity. The activity began with an opening and remarks by the Head of the Margodadi Village health cadre, followed by a pre-test. The activity began by providing counseling materials to Margodadi Village health cadres, followed by training on early detection of oral cancer with SAMURI. After the training, a postest was carried out to evaluate the material that has been delivered.

Figure 1. SAMURI Counseling and Training

Figure 2. Teaching Media Submission
The participants filled out the pre-test and post-test with a total of 10 questions and obtained the average results as follows:

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.44</td>
<td>8.68</td>
</tr>
<tr>
<td>N</td>
<td>76</td>
<td>76</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.702</td>
<td>1.142</td>
</tr>
</tbody>
</table>

The results of the evaluation of health cadres' knowledge of the education provided can be seen in Table 1. Based on Table 1, all health cadres demonstrated an increase in the knowledge related to the introduction of oral cancer about early detection of oral cancer. It is important to provide adequate information about oral diseases towards malignancy in an effort to reduce the number of patients and increase the success of oral malignancy treatment.

This trend in life expectancy can be explained in terms of diagnostic delays in oral malignancy. It is reported in the literature that two-thirds of cases of malignancy in the oral cavity are diagnosed at an advanced stage (Stage III or IV), therefore prognosis and survival rates are of serious concern. The diagnostic delay of oral malignancy can be differentiated into "patient delay", which is the period between the patient's first detection and seeking health care, and "professional delay", which is the period from the first examination to the final diagnosis of the condition [11]. Therefore, the main cause of death in this case is the lack of awareness and knowledge of patients and doctors about this condition.

The dedication that has been done seems to be a solution to these problems, this can be seen from the result analysis of the data collected. The respondents’ knowledge increased in the post-test results. Health cadres as empowerers, motivators, and mobilizers of family health and welfare are the main spears of hope for the success of oral cancer education in the community.
4 Conclusion

The community service carried out in Margodadi, Seyegan, Sleman has proven to increase knowledge related to early detection of malignancy in the oral cavity. Increasing knowledge through counseling and training using teaching media is effective and can be the method of choice today. The next dedication suggestion is to form a special movement team in the village that focuses on preventing malignancy in the oral cavity so that the movement reaches a wider area, sustainable, and comprehensive.

References


