Empowering Cadres through Knowledge and Practice to Improve Early Detection of Cancer (Leukaemia) in Children in Surabaya, Indonesia

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ABSTRACT Cancer is one of the non-communicable diseases that has become a public health problem in the world including Indonesia. Every year there are 12 million people worldwide suffering from cancer and 7.6 million of them die. If adequate control measures are not taken, by 2030 it is estimated that 26 million people will suffer from cancer and 17 million of them will die. (Ministry of Health of the Republic of Indonesia and Directorate General of PP and PL Directorate of Non-Communicable Disease Control 2011). The general objective of this community service is to increase the role of health cadres in the context of early detection of childhood cancer (Leukemia) in the Surabaya city health centre area. The implementation of Community Service Activities is the empowerment of Health Cadres / Posyandu in the Pacar Keling Surabaya Puskesmas area, which began with direct meetings, there were changes online and offline. Activities carried out between lecturers, students and cadres along with the team from Puskesmas Pacar Keling Surabaya. Community service activities on empowering cadres in the context of early detection of cancer (Leukemia) in children in the Surabaya Pacar Keling Puskesmas area, participants / cadres play an active role by showing attendance: 100% and responses to activities were mostly very good 22 (73.3%), the accuracy of implementation was mostly good 19 (63.3%). Community service activities, regarding counseling on the concept of leukemia disease and its management showed mostly very good 21 (70%) and training in the process of early detection of cancer (Leukemia) in children, documenting the results of the process of early detection of cancer (Leukemia) in children showed mostly very good 20 (66.7%). It is recommended that cadres after understanding the concept of early detection of cancer (leukemia) in children cadres are expected to disseminate information about this understanding and cadres are also expected to support health workers by participating and using early detection cards at the time of the initial examination of children who come to the Posyandu or in children at risk of suffering from leukemia so that prevention and treatment can be carried out immediately in children with leukemia.

INDEX TERMS: Cadres, Cancer (Leukaemia), Children

I. INTRODUCTION The number of cancer patients in children is increasing, while in daily practice, health workers have many obstacles in terms of diagnosis and variations in management. People who receive health services have high expectations for the provision of quality services, but in Indonesia, children with cancer come at an advanced stage [1]. If the patient comes at an early stage, the possibility of obtaining survival rates will be high and the quality of life is higher. Childhood cancer should be curable if found at an early stage [2]. Childhood cancer control programmes need the support of health workers from primary care to higher levels, who need a better understanding of childhood cancer, especially in early diagnosis and management, so that treatment is not too late [3]. Through this practical guidebook, it is expected that health workers will easily recognise and diagnose early childhood cancer and refer immediately. (Ministry of Health of the Republic of Indonesia and Directorate General of PP and PL Directorate of Non-Communicable Disease Control 2011).

Cancer is one of the non-communicable diseases that has become a public health problem in the world including Indonesia [4]. Every year there are 12 million people worldwide suffering from cancer and 7.6 million of them die. If adequate control measures are not taken, then by 2030 it is estimated that 26 million people will suffer from cancer and 17 million of them will die. This will happen faster, especially in poor and developing countries. Based on Risksesas 2007, tumour/cancer was the 7th leading cause of death in Indonesia, accounting for 5.7% of all deaths. The prevalence rate was 4.3 per 1000
The age limit of the child referred to in this guidebook is based on the Convention on the Rights of the Child approved by the General Assembly of the United Nations on 20 November 1990, Part 1 Article 1; is any person under 18 years of age, unless under the law applicable to the child it is determined that the age of majority is reached earlier. A child according to Law No. 23 of 2002 on Child Protection article 1 paragraph 1, is someone who is not yet 18 years old, including children still in the womb. WHO states that cancer cases in children account for 2-4% of all cancer cases in humans. It is also stated that 10% of deaths in children are caused by cancer[6].

According to data from the Cancer Registration System in Indonesia (SriKanDI) in 2005-2007, the estimated incidence of cancer in children (017 years old) was 9 per 100,000 children. Cancer leukaemia is the highest cancer in children (2.8 per 100,000), then eyelid cancer/Retinoblastoma (2.4 per 100,000), Bone Cancer (0.97 per 100,000), Lymphoma (0.75 per 100,000), Nasopharyngeal Cancer (0.43 per 100,000). Childhood cancer cases account for 4.7% of cancers at all ages, in males 53.5% and in females 46.5%[6][7] The mortality rate due to this disease reaches 50-60 per cent because generally patients come late or already in an advanced stage. Currently, the exact risk factors and causes of childhood cancer are unknown. It is thought to be an interaction of 4 factors, namely genetics, chemicals, viruses, radiation. Not all types of childhood cancer have methods for early detection, and childhood cancer cannot be prevented[8]. Therefore, it is important for health workers to know the signs and symptoms of childhood cancer. Unlike childhood cancer, risk factors for adult cancer are related to behavioural and lifestyle factors[9]. Cancer symptoms in children and infants are more difficult to recognise because they are not yet able to express what they feel. The role of parents, communities, cadres, and health workers, is important to recognise the signs and symptoms of childhood cancer so that the possibility for immediate treatment and cure rates becomes much greater[13][14]. Referring to the various complexities of childhood cancer problems, a serious handling effort is needed with a comprehensive and integrated community-based strategy and approach through the cooperation of various parties. Given the importance of recognising the signs and symptoms of childhood cancer, a guidebook is needed that can be used as a reference for health workers from the health centre to the hospital level. This guidebook prioritises 6 types of childhood cancer, namely Leukaemia, Retinoblastoma, Neuroblastoma, Lymphoma, Nasopharyngeal Carcinoma and Osteosarcoma. The results of Indrati's research, 2014, qualitative research using a phenomenological approach to mothers or families and leukemia child patients who were treated in the Bona I Room of Dr. Soetomo Surabaya Hospital in November 2014 in a total of 5 patients and their families, found that children with Leukemia mostly had a history of consuming fast food in the form of instant noodles in their daily diet and for a long time[15]. While the results of further research by Indriatie, 2017 at the Surabaya halfway house stated that the culture of food menu selection ranging from beliefs, knowledge of food menus, social functions, preferences or preferences and menu selection patterns did not contribute to the incidence of leukaemia because children suffered from leukaemia for a long time so it was recommended to choose a healthy menu early on[16][17][18].

In 2018, there were 9.6 million cancer deaths. Cancer cases do not look at the age limit. In Surabaya, there are also cancer patients who come from children. Based on data received by Basra from the Surabaya City Health Office, in 2018 there were 25 children with cancer. The data was collected by the Surabaya City Health Office from several health centres. The 25 children came from 19 health centres in Surabaya, and the highest number was in Dupak health centre with 3 children with cancer. Still based on the data, brain cancer, liver cancer, eye cancer, kidney cancer, and leukaemia were recorded as the most common cases. Out of 19 puskesmas, 15 of them have child patients with leukaemia. In total, there are 22 children with leukaemia in Surabaya. Among the 15 Puskesmas, one of them is Pacar Keling Puskesmas with 2 children aged 5 years and 11 years. The government is currently paying special attention to childhood cancer, namely leukaemia or blood cancer among other cancer cases[19]. Therefore, children's health needs to get special attention from parents and families so that the symptoms of cancer in children can be detected as early as possible so that treatment can be carried out as early as possible. In the health care strategy for children with leukaemia[3], Puskesmas or primary care units/institutions are very important as the spearhead in primary health care[20]. Puskesmas can empower and utilise the community as Health Cadres who can help or support patients and families in the treatment, management and prevention of childhood leukaemia which is very likely to increase cure rates and life expectancyk[21][22]
And children can avoid various types of cancer that arise in adulthood. Cultivating clean and healthy living behaviour by eating healthy food, a balanced nutritious menu with enough fruits and vegetables, is a form of implementation of the Healthy Living Community Movement (Germas). Based on this description, we, the academic community of Prodi DIII Nursing Soetomo Poltekkes Kemenkes Surabaya, intend to hold Community Service activities aimed at empowering existing Health Cadres through Training activities with Cadre Empowerment in the context of Early Detection of Leukemia Prevention in children with a Culture of Healthy food menu selection in Surabaya.

II. METHOD

The method of community service activities is as follows: Offline and online. Offline activities, Participants are present at the Puskesmas with the assistance of Puskesmas officers by applying physical distancing as a process of ensuring participants and receiving souvenirs, credit reimbursement, consumption and transport money. Whereas online, previously conducted Socialization of the procedure for activities by forming a WatsApp Group Providing lectures and training and questions and answers about the concept of leukemia and management and demonstrating the process of early detection of childhood cancer (leukemia). Media: WatsApp and Google meet. Tools and materials: Modules and Early Detection Cards.

Evaluation: Evaluation of understanding of the material and response to the implementation of activities is carried out by providing a questionnaire using Google form, with the results of the assessment being very good, good, sufficient and lacking with the following details:

- 100% : All
- 76%-99% : Almost entirely
- 51%-75% : Mostly
- 50% : Half
- 26%-49% : Almost half
- 1- : A small part

Targets and outcomes Empowerment of cadres in the context of early detection of childhood cancer (Leukemia) in the Puskesmas Pacar Keling Surabaya area. The strategic target audience for this community service activity are: health cadres in the Pacar Keling Puskesmas area of Surabaya City from Posyandu RW 03, 05, 07, 08, and RW 10 as many as 30 people.

III. IMPLEMENTATION

1. Preparation.

After a decision from the Poltekkes Kemenkes Surabaya with the covid 19 pandemic, related to community service activities can be carried out using health protocols[24], community service activities on empowering cadres in the context of early detection of childhood cancer (Leukemia) in the Pacar Keling Surabaya Health Center area are still carried out with the following licensing and approval process:

1. Head of the Department of Nursing Poltekkes Kemenkes Surabaya
2. Director of Poltekkes Kemenkes Surabaya

3. Head of Bakesbangpol Linmas Surabaya
4. Head of Surabaya City Health Office
5. Head of Puskesmas Pacar Keling Surabaya.

The area of Pacar Keling Health Centre with Sutomo Surabaya Nursing Study Institute is 2.8 km according to Google Mapp. The Community Service team together with students and health workers from the Puskesmas coordinate activities through coordination meetings both online and offline[25].

Implementation: From 2 September 2020 to 22 September 2020

FIGURE 1. Online Meeting of Pengabmas Committee with Cadres In Pacar Keling Health Center Area

FIGURE 2. Coordination Meeting with Pacar Keling Health Center Officers

FIGURE 3. 2nd Coordination Meeting with Pacar Keling Health Center Officers
Based on the approval of the Head of the Surabaya City Health Office and the Head of the Pacar Keling Surabaya Health Centre by online, the implementation of Community Service activities is carried out as follows:

1. Determination of targets with the approval of the Head of Puskesmas assisted by Health Workers from the Puskesmas and obtained 30 Posyandu cadres who have mobile phones with the WathsApp application, google meet and can operate it.

2. The Community Service team and students conducted online socialisation of activities through WathsApp.

3. The Community Service team together with the Pacar Keling Puskesmas Health Worker conducted an offline meeting by applying physical distancing as a process of ensuring participants and receiving souvenirs, credit reimbursement, consumption and transport money.

4. The Community Service Team together with students carried out Online Training activities with Module media and Early Detection Cards for Signs and Symptoms of Leukaemia in children as planned.

5. The activity plan is as follows: Implementation Time Wednesday -Thursday / Dated 16-17 September 2020. Starting at 13.00 to 15.30 WIB. Place In the area of Pacar Keling Surabaya Health Centre and Sutomo Surabaya Nursing Study Program Campus. Zoom Room

6. Activity Partners Cadres of Puskesmas Pacar Keling Surabaya Area

7. Number of Partners 30 people. To get the output results both attendance, evaluation of material understanding and response to the implementation of activities carried out by providing questionnaires using Google form

IV. RESULTS
Puskesmas Pacar Keling with Accreditation Status: Motto, "Your healing and satisfaction is our happiness", vision The realization of the community in the Pacarkeling Health Center area living healthy and independent lives, Mission, Prioritizing the implementation of promotive and preventive aspects oriented environmental health and PHBS as the main pillars. Service hours, morning services Monday - Saturday and afternoon services Monday - Friday, with general Clinic services, MCH Clinic, Dental Clinic, Kestrad Clinic, Psycholog Clinic, Nutrition and Health promotion Clinic, Environmental Health Clinic, Laboratory
A. Problems and follow-up activities.

The process of implementing the cadre empowerment training activities in the context of early detection of childhood cancer (Leukemia) in the area of Puskesmas Pacar Keling Surabaya with follow-up from partners as follows:

1. The Health Worker Team, Mrs. Siti Anisah, in the Nutrition section, represented the Head of the Pacar Keling Health Centre. Pacar Keling Follow-up all activities will be reported to the Head of Puskesmas.
And the cooperation will be maintained
2. Training participants / cadres according to the results of the evaluation of activities through Goglee Form with open questions as criticism and suggestions.

B. Suggestions:
Out of 30 participants, 11 participants suggested that the training be continued for other cadres in the Pacar Keling Health Centre Surabaya area, 13 other participants stated that the training activities
with the topics provided were very useful for the cadres' understanding in participating in reducing the incidence of childhood leukaemia cases, so the activities can be carried out continuously. Criticism: 6 participants stated that online activities were not effective due to interruptions in the smoothness of the internet signal.

REFERENCES


