



A Little Pharmacist (APOCIL): Introduction Of The Pharmacist Profession to Students at Sungai Miai 10 Elementary School Banjarmasin, South Kalimantan

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Abstract: *It is very important to introduce the pharmacist profession too early in childhood, one of which is a Little Pharmacist program in elementary schools. The purpose of this community service is to introduce the pharmacist profession, especially to students at Sungai Miai 10 Elementary School Banjarmasin so that they are more familiar with and foster interest in the pharmacist profession. The stages of this activity start from a survey of the implementation location, making activity permits, preparation and implementation of activities as well as analysis of results and conclusions. The method used in this activity is the lecture method, and discussion, accompanied by training in making puyer. Participants who take part in this program are grade 5 students, totaling 31 people. The results obtained were that all participants were very enthusiastic about the pharmacist profession introduction program and after participating in this program, participants better understood the duties and responsibilities of the pharmacist profession.*

Keywords: *pharmacist Profession, pharmacy service, a little pharmacist*

Introduction

Currently, the development and empowerment of education programs in the field of health and health services at school age, especially at the elementary school level, is starting to develop. This can be seen in several health programs such as a little pharmacist program initiated by the Indonesian Pharmacists Association to introduce all forms of pharmaceutical work among children. This is in line with the movement that has been carried out by WHO Global School Health since 1995, where this organization campaigns to carry out and emphasize health promotion activities in all sectors, both

local, national, regional, and global¹.

Pharmacists are health workers who have expertise in the field of medicine, but currently, there are still many people who are not familiar with the pharmacist profession, especially children. Through a little pharmacist program, young children are introduced to the pharmacist profession as one of the health workers who have expertise in the field of medicine². One of the community services carried out in the city of Makassar shows that SDN students still do not understand the pharmacist profession, this is because there is no pharmacist program in the elementary school³. Other community services carried out also said that it was very important to be able to provide an introduction to the world of children's health from a young age, one of which was through a little pharmacist program^{4,5}. This program provides an understanding for children to use drugs medicine wisely and safely⁶. A little pharmacist program is a social agenda that is a real action to educate the public, especially children, in the field of drugs medicine.

Students at SDN Sungai Miai 10 Banjarmasin have low knowledge of the pharmacist profession. On average they only know the professions of doctors, nurses, and midwives. Students of SDN Sungai Miai 10 know that pharmacists only work in pharmacies, so they do not appreciate the presence of pharmacists in health services. In addition, based on the results of interviews during a survey with the school, there has never been an APOCIL program that has entered their school, so this service can provide a little knowledge and education about the pharmacist profession and its duties in the field of medicine. This description is a very important basis for holding a pharmacist professional branding activity that must be started early, especially at Sungai Miai 10 Elementary School Banjarmasin.

A little pharmacist "APOCIL" was formed so that the existence of the pharmacist profession could be known as a doctor's profession with its little doctor. In addition, this program can maintain harmonization between health professionals so that there are no disputes and foster a sense of solidarity in working together to improve skills between

¹ C Desai, A.O Girdhar, and U.H Shah, "Knowledge and Awareness About Medicines Among Primary School Children in Ahmedabab, India, Regional Health Forum," *Regional Health Forum* 9, no. 2 (2005): 1–8.

² A.R Fahrianti et al., "Penyuluhan Dan Pengenalan Profesi Apoteker Kepada Siswa Sekolah Dasar Mini 2 Tangerang Selatan," *Prosiding Senantias* 1, no. 1 (2020): 687–694.

³ S Wahyuningsih, "Edukasi Apoteker Cilik Terkait Pengenalan Obat Kepada Siwa 5 SD Negeri Mangkura 1 Makassar," *INDRA : Jurnal Pengabdian Kepada Masyarakat* 2, no. 2 (2021): 58–61.

⁴ A.N.W Pratama, *Buku Saku Apoteker Kecil Untuk Siswa SD* (In Program Ipteks bagi Masyarakat (IbM), 2013).

⁵ W.S Abdulkadir and J Akuba, "Pemberdayaan Siswa Sekolah Dasar Dalam Pelatihan Dan Edukasi Apoteker Cilik Dalam Rangka Pencapaian Desa Peduli Kesehatan Di Kecamatan Pagimana," *Jurnal Sibermas* 11, no. 1 (2022): 77–85.

⁶ S Yanti and Y Vera, "Penyuluhan Tentang Cara Penggunaan Obat Yang Baik," *Jurnal Education And Development* 8, no. 1 (2020): 26–28.

professionals in their respective fields of work in the health sector⁷.

This community service activity aims to provide introduction and education about the pharmacist profession in the field of drugs medicine, especially at the age of children at Sungai Miai 10 State Elementary School Banjarmasin, South Kalimantan.

Since 2012, Ismafarsi and the Indonesian Pharmacists Association (IAI) have promoted a Little Pharmacist (APOCIL) program to introduce elementary school students to the profession in the field of drugs medicine⁸. A little pharmacist is an idea to increase the role of the pharmacist profession more realistically from an early age. This initiative is expected to be able to increase the positive image of the pharmacist profession in the community in order to create healthy environmental conditions for the community⁹.

Method

This community service was carried out at Sungai Miai 10 Elementary School Banjarmasin, South Kalimantan. Participants who took part in this activity were grade 5 students, totaling 31 participants. The method of delivering material is done using lectures, discussions, and practice. Before the first session was held, program participants were invited to sing a song "little pharmacist" assisted by the entire implementation team.

This program is divided into two sessions, where the first session is delivering material about the pharmacist profession, its duties, functions, and responsibilities in pharmaceutical services. In the second session, the practice of making puyer was carried out by all participants who were made in groups and assisted by the entire implementation team. This community service also carries out pre-test and post-test to measure the success of this program. The results obtained will be analyzed using the Wilcoxon Signed Rank Test using the results of the pre-test and post-test scores. The method of implementing community service can be seen in Figure 1 below:

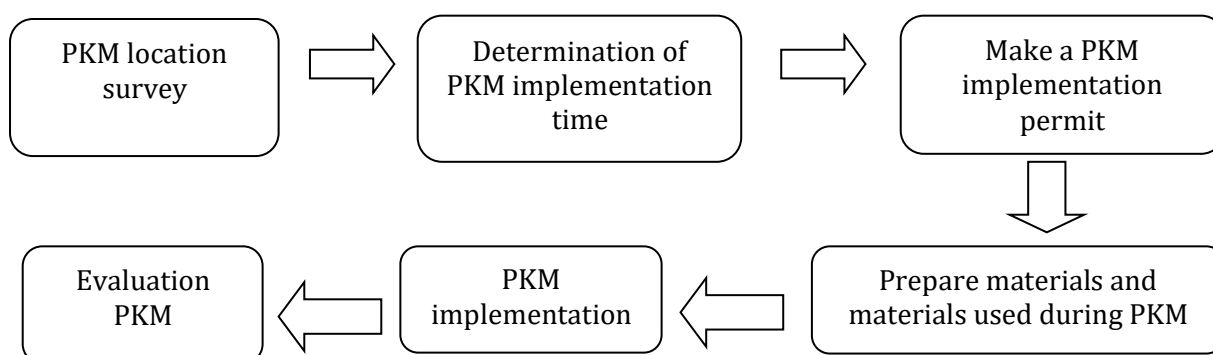


Figure 1. Flowchart of Community Service Implementation

⁷ D.R Octavia and M Aisyah, "Pelatihan Apoteker Cilik Siswa Sekolah Dasar Dalam Upaya Penggunaan Obat Yang Tepat Di Lamongan," *Journal of Character Education Society* 2, no. 2 (2019): 1–10.

⁸ Y Sukawaty, H Warnida, and A Aprliana, "Apoteker Remaja, Edukator Kesehatan Sebaya Di SMAN 1 Rantau Pulung Dan SMP N 1 Samarinda," *Jurnal Abdimas Mahakam* 1, no. 2 (2017): 112.

⁹ C.M Anidya et al., "ACIL 'Apoteker Cilik': Upaya Membangkitkan Eksistensi Profesi Apoteker Dan Sistem Interpersonal Education Profesi Kesehatan Sejak Dini," *Khazanah* 6, no. 1 (2013): 35–40.

Result

This activity is in the form of educating elementary school-aged children about the pharmacist profession regarding their duties, functions, and responsibilities to manage medicines. This activity is adapted to the characteristics of students and made as interesting as possible with discussions and the practice of making puyer so that students understand the content of the material presented.

Participants who participated in this community service were 5th-grade students representing two classes, namely 5A and 5B with a total of 31 participants. The implementing team that participated in this community service consisted of 4 lecturers from the Faculty of Pharmacy, Uniska MAB Banjarmasin, and two students. This service was carried out based on the results of interviews with the 5th-grade homeroom teacher and the Principal of SDN Sungai Miai 10 Banjarmasin. The results of this interview, it was followed up with an agreement on the time and place for the implementation of the service.



Figure 2. All participants listen to the presentation of the material and take a group photo with the implementation team

The service implementation begins with singing a little pharmacist song which is followed by all participants who are present and a *pre-test* is carried out. After that, in the first session, Apt. Yulistia Budianti Soemarie, M. Farm. The presentation of the material was carried out for 45 minutes and continued with a discussion session. This material explains who a pharmacist is, where is the pharmacist's place of work, what are the duties of a pharmacist, where the pharmacist orders drugs/medical equipment, and others. Several questions were asked by participants such as whether pharmacists can diagnose patients and how long it takes to study to get a pharmacist degree. After session 1, it was continued with a second session in the form of training on making puyer, which previously started with a little material about puyer and what things must be considered when mixing powder dosage form. This training provides tools such as mortar, stamper, spatula as well as parchment paper, and a model of the drug

“paracetamol”. How to wrap the puyer is also taught in this training to all participants. Participants were very enthusiastic about participating in this training, even the implementation team provided rewards for the participants who wrapped the puyer neatly and quickly. This training aims to make the material presented from session 1 and session 2 quickly understood by all participants. After the second session was closed by singing a little pharmacist song again and a *post-test* was carried out to assess whether the material was accepted by the participants.



Figure 3: All participants enthusiastically participated in the practice of making puyer accompanied by the implementation team

Table 1. Difference in Knowledge of Little Pharmacists Participants using Pre-Post Test Score

Knowledge Variable	Min-Max	Median	Mean	Std. Deviation	P-Value
<i>Pre-Post</i>	60 – 80	70	67.42	6.174	0.005
<i>Post-test</i>	75 - 95	85	83.55	5.507	

**Wilcoxon Signed Rank Test*

This activity was evaluated using the Wilcoxon Signed Rank Test using the results of the *pre-test* and *post-test* scores. The results obtained from this test are that there is a difference between the results of the *pre-test* and *post-test*, so it is said that there is an effect of providing materials and training on making powder on the introduction of little pharmacists at Sungai Miai 10 Elementary School Banjarmasin. This can be seen from the value of *Asymp. Sig* (2-tailed) with a value of $0.000 \leq 0.005$, so the hypothesis is accepted (there is a significant difference).

Discussion

A little pharmacist is a program that contains everything related to the pharmaceutical profession. This program is intended for school-age children to be able to recognize and be able to arouse children's interest in the pharmacist profession. Elementary school age is the most appropriate age to learn about health, including drugs medicine. This can assist them in increasing their knowledge in the field of drugs medicine so that they can apply this knowledge in the use of medicines such as taking medicines according to indications and doses. This program can also reduce the occurrence of drug abuse due to a lack of knowledge about side effects that can cause problems in treatment (medication errors)¹⁰.

Children are ages who are very often disobedient, especially in taking medicine. This is because most drugs have a bitter and unpleasant taste, so the role of parents is needed to help maintain drug compliance in children. This will be very easy if children are given knowledge about the awareness of the importance of taking medicine, especially when they are sick. In addition, with knowledge and awareness in children about the dangers of side effects of drug medicine if used inappropriately, it will keep them away from the dangers of drug abuse, especially psychotropic and narcotic groups when they are adults¹¹.

The dedication to introducing the pharmacist profession to high school students in Bantul Regency stated that all participants seemed enthusiastic and could understand the material well, seen from the increase in *pre-test* and *post-test* scores¹².

Other services that have been carried out for students at SDN Sendangmulyo 02 Semarang are known to increase students' knowledge of the pharmacist profession and its duties as well as the DAGUSIBU program (how to get, use, store and dispose of medicines correctly)¹³.

The service with the theme of Little Pharmacist must also emphasize that pharmacists do not only sell drugs in pharmacies. However, pharmacists can also work in other agencies as responsible for pharmaceutical practice such as hospitals, health centers, clinics, industry, health services, BPOM, Pharmaceutical Wholesalers (PBF) and other places. A little pharmacist program is also expected to be able to create harmonization between health professions in School Health Business activities. Research conducted in Japan found that activities in the field of health and safety in

¹⁰ E.K Untari et al., "Increasing Knowledge and Promoting Better Attitude Towards Appropriate Self-Medication in Sungai Ambawang Community Through CBIA," *Jurnal Pengabdian Kepada Masyarakat* 7, no. 2 (2021): 123-130.

¹¹ Yanti and Vera, "Penyuluhan Tentang Cara Penggunaan Obat Yang Baik."

¹² I Hadning et al., "Pengenalan Profesi APoteker Kepada Siswa SMA Melalui Lomba Keterampilan Kefarmasian," *Seminar Nasional Abdimas II* (2019): 438-444.

¹³ C Astutiningsih et al., ". Pengenalan Profesi APoteker Dan Mengenali Obat Sejak Dini," *Jurnal Abdimas* 2, no. 3 (2021): 713-719.

schools that were supervised by doctors, dentists and pharmacists were very beneficial for all students and teachers¹⁴.

Health education in early childhood should be important to note, this is in order to increase the potential of children optimally by forming and familiarizing healthy living behavior. Therefore, the implementation of service activities regarding the introduction of the pharmacist profession in the field of drugs medicine in early childhood is very appropriate to do to improve the health status of children¹⁵.

Conclusion

A little pharmacist is a program that was formed so that the existence of the pharmacist profession in the pharmaceutical world can be known like other health professions, especially in early childhood. This program is also expected to be able to establish harmonization and cooperation with other health professionals in their respective work environments to introduce their duties and responsibilities to the wider community.

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¹⁴ H Teramachi, "Established of a 'Correct Use Medicine' Educational Program For Health and Physical Education at Junior High Schools," *Yakugaku Zasshi* 133, no. 12 (2013): 1325–1334.

¹⁵ T.J Saragih et al., "Increasing Knowledge of 'Apoteker Cilik' and Nutritional Healthy Food In The Al-Ikhlas Smart House, Pamulang District, Tangerang Raya," *JAM: Jurnal Abdi Masyarakat* 2, no. 2 (2021): 1–8.

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