

Little Pharmacist Training and Healthy Nutritious Food Education for Elementary Students in Kemanisan Village

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Abstract

WHO in its program, namely the Global School Health Initiative seeks to mobilize and strengthen health promotion and education activities in young children. One of the health education programs that could be held in elementary schools is the training of young pharmacists. Little Pharmacist, commonly abbreviated as Apocil, is an idea to introduce the role of the pharmacist profession more clearly from an early age. It is hoped that the presence of this little pharmacist in the future will increase elementary school students' awareness of medication and introduce the pharmacist profession to students and the community. Student and community knowledge regarding health and medicine is still limited. Medications have an important role in maintaining health, therefore it should be used correctly in order to provide optimal clinical benefits. The purpose of this community service is to train little pharmacists in an effort to use the right medicine and educate healthy, nutritious food for elementary school students in Kemanisan Village. The method used was the Active Individual Learning Method (CBIA), the practice of making powder medicine, and it was evaluated by carrying out DAGUSIBU (get, use, store, and dispose of) mini-games. The media used in this activity are banners, mortar and stamper, and parchment paper. From the results of the activities was found that the students had known the pharmacist role and understood DAGUSIBU as well as education on healthy nutritious food with good results using mini-games. In summary, it can be concluded that the provision of education can increase the knowledge of elementary school students in the village of Kemanisan.

Keywords: Training, Little Pharmacist, DAGUSIBU, CBIA

INTRODUCTION

Indonesia is one of the countries with early health education programs that are starting to develop, for example fostering and empowering children at primary school age. One of the health education programs such as the little doctor implemented by elementary schools in Indonesia. This is in line with the movement that has been carried out by the WHO Global School Health Initiative since 1995, this organization campaigns to carry out and confirm health promotion activities in all sectors, whether locally, nationally, regionally, or globally (Fahriati et al., 2020). Health promotion carried out by schools is an effort to implement policies related to healthy schools introduced by WHO in 1995.

Self-medication or another term called self-medication is one of the efforts in society to maintain health independently. In current practice, self-medication can be a source of problems with medication use due to a lack of knowledge about medications and their use (Harahap et al., 2017). In recent times, self-medication by the community has been used to help prevent and treat the medical conditions they experience. However, emerging health hazards are becoming more and more common. Cases of inappropriate use of drugs are often encountered, such as poisoning, and overdose, which can lead to death. To overcome

this problem, initial treatment or prevention is needed to overcome health hazards, especially the use of medications in the community. At present the increase in drug use is accompanied by the awareness of its use independently in society which is not comparable to the understanding of drug use itself. At present, people are starting to be aware of medication but not accompanied by adequate knowledge about drug use. Some people often self-medicate (self-medication) for minor illnesses (Lia Yunita & Atmadani, 2021).

Medications are materials that are very easy to find, but people's knowledge regarding health and especially drugs is still limited and has an important role in health services, therefore it must always be used correctly in order to provide optimal clinical benefits (Wahyuningsih, 2021). For drugs that are no longer used, it is important to dispose of them properly to prevent harm to the community, the knowledge and methods of medication that are not used are very important. This problem will cause environmental pollution which is very dangerous and can have consequences for future generations (Ani Kristiyani & Sarah Puspita Admaja, 2021). To prevent errors in medication use, it is necessary to educate the public on drug use from an early age, especially for children to increase their knowledge of drug use and be given education about proper drug use (Ristian Octavia & Aisyah, 2019)

Pharmaceutical work is the manufacture including quality control of pharmaceutical preparations, procurement, reception, storage, distribution, drug management, prescription drug services, and drug information services (Peraturan Pemerintah, 2009). Pharmacy services to the community are carried out by pharmacists through the Intelligent Society Movement for Using Drugs (Gema Cermat) in the Get, Use, Store, and Dispose of (DAGUSIBU) program.

The Indonesian Pharmacist Association (IAI) reported that 14.7% of children surveyed said that drugs were used as a toy, 11.5% of children had bought their own medicine without the family knowing about it, 31.4% of children had taken medicine at home without being ordered by parents, 35.6% of children have disposed of medication inappropriately, and 46.5% of children have taken medication without being accompanied by their family (Ani Kristiyani & Sarah Puspita Admaja, 2021).

One source of information about drugs that can be searched is a pharmacist. The pharmacist is a health professional whose existence is recognized by the State. This is stated in the Law on Health Personnel such as doctors, nurses, and midwives (Anonim, 2014). Pharmacists play a role in the health sector by providing Consultation, Information, and Education (IEC) so that efforts can be made to increase public knowledge of drug use. It's such a long and complicated journey for someone to get a bachelor's degree in pharmacy to the pharmacist profession. This is not comparable to the existence of pharmacists in society which is still low. Currently, many people only know pharmacists in pharmacies as drug sellers.

One of the efforts that can be made to improve the image of pharmacists in society and educate the public, especially young children, is to recognize pharmacists as health worker who has expertise in the field of medicine, namely the Little Pharmacist Program (ACIL). The Little Pharmacist (ACIL) is an idea and effort to raise the existence of the Pharmacist profession in a more real way from an early age.

METHODS

The Community Service activities used in the community service which were carried out on Thursday, October 06, 2022, were in the form of Little Pharmacist Training in Efforts to use appropriate medicines and Healthy Nutritious Food Education for Elementary School Students in Kemanisan Village. This community service activity was carried out by providing education and socialization of the pharmacist profession (Astuti & Hidayati, 2021), followed by the practice of introducing drugs and healthy and nutritious foods with interesting

methods such as the Active Insan Learning Method (CBIA), practice making puyer, and evaluated by conducting a Get, Use, Save, and Dispose (DAGUSIBU) quiz (Atmadani & Hidayati, 2020). This socialization and education activity was delivered using an interesting and interactive method: asking questions and answering questions and singing about the material. During the delivery of educational material, elementary school students are allowed to ask questions about material that has not been understood.

The media used in this activity are leaflets, banners, mortar and stampers, parchment paper, various examples of drug preparation examples, and educational media games to invite students to know the material and avoid students feeling bored when delivering the material. In evaluating the results and monitoring the activities of the Little Pharmacist (ACIL) program, students are asked questions about the material, to avoid a sense of boredom, a mini-game is made at the end of the material with attractive door prizes and to give a more pleasant impression on the students.

The training activities began with member introductions. The material provided was an introduction to the pharmacist profession, the duties and work of pharmacists, both when in the pharmaceutical factory/industry and community services, the journey to getting a pharmacist degree, then together singing the little pharmacist song, education continued with the presentation of material related to the right time to take medicine, the correct way to take medicine (must be accompanied by parents or adults), not accepting medicine from strangers, explaining that medicine is not candy, Followed by exposure to the DAGUSIBU program to elementary school students by providing leaflets with interesting pictures accompanied by information. DA which means get, explains the right places to get medicine/drug information that is safe, useful, and quality, Gu which means use, explains how to use the right medicine, both the use of antibiotics and non-biotics, then makes a simulation about the time to take medicine that is said to be right. SI which means the save is related to the correct storage of drugs because certain drugs require different storage conditions. And BU which means dispose. All materials were delivered by each team member and equipped with tips on the DAGUSIBU program. The last educational material is in the form of education on healthy and nutritious food for children.

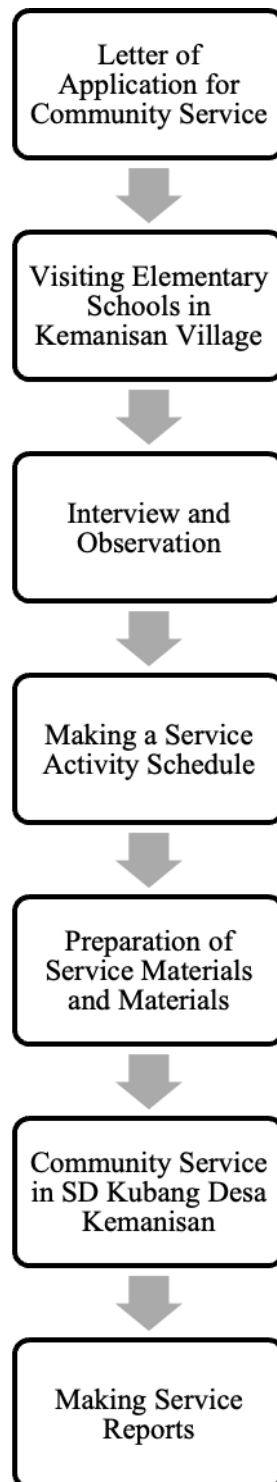


Figure 1. Community service activities

RESULTS AND DISCUSSION

This community service was carried out at Kemanisan Elementary School for students in grades 4,5 and 6. The number of students in grades 4,5 and 6 was 40 students, 39 students, and 41 students respectively. The early stage of community service begins with the preparation of a community service proposal involving eight members of the community service team. In the next stage, the community service team coordinated with one student who was recruited as a facilitator in the community service program. In this session, the community service team explained the purpose of community service, the program plans to be carried out, and the roles of the community service team and students (Matson et al.,

2019). Then, representatives of the community service team coordinated with the Principal of the Kemanisan Elementary School for a request to carry out community service at school which had been approved by the Principal.

The service begins with making material in the form of learning leaflets about the pharmacist profession, followed by the practice of introducing medicines (Hidayati et al., 2022) and healthy and nutritious food with interesting methods such as Active Individual Learning Methods (CBIA) and through presentations and practice of making powders, as well as being evaluated by doing DAGUSIBU games (Atmadani & Hidayati, 2020). It is important for elementary school students to learn about health and medicine therefore they will be more precise and wise in using drugs according to their indications and conditions



(Matson et al., 2019; Syofyan et al., 2019), and to prevent drug abuse (Prakash et al., 2021)

The media used in this activity are leaflets, banners, mortar and stamper, and parchment paper. In delivering the first material the students emphasized being able to know the meaning of DAGUSIBU, namely DA which means get, the team conveyed how to get the right and useful medicine, safety must be guaranteed, and places that have the right to sell drugs that have permits. The second is Gu which means using the medication according to the dosage and rules given by the doctor, the third is SI, which is how to store medicine properly and correctly according to what is written on the packaging so that the medicine can avoid damage, the fourth is BU, which is how to dispose of the drug that has been expired, the drug must be disposed of immediately. DAGUSIBU's educational activities adopt one of the health promotion programs of the Indonesian Pharmacist Association (IAI) to educate the public about the importance of understanding drug use properly and correctly. The increasing use of drugs really needs to be supported by good public knowledge about good drug management which they will obtain through prescription or self-medication. In this material, the servant carries out interesting methods such as Active Individual Learning Methods (CBIA) and through the presentation of leaflets.

The second activity of providing material was about the practice of introducing medicine and healthy and nutritious food, the media used in this activity were leaflets, banners, mortar and stamper, and parchment paper. Delivering the material in a creative way where in between activities a question and answer mini-game was held again while singing together which made the students return to be more enthusiastic and more focused on paying attention to the presenters' team. Taking into account the student's abilities when presenting educational material, one of them was appointed to conduct an explanation related to

material on introducing pharmacists, DAGUSIBU, and healthy and nutritious food to represent their friends as young pharmacists at school and in their home environment.

Figure 2. Little Pharmacist Education Process

The Little Pharmacist is an activity to introduce the pharmaceutical profession to students so they can get to know and generate attention and interest in the pharmaceutical profession. The little pharmacist was formed so that the pharmaceutical profession exists and is known like other professions that are widely known by the public, namely doctors, nurses, or midwives. nutritious.



Figure 3. Explaining the Role of a Pharmacist in a Healthy Lifestyle

The results of the evaluation of this activity were as follows: The evaluation of this activity was the Remaja Elementary School students were very enthusiastic about their role as Little Pharmacists and in learning about DaGuSiBu and being able to increase their awareness regarding medicine. Furthermore, education for students in activities like this is very necessary to provide an overview of the roles and responsibilities of pharmacists in health services. The follow-up of this activity is that it is necessary to carry out further education related to good and correct information on drug use, including the presence of dangerous risks if the use of drugs is not in accordance with the dosage and function.



Based on the general conclusion that this little pharmacist activity can be concluded as a very useful for broadening insight and building views about the world of pharmacy, especially pharmacists in elementary school children to avoid drug abuse which is dangerous and instills awareness of pharmaceutical science among children. This is also needed in order to open up thoughts and insights, build pharmacist branding, and raised awareness of the importance of using drugs appropriately.

CONCLUSIONS

This community service activity obtained very positive results from students and the community at Kubang Elementary School in Kemanisan Village, therefore it can be concluded:

- Students were able to accept learning activities through quizzes and learning videos that have been given regarding DAGUSIBU and Healthy Nutritious Food.
- There was an increase in knowledge about the profession of Pharmacist and DAGUSIBU seen from answering in the DAGUSIBU and Healthy Nutritious Food mini-games.

REFERENCES

- Ani Kristiyani, & Sarah Puspita Admaja. (2021). Edukasi Pengenalan Obat Kepada Siswa Sekolah Dasar. *J.Abdimas: Community Health*, 2(1), 28–34. <https://doi.org/10.30590/jach.v2n1.p28-34.2021>
- Anonim. (2014). *Undang Undang Republik Indonesia Nomor 36 Tahun 2014 tentang Tenaga Kesehatan* (pp. 1–24).
- Astuti, E. J., & Hidayati, I. R. (2021). EDUKASI DAGUSIBU DAN PENGENALAN APOTEKER CILIK (APOCIL). *Jurnal Pengabdian Masyarakat*, 4(3), 984–989. <https://doi.org/10.31604/jpm.v4i3.984-989>
- Atmadani, R. N., & Hidayati, I. R. (2020). Pelatihan Apoteker Cilik dan DaGuSiBu bagi Siswa SDN Losari di Singosari, Kabupaten Malang. *Jurnal Pengabdian UNDIKMA*, 1(2), 77. <https://doi.org/10.33394/jpu.v1i2.2966>
- Fahriati, A., Nurhardiyanti, Maelaningsih, F. S., Aulia, G., Sari, D. P., Werawati, A., Fadhilah, H., Ismaya, N. A., Melizsa, Nadya A R I, & Sayyidah. (2020). Penyuluhan dan Pengenalan Profesi Apoteker kepada Siswa Sekolah Dasar di MIN 2 Tangerang Selatan. *Prosiding Senantias*, 1(1), 687–694.
- Harahap, N. A., Khairunnisa, & Tanuwijaya, J. (2017). Tingkat Pengetahuan Pasien dan Rasionalitas Swamedikasi di Tiga Apotek Kota Panyabungan. *Jurnal Sains Farmasi & Klinis*, 3(2), 186–192. <https://media.neliti.com/media/publications/129397-ID-none.pdf>
- Hidayati, R., Rahmawaty, A., & Caesar, D. L. (2022). Cerdas Mengenal Obat Bersama Apoteker Cilik (Apocil) di SDN 1 Jepang Kudus. *Muria Jurnal Layanan Masyarakat*, 4(2), 132–136. <https://doi.org/10.24176/mjlm.v4i2.8615>
- Lia Yunita, S., & Atmadani, R. N. (2021). IBM DaGuSiBu Obat dan Pemeriksaan Kesehatan Bagu Pekerja Migran (PMI) di Taipei, Taiwan. *Selaparang, Jurnal Pengabdian Masyarakat Berkemajuan*, 4(2), 205–209. <https://media.neliti.com/media/publications/535054-none-d4b37761.pdf>
- Matson, K. L., Orr, K. K., Marino, C., & Cohen, L. (2019). The Effect of a Student Pharmacist Directed Health-Education Program for Elementary-School Children. *INNOVATIONS in Pharmacy*, 10(4), 6. <https://doi.org/10.24926/iip.v10i4.1457>
- Peraturan Pemerintah. (2009). *Peraturan Pemerintah no 51 tahun 2009 tentang Pekerjaan Kefarmasian*.
- Prakash, P., Kumar, S., Kumari, S., Sinha, P., & (2021). Knowledge and Perception of Drugs Use and Abuse among Secondary School Students. *International Journal of Research and Review (Ijrrjournal.Com)*, 8, 3.
- Ristian Octavia, D., & Aisyah, M. (2019). *Pelatihan Apoteker Cilik Siswa Sekolah Dasar dalam Upaya Penggunaan Obat yang Tepat di Lamongan*. 2(2), 1–10. <https://doi.org/10.31764/jces.v2i2.1482>
- Syofyan, S., Dachriyanus, D., Masrul, M., & Rasyid, R. (2019). The knowledge and attitudes about the benefits, risks and use of medicine in aged primary students in Indonesia. *Open Access Macedonian Journal of Medical Sciences*, 7(11), 1860–1866. <https://doi.org/10.3889/oamjms.2019.347>

Wahyuningsih, S. (2021). Edukasi Apoteker Cilik Terkait Pengenalan Obat Kepada Siswa Kelas 5 SD Negeri Mangkura 1 Makassar. *INDRA: Jurnal Pengabdian Kepada Masyarakat*, 2(2), 58–61. <https://doi.org/10.29303/indra.v2i2.132>