



## “Little Doctor” : An Empowerment of Behaviour Model of Clean Healthy Life in Elementary School Bogor

Dedes Fitria; Fuadah Ashri Nurfurqoni; Sinta Nuryati

<sup>1</sup>Department of Midwifery, Poltekkes Kemenkes Bandung, Jalan Prof. Eyckman No. 24 Bandung, Indonesia. ZIP code 40161

Corresponding author: dedesfitria@yahoo.com

**Abstract. Background :** The behavior of Clean Healthy Life is a form of community empowerment that is conscious, willing and able to practice healthy life behavior. Promotion of Healthy Life Behavior is an effort to provide learning experiences or create a condition for individuals, families, groups and communities, by opening communication lines, providing information and giving education, increasing knowledge, attitudes and behavior, through a leadership approach (Advocacy), social support and community empowerment. Empowerment can be done through the formation of a Little Doctor. However, this activity has not been active done in the education system, especially elementary students.

**Methods :** This behavior model begins by formation of Little Doctors, after that they provides health promotion to students at Class IV and V and simulation healthy life behavior, so that health efforts are not only dependent on health workers, but also to students, they can participate every potential capability to increase their health status.

**Results :** Little Doctors that been formed was given learned about Clean and Healthy Behavior. Next activity will be to provide opportunities for Little Doctor to give promotion about model of healthy behavior for elementary students and continue with practice. After that elementary school students have the opportunity to simulate a healthy behavior independently and the community service team will observing. The evaluation including a pre-test that been done at first meeting and a post-test after given health promotion. It will determine the extent successfull of increasing knowledge .

**Conclusion :** The post test results showed a better change in scores, the schools hoped this community service activities can be continued.

## Introduction

Behavior factors theoretically have contribution 30-35% to health degrees, while the impact of behavior on health degrees is quite large, so various efforts are needed to change unhealthy behaviors to be healthy, one of them is through the Clean and Healthy Behavior program (PHBS).

PHBS Promotion is an effort to provide learning experiences or create conditions for individuals, families, groups and communities, by opening communication channels, giving information and doing education, for increasing knowledge, attitudes and behavior, through a leadership approach (Advocacy), community development (Social Support) and community empowerment, so that people can recognize and solve their problems, especially in their life, and the community can apply healthy ways of life by maintaining and improving their health.

The indicators of PHBS including 1) labour which done by health worker, exclusive breastfeeding up to 6 months; 2) weighing toddlers every month, 3) using clean water for household; 4) the habit of washing hands with clean water and soap, using healthy lavatory; 5) eradicating larvae at home; 6) eating vegetables and fruit every day; 7) doing physical activities every day; 8) no smoking in the house; 9) consuming balance nutrition in the family; 10) pregnancy examination according standards of pregnant women to health workers; 11) having health insurance; 12) complete immunization in infants; 12) EFA as family planning participants (except for EFA who want children but do not have risk factors); 13) house floors made of cement, tiles, ceramics / or similar types that are waterproof; 14) utilization of health service facilities; 15) good garbage manage 6) have family medicinal plants; and 17) oral hygiene habits.

Bogor City is one of the city in Indonesia with a high risk of diarrhea and pneumonia, which is equal to 58.5% (Fuada: 2012). Most elementary schools in Cilendek Timur are close to the river flow and public garbage disposal, one of its is in Cilendek Timur Elementary School and Pabuaran, so there are susceptible to various infectious diseases. One of them is because of food/snacks around the school are easy to get bacteria, and not yet grown habit of washing hands with soap in 5 critical times. That's why healthy living behaviors that need to be accustomed starting from elementary school including the consumption of healthy snacks at school, the habit of washing hands with soap and throw garbage on its place.

According to Khomsan and Christianti, 2016, in Bogor City, the average menarche in girl teenager occurs at 10.6 years old. Thus some of the 4th and 5th-grade in elementary schools female students who are on average 10-11 years old must be prepared for menarche. One of preparation that needs to be done is how to clean herself after urinal or defecation. Because if the method of cleaning genital is not right, it will affect hygiene and health reproduction in future. So it is important to teach the right behavior of personal hygiene after defecation and urinal properly.

This behavior can take place continuously through empowerment of Little doctors in elementary school. Based on Reza et al's study in 2012 in Kebumen, health education conducted by peer groups including Little doctors was as effective as health education carried out by health workers. (1) Through this program, it was hoped that little doctors could become agents who bring changes in health behavior towards much better.

Through this activity, it is expected that elementary students in the Cilendek village can empower themselves to be able to carry out a clean and healthy behavior in their daily lives to improve optimal health. This activity is expected to empower the potential that exists in children so that children can live healthy and independently.

The realization of this activity is expected to be a pilot project as an effort to form partnerships between the organizers/managers of Elementary Schools and Primary Health Centre in realizing The Behavior of Clean and Healthy Life through the empowerment of Little Doctors.

## Objective

The objectives to be achieved from the implementation of this empowerment are:

1. Formed Little doctors in the school as many as 19 elementary students in grades 4, 5, and 6, and 1 assistant teacher from each elementary school. Little Doctors have been able to teach their peers about healthy snacks, how to wash their hands properly, how to brush their teeth properly, sorting out the garbage, and toilet hygiene.

2. Elementary students know the importance of being clean and healthy behavior in school.
3. Elementary students able to choose clean and healthy snacks at school
4. Elementary students able to brush their teeth properly
5. Elementary students able to wash their hands properly
6. Elementary students know about toilet hygiene after defecation and urination

## Methods

### Formation of Little Doctors (Little Educator)

The community service activities begin with made a team of 19 little doctors and 1 guide teacher in each elementary school. Empowerment is been held through training for 4 days. Students who took part in the formation of little doctors were selected from grades 4, 5, and 6. After the team was formed, the team gave health promotion about health behavior to other students. They presented about basic concepts of PHBS in schools, toilet hygiene, healthy snacks, healthy canteen, washing hands, and brushing teeth properly.

The topic using interesting methods, such as videos, songs, games, and direct practices. Before the group been formatted, a pretest is conducted to determine prior knowledge about the topic that will be delivered. After the health promotion and practice were completed, a post-test was carried out to determine changes in student understanding.

### Health Promotion of Healthy Life Behavior in School for Elementary Students by Little Doctors

Health promotion consists of 2 stage, there is theory and practice. When little doctor given health promotion, they were accompanied by a community service team from Bogor Midwifery Study Program. Each session being done every week. This socialization was given to provide knowledge to elementary students about how to choose healthy snacks, hand washing, brushing teeth and toilet hygiene properly.

Before the socialization being done, pre-tests were held to determine understanding of students about implementation of clean and healthy behavior. Then, on the first day, they get theory, while the second day get practice.

### Implementation And Evaluation

Evaluation of the implementation was carried out through pre and post-tests for Little doctors and elementary students. This is used to know the success of the community service program that been held. Before the activity, the participants had undergone a pretest, they have given a briefing on theory and also the practice of clean and healthy

behavior in school. With the implementation of these activities, it is expected that students already have the basic knowledge about health promotion to peers.

## Results and Discussion

After a Little doctor is formed, the next activity is peer group learning, they give health promotion to their peers. The details activity of Little Doctors can be seen in Table 1 below:

**Tabel 1:**  
**Health Promotion by Peer Group "Little Doctors"**

Topic	Hand Hygiene	Brushing tooth	Sorting Garbage	Hand Hygiene	Healthy Snack	Brushing tooth	Toilet Hygiene
	1	2	3	4	5	6	7
Partner	Grade 3	Grade 4	Grade 3	Grade 4	Grade 4	Grade 5	Grade 6
SDN Cilendek Timur 1	11 Agt 2017	11 Agt 2017	25 Agt 2017	25 Agt 2017	8 Sept 2017	22 Sept 2017	6 Okt 2017
Time	09.00-11.00	11.00-12.00	09.00-11.00	11.00-12.00	11.00-12.00	11.00-12.00	12.00-13.00
SDN Pabuaran	18 Agt 2017	18 Agt 2017	1 Sept 2017	1 Sept 2017	15 Sept 2017	29 Sept 2017	13 Okt 2017
Time	10.00-11.00	11.00-12.00	10.00-11.00	11.00-12.00	11.00-12.00	12.00-13.00	13.00-14.00

Based on Table 1, it is known that the activities of health promotion peer group by Little Doctor completed in 14 times. Activities been held in grades 3, 4, 5, and 6. The Little doctors look enthusiastic to demonstrate and teach their peers about healthy behavior at school.

The formed of Little doctor had beneficial for school. Students that been trained were enthusiastically in each activity. Because the topic been given through interesting methods for elementary students by using video, games, pamphlets, and practice.

At Cilendek Timur 1 Elementary School, students who are trained to be Little Doctors have a larger posture and active in each activity. While at SDN Pabuaran, students who take part in the activities of Little doctors workers have smaller postures and passive in activities.

The pre-test is given before give health promotion by community service team. And a post-test is given after health promotion given using any methods. The results can be shown below:

**Table 2: Pre and Post-Test Result**

Result	SDN Cilendek Timur 1		SDN Pabuaran	
	Pre	Post	Pre	Post

Mean	63	80	61	78
------	----	----	----	----

Peer groups doing by Little Doctors make confidence for students, because Little doctors already have good knowledge before teach the peer groups. According to Notoatmodjo, adequate knowledge is one of the basic fundamental for positive behavior change. (2) (3)

According to Ambarwati's study about "Comparison of the effects of health promotion using audio media with audio-visual media to oral hygiene behavior in elementary student, it is known that there are positive behavioral changes in children's health and mouth when given health education through audio-visual media. (4) For this reason, the community service media used interesting media both in audio-visual media using animated cartoons, pamphlets, and practices. For toothbrushing topic, given through cartoon animation, because according to Tandilangi, video make behavioral changes in children's dental health. (5) (6)

For the success of health education using the peer group method can be seen from various study results, including Andari's study said that there was an effect of health education with the Peer Group model on the behavior of Mother in Early Detection of Cervical Cancer between the experimental group and the control group (7). Likewise with the results of Desmarnita's study said that education by peers is good for increasing adolescent reproductive health knowledge and attitudes. (8) Based on the results of these studies, this community service activity is adopting a peer group method by Little doctors.

## Conclusion

The formed of little doctors has been done in both partners, they able to teach how to choose healthy snacks, brush their teeth, wash hands, teach about toilet hygiene and sorted garbage properly.

## Competing Interest

The authors of this paper have no competing interest to report.

## Acknowledgement

The authors of this paper have no acknowledgement to report.

## References

- Reza F, Saraswati R, Keperawatan STIKes Muhammadiyah Gombong J. Efektifitas Penyuluhan Kesehatan oleh Peer Group dan Tenaga Kesehatan Tentang Perilaku Hidup Bersih Sehat (PHBS) Cuci Tangan Bersih Pada Siswa Sd N 01 dan 02 Bonosari Sempor Kebumen. J Ilm Kesehat Keperawatan. 2012;8(1).
- Notoatmodjo S. Pendidikan dan Perilaku Kesehatan. Jakarta: Rineka Cipta; 2012.

3. Setiawati, Dermawan. Proses Pembelajaran dalam Pendidikan Kesehatan. Jakarta: Trans Info Media; 2008.
4. Ambarwati A, Umaroh AK, Kurniawati F, Kuswandari TD, Darojah S. Media Leaflet, Video dan Pengetahuan Siswa SD Tentang Bahaya Merokok (Studi Pada Siswa Sdn 78 Sabrang Lor Mojosoongo Surakarta). J Kesehat Masy [Internet]. 2014;10(1):7–13. Available from: [http://journal.unnes.ac.id/artikel\\_nju/kemas/3064](http://journal.unnes.ac.id/artikel_nju/kemas/3064)
5. Tandilangi M, Mintjelungan C, Wowor VNS, Skripsi K, Studi P, Dokter P, et al. Efektivitas dental health education dengan media animasi kartun terhadap perubahan perilaku kesehatan gigi dan mulut Siswa SD Advent 02 Sario Manado. [cited 2017 Oct 5];4(2). Available from: [http://download.portalgaruda.org/article.php?article=458918&val=1000&title=Efektivitas dental health education dengan media animasi kartun terhadap perubahan perilaku kesehatan gigi dan mulut Siswa SD Advent 02 Sario Manado](http://download.portalgaruda.org/article.php?article=458918&val=1000&title=Efektivitas+dental+health+education+dengan+media+animasi+kartun+terhadap+perubahan+perilaku+kesehatan+gigi+dan+mulut+Siswa+SD+Advent+02+Sario+Manado)
6. Papilaya EA, Zuliari K, Skripsi Program Studi Pendidikan Dokter Gigi Fakultas Kedokteran K, Studi Pendidikan Dokter Gigi Fakultas Kedokteran Universitas Sam Ratulangi Manado P. Perbandingan pengaruh promosi kesehatan menggunakan media audio dengan media audio-visual terhadap perilaku kesehatan gigi dan mulut siswa SD. [cited 2017 Oct 5];4(2). Available from: [https://ejournal.unsrat.ac.id/index.php/egigi/article/view File/14261/13836](https://ejournal.unsrat.ac.id/index.php/egigi/article/view/File/14261/13836)
7. Andari IA. Pengaruh Pendidikan Kesehatan Dan Model Peer Group Terhadap Perilaku Ibu Melakukan Deteksi Dini Kanker Serviks Naskah Publikasi [Internet]. Universitas Muhammadiyah Surakarta; 2014 [cited 2017 Nov 7]. Available from: [http://eprints.ums.ac.id/30724/15/NASKAH\\_PUBLIKASI.pdf](http://eprints.ums.ac.id/30724/15/NASKAH_PUBLIKASI.pdf)
8. Desmarnita U, Djuwitaningsih S, Rochimah. Effect Of Peer Group Health Promotion to Knowledge and Attitude in Health Reproduction Among Girls Teenager. J Keperawatan [Internet]. 2014 [cited 2017 Nov 7];2(3):55–62. Available from: <file:///C:/Users/hp/Downloads/37-62-1-SM.pdf>