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# Family outreach and empowerment program: Health promotion model for medical students

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## Abstract:

**INTRODUCTION:** Providing health promotion and communication learning opportunities for medical students practising their theoretical information into action, addressing the health problems, and trying to find suitable and feasible interventions is very much needed to learn and experience directly about health-related behavior in the community. Health promotion practice of PRECEDE-PROCEED model, is used as the foundation of this Family Outreach and Empowerment Program (FOEP). This study aims to implement and evaluate FOEP as an effective health promotion learning model for undergraduate medical students.

**METHODS:** Two hundred and forty-four medical students joined the program for the whole weeks. The reports were evaluated to assess their activities throughout the process. Evaluation was done using the assessment checklists based on PRECEDE-PROCEED framework. Data collected from the assessment will be processed and analyzed using the IBM SPSS Statistics 22 program.

**RESULTS:** Two hundred and forty-four reports have been evaluated, the reports' scores in the category very good is 136, good 64, enough 26, bad 12 and very bad 6. The main problem in FOEP is behavior (37,6%) and the most alternate intervention chosen is education (232).

**DISCUSSION:** The most intervention used by students for FOEP was education because it has been proven that can demonstrate feasibility, effectivity, increase knowledge control, and self-efficacy among disease.

**CONCLUSION:** Student's reports were already satisfied.

## Keywords:

Family outreach and empowerment, student, health promotion

## Introduction

Sustainable development goals (SDGs) is the latest international development agreement replacing the old agreement called millennium development goals (MDGs).<sup>[1]</sup> SDGs has been already implemented since year 2015 and expected to reach the goal in 2030. The SDGs consist of documents as thick as 35 pages which had been dealt by more than 190 countries which contain 17 objectives and 169 development targets.

Seventeen objectives with 169 targets are expected to address the underdevelopment countries around the world, both in developed countries (excessive consumption and production, and inequality) and developing countries (poverty, health, education, protection of marine and forest ecosystems, urban, sanitation, and drinking water availability).<sup>[1]</sup>

From the experiences of the MDGs (2000-2015), Indonesia has not succeeded in reducing maternal mortality, access

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to sanitation and drinking water, and a decrease in HIV-AIDS prevalence.<sup>[1]</sup>

Seventeen goals in SGDs are eliminating poverty, ending hunger, health, and wellbeing for all walks of life, good quality education, gender equality, availability of clean water and sanitation, access to affordable energy, economic growth, innovation and infrastructure, reducing inequality, sustainable development, sustainable consumption and production, preventing the impacts of climate change, safeguarding marine resources, maintaining terrestrial ecosystem, peace and justice, and revitalizing global partnerships.<sup>[2]</sup>

Medical students have at least three contingent roles that can be played for the achievement of SDGs goals.<sup>[3-5]</sup> The goal of SDGs that is focused on health personnel is goal number three, which is the health for all layers of the population. As an agent of health, when linked directly to SDGs, the agent of health becomes the front guard in fostering good relationship to the public.<sup>[3]</sup> The aim is to make people more concerned with their health and ultimately understand that being healthy is a valuable thing.

As an agent of change,<sup>[4]</sup> we expecting that the health quality of Indonesian society continues to increase and reach the SDGs in 2030 to come. Medical students can be a driver of change by sharing their knowledge and inviting people to change.<sup>[4]</sup>

Medical students as an agent of development synergize with the role of an agent of change.<sup>[4]</sup> Every efforts made for better change, primarily toward SDGs, can be maintained and developed in the future.<sup>[5]</sup>

Providing health promotion and communication learning opportunities for medical students practising their theoretical information into action, addressing the health problems, and trying to find suitable and feasible interventions is very much needed. Students will be able to learn and experience directly about health-related behavior in the community. Health promotion practice of PRECEDE-PROCEED model, a comprehensive framework in assessing individual needs, problems, and concerns to design, implement, and evaluate personalized health programs, is used as the foundation of this Family Outreach and Empowerment Program (FOEP). This study aims to implement and evaluate FOEP as an effective health promotion learning model for undergraduate medical students.

## Method

The FOEP was a 5-week program, aimed for medical students in their 3<sup>rd</sup> year. During this program, every

student was responsible for one family to assess and to be taken care of, with emphasize on their behavior and environment problems, as well as their personal health problems.

Evaluation of FOEP reports was conducted to analyze the skills of the undergraduate medical students of Sriwijaya University in writing the report of the FOEP.

The students were expected to assess their family's problems, choosing priorities, constructing and implementing interventions, evaluating and making follow-up plan after their session was finished.

Two hundred and forty-four medical students of Sriwijaya University joined the program for the whole 5 weeks, with every weekend was set as consultation and self-reflection day, and in their last day, they made a full report of their activities. Their reports were evaluated to assess their activities throughout the process.

Evaluation was done using the assessment checklist based on PRECEDE-PROCEED framework. The data collected from the assessment will be processed and analyzed using the IBM SPSS Statistics for Windows, Version 22.0, Armonk, New York. This report use descriptive or univariate statistic analysis.

Every family has been given consent by the students themselves and the choices of participations are voluntary.

## Results

The highest percentage of student scores was in the category of very good (136) followed by good (64), enough (26), bad (12), and very bad (6).

In Table 1, we found some cells filled with 0. That means the student did not make any analysis on some of the FOEP report. In assessing the report of FOEP, we look at the completeness of reports from the assessment stage, assessment of documentation, priority issues, alternative interventions, and implementation of documentation. In general, students have compiled the report completely.

The priority problem is divided into three major groups. The groups are behavior, disease, and environment. Apart from the three categories, they are classified into other categories such as economic and educational issues. The main problem we found in FOEP as shown in Table 2 is behavior (37.6%), followed by disease (33.4%), environment (19.1%), and others (1.9%).

As seen in Table 3, Almost every student use education as alternate intervention, as many as 232 and then followed by 40 students using house cleaning, 37 students use

**Table 1: Family outreach and empowerment program score report (n=244)**

Analysis															Score	n (%)		
Assessment			Problem priority			Alternate intervention			Implementation			Evaluation						
0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	Very good	136 (55.7)		
9	64	171	6	100	138	3	100	141	3	108	133	3	71	170				
Form															Enough	26 (10.6)		
Assessment			Documentation assessment			Problem priority			Alternate intervention			Implementation					Document implementation	
0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	Bad	12 (5.0)
0	56	188	24	220	0	39	205	0	87	157	0	50	194	14	230	Very bad		

**Table 2<sup>5</sup>: Problem priority\***

Problem priority	n (%)
Behavior	196 (37.6)
Disease	174 (33.4)
Environment	100 (19.1)
Others	10 (1.9)

\*Student can choose more than one problem

**Table 3<sup>5</sup>: Alternate intervention\***

Alternate intervention	n (%)
Education	232 (66.2)
House cleaning	40 (11.4)
Physical exercise	37 (10.6)
Schedule and reward	18 (5.1)
Cleaning house tools	12 (3.4)
Others	6 (1.7)
Doctor seeking	5 (1.4)

\*Student can choose more than one alternate intervention

physical exercise, 18 students use schedule and reward, 12 students use cleaning house tools, 5 students use doctor seeking, and 6 students use other interventions.

## Discussion

FOEP is one of the health education programs that has been approved and has impact in health problems.<sup>[6]</sup> In this program, medical students also play an important role inside of it.<sup>[7]</sup> The aim of this research is they can approach health promotion and assessing the concerned family.

Student's reports on their activities are examined; resulted in a quite satisfactory 55.7% rate of completeness in fulfilling steps of PRECEDE-PROCEED with no dropout throughout the program. The best rate of step completion and analysis were found in assessment stage. As comparison to the similar previous study which showing most students complete good FOEP (87%), this study already shows satisfactory results too.

Students reported that the FOEP program was effective in improving their confidence and ability in communicating, constructing fun interventions, negotiating, and giving counseling to family members; also, they were more

aware that health problems need to be taken care as a whole concept, instead of just in one clinical perception. The students also recommend this program to continue for next year.

Although there were some concerns in their choice of health intervention alternatives and implementations, they still rely on basic counseling and education as the intervention instead of doing more creative, personalized, and behavior-changing intervention.

In this study, the most intervention used by students for FOEP was education, as it shows 66.7% compared to other intervention. They tend to choose education rather than the other intervention because it has been proven in the previous study in the United States that education can demonstrate the feasibility and effectivity for promoting health education; also, education aimed at increasing knowledge control and self-efficacy among disease.<sup>[8]</sup>

Beside having the advantages, education also has flaws such as difficulties to communication with family members; the family afraid to tell or explain about their problems; bad communication techniques of students; and decreased empathy from students.<sup>[9,10]</sup>

Media promotion such as video, brochure, cartoon, or poster can help people to learn easily about health promotion. People's formal education affects their way to understand, so it is important to choose properly the media that is going to be used.<sup>[11]</sup> Verbal promotion is less effective than media promotion, especially with something that can be used such as props, model, figure, or mannequin.<sup>[12]</sup>

Otherwise, in the assessment, many of the students did not complete the report as expected. Some of them showed unsatisfied result in the assessment. One of the causes is students tend to do procrastination or the report was made in short time at the deadline. Procrastinating makes report quality worse.<sup>[13]</sup>

The other problem for students is time limitation to write FOEP report. Beside writing the report, they also have to attend the daily lecture activities; this caused the

time to communicate with their concerned family and write the report limited. In fact, every person averagely need 10 min to explain and tell their problem to other person.<sup>[14]</sup>

This study showed that students are more concern about document completeness than the quality of report's analysis.

This report also shows that the students chose behavior as the most priority problem, showing 37.6%. Behavioral health is essential to the realization of healthy communities and healthy individuals. Students prefer to choose behavior intervention because of the appropriateness, cost-effectiveness, affordability, acceptability, and sustainability of the intervention followed thereafter.<sup>[15]</sup> Behavioral change is important for healthy communities. Good behavior such as maintaining health will increase someone's quality of life and prosperous, for example, by doing some sanitary activities and maintaining healthy life.<sup>[16]</sup> It shows that the students not only concern about biological problem but also psychosocial and mental health problem. In general, the students often miss psychosocial problem and tend to concern about their biology or physical problem than their mental health.<sup>[17]</sup>

There are factors that also affect FOEP report, which are lecturer's teaching method and student's motivation. The good method that lecturers use could affect their student to accept the topics. Every teacher have a responsibility to presents, explains, responsible for the contents of the materials in the learning process in college.<sup>[18]</sup> Therefore, studying must be known as active, constructive, and self-regulated process, so the students will get academic achievement.<sup>[19]</sup>

Motivation to study affects the student's achievement. Motivation is an encouragement that pushes student to study. Motivation can be form of verbal, physic, or psychosocial response. It is important for every student to have motivation to gain a good achievement in education.<sup>[20]</sup>

Simultaneously, Student's ability to study effectively would growth from adolescence. They were started from how they are organizing and setting their study purpose, planning and monitoring, scheduling, and motivating their self and environment.<sup>[19,21]</sup> Student's ability to organize learning pattern is different from one to another student. There are some factors that influence academic achievement on student, which are (a) their ability to understand, (b) time management, and (c) learning strategy.<sup>[21]</sup>

Assignment becomes a factor that affects student's performance. Assignment becomes indicator how far the

student understands about the topic. For medical students, assignment is given at every block that they passed.<sup>[22]</sup>

## Conclusion

- a. Exposure to the community can be done early in undergraduate level, as medical students can make an impact in addressing health problems in the community
- b. Student's skills in making FOEP report were basically good
- c. The most used intervention by the students for FOEP is education
- d. More inputs about variety of health promotion strategies should be introduced to ensure more effective interventions that leading to behavioral change and to resolve health problems
- e. Community-related activities were also useful to increase medical students' confidence dealing with other people and insights of the importance of health promotion and prevention.

## Suggestion

First, lecture can be given before FOEP activity. Students need to know the system and procedures about FOEP. Second, template could be helping students to minimalize error of writing FOEP. Third, students write FOEP report with supervisor.

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## Conflicts of interest

There are no conflicts of interest.

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