COMMUNITY EMPOWERMENT PROGRAM (CEP) FORMATION AND ASSISTANCE OF PEER COUNSELOR EDUCATION TEAMS ON EFFORTS TO PREVENT AND REDUCE PREMENSTRUAL SYNDROME SYMPTOMS (PMS) ON YOUNG WOMEN AT SENIOR HIGH SCHOOL

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Abstract. **Background :** *Pre-Menstrual Syndrome* (PMS) is a collection of symptoms that often appear and occur in young women, especially in school-age adolescent girls who are very disturbing in the process of learning activities. The survey results show that the average school attendance rate for young women is <90%. Some of the causes are complaints of pain due to menstrual pain, headaches, or lack of enthusiasm during class. It is necessary to form a peer team as a counselor to prevent and reduce PMS symptoms. It is expected to be a solution to several PMS disorders that affect student absenteeism at school.
Methods : The method of implementing the activities of forming and assisting the peer counselor team includes *preparation*, implementation, and evaluation. Practice includes field preparation, materials, and participants. Performance includes pre-test followed by training and ends post-test. After completing the training, a peer counselor team was assigned to carry out counseling on PMS. Mentoring and monitoring were carried out when they provided counseling activities based on peer information data about their PMS. Next is the implementation of activity evaluation.
Results : The training results stated that 7 participants in Mitra 1 experienced a significant increase in knowledge. Mira 2, as many as 6 participants showed a considerable difference in the value098 of understanding between the pre-test and post-test. The activities carried out in conducting counselors to peers during the mentoring show that 36 peers from Partner 1 received PMS symptom management by participants. In contrast, from Partner 2, 22 peers had all been carried out well.
Conclusion : The evaluation results showed a relatively high level of satisfaction and hoped there would be similar activities with the theme of preventing COVID-19. In realizing healthy for students, it is necessary to have a policy and form another counselor theme team following the health needs of the school.

Keywords: Counselor Education, Prevention, Premenstrual-syndrome, Young Women

Introduction

Background: Adolescence is a unique developmental process that significantly changes psychological and physical. *Pre-Menstrual Syndrome* (PMS) generally often occurs in young age groups and is part of the general health problem of adolescent girls. *Premenstrual syndrome* (PMS) is a physical, mental, and behavioral disorder, including social and interpersonal relationships. Symptoms appear in the luteal phase of the menstrual cycle, and conditions occur at reproductive age (1). Symptoms that arise before the menstrual period are expected to disturb daily activities in adolescent girls during menstruation. According to Dickerson et al. in Devi (2009), as many as 85% of adolescent girls experience one or more symptoms of premenstrual syndrome during menstruation.

Meanwhile, Ruhana's research in Devi (2009) shows that it is 87.2%. Bogor Agricultural University (IPB) female student has premenstrual syndrome. Dalton's research in Devi (2009) found that there were sociological signs associated with PMS. Severe sociological symptoms cause the disorder only in 40-50% of the entire female population, so not all women suffer from this disorder. *Pre-Menstrual Syndrome* (PMS) is a disorder that usually occurs in the reproductive age and by 85-90% appears in the reproductive period with various levels (1)

Women with Pre-Menstrual Syndrome have reported behavioral differences in emotional and cognitive processes. It is of particular concern that *Pre-Menstrual Syndrome* affects the occurrence of emotional traits and cognitive functions in parallel (3). Premenstrual disorders such as *Pre-Menstrual Syndrome* and *Pre-Menstrual Dysphoric Disorder* are unknown. Still, lifestyle habits such as regular exercise and taste *choices are* known to have a relationship. (4) researched senior high school students in Japan, which aims to determine how premenstrual symptoms affect the learning process and whether there are factors causing school absenteeism caused by the symptoms of premenstrual symptoms experienced by them. One in nine high school students in Japan is absent from school due

to premenstrual symptoms. Premenstrual symptoms in physical and lifestyle, such as liking salty food, rarely exercising regularly, are known as risk factors for absenteeism at school.

***Problem*:** Based on a field study, the number of teachers in Mitra 1 is 12 people, with 634 students divided into 29 classes. The number of school health service facilities is significantly less, although it is always for health matters to be assisted by the Karawang Kulon Health Center. With current conditions, students are less likely to benefit from the presence of UKS in Mitra 1 . Various factors that can hinder UKS implementation activities will occur if these are not addressed. The high incidence of Premenstrual syndrome in Mitra 1 is as follows: physical symptoms that have the highest percentage of symptoms experienced by respondents are menstrual pain, namely 77 respondents (77.8%), pelvic pain experienced by 60 respondents (60.6%), and growth Acne experienced by 56 respondents (56.6%), while the psychological or emotional symptoms experienced by many respondents were: feelings of wanting to be angry as many as 82 respondents (82%), reduced concentration by 46 respondents (46.5%) and feelings of wanting to be experienced by as many as 42 respondents (42.4 %). This symptom is also experienced in Mitra 2. In this case, this symptom can interfere with teaching and learning activities at school and home for vocational students. X and SMK Y, Based on the results of the assessment, that the average attendance rate of SMK X students was <90%, and events such as leaving class while studying because of pain in the hip area and lack of enthusiasm for some young women

Solution Offered: Health Unit Schools and its implementers compared to classes or students, so this situation is unbalanced. Then one of the solutions offered are: Cooperating with partners to form a team of educators or education counselors from students, applying a knowledge transfer model or learning study system to SMK students: 1) Training students as special education counselors for students from each school. The class consists of people (male and female). 2) Provide a pocketbook. This book is a reference for students in carrying out their duties in each class to handle, provide counseling or identify problems related to PMS.

Objective: The formation of a Counseling Education Team in SMK X and SMA Y and increasing students' understanding of the prevention and reduction of PMS symptoms

Methods

Implementation of the Peer Counselor Team Training on Prevention and Reduction of PMS symptoms is carried out through the following stages:

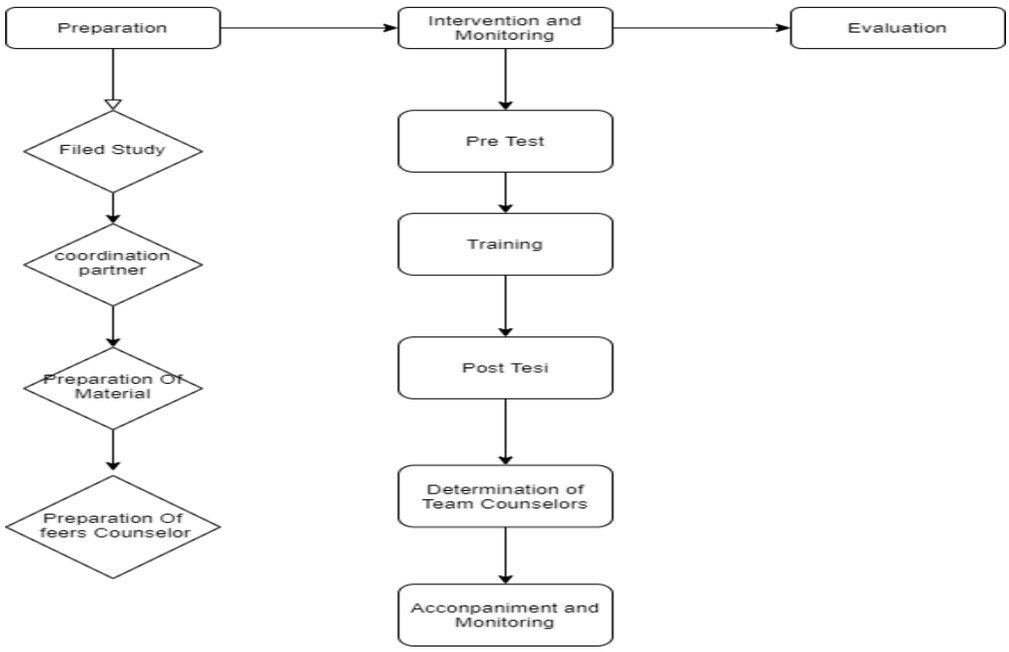


Figure 1. Schematic of the Partnership Implementation Method for Community Service

Preparation

On March 17, the executor took an administrative approach and prepared to collaborate in training activities for 2 Partners. In Partner 1: a student screening is carried out to get students who want to become peer counselors related to the handling of PMS through social media, while in Mitra, based on the choice of the principal, they work together with the class teacher. The screening is carried out on April 9-11, 2020. The requirements presented to students and tutor teachers were: 1) Grade 10 or grade 11. 2) Willing to participate in online training and guidance. 3) Advantages: Get a Pocketbook on PMS, Get a training certificate and Get a data package/Toll 2 times, 1-2 GB (Rp, 25,000 – Rp. 30,000)

After obtaining as many as 12 participants, then participants were asked to enter groups in each partner. At this stage, the participants are prepared mentally as well as time and HP

software. One day before the event starts, students are notified when the training will be delivered online (WA). Students are asked for data: full name, date of birth, class, and active WA number. On the day of the training, the participants were given a data package of between Rp. 25000 – Rp. 30,000.

Implementation

The implementation of the training begins with an introduction, and the purpose and objectives are conveyed and then carried out.

a. Pre-test: Pre-test form on partner one https://forms.gle/Z6R9sZ5crDXDVtUh7 results: https://docs.google.com/spreadsheets/d/13wVIyGiBL2jDL6Kopbqy5ZduSp8ns-zOsihxbBH-gkI/edit?usp=sharing. And the pre-test form for partner 2: https://forms.gle/Mm7YbMvtFkLTQTTw9 After the pre-test is done, the results will be submitted the next day before the training starts. For students who get the three highest scores, they get a bonus pulse in stages.

b. Training: The next day, the activity started delivered via google meet and meetings through materials and WA groups in the form of a Voice note to partner one on April 15, 2020. And partner two on April 8, 2020, Pocketbook for handling PMS (..\BOOK PACKAGE PREMENSTRUAL SYNDROME edit.pdf) submitted to the group asked to be read and if there are questions to be forwarded to the group. There were discussions and questions from several participants who were conveyed through the WA group. The number of participants who took part in the training was 12 participants in partner group 2 and partner one, followed by 10 participants.

c. Post-test: After the delivery of the material is finished, a post-test is carried out the next day. Using the google form: Form for partners post-test on https://forms.gle/bTkxv9wmABgWeLyB9 and results: the results: https://docs.google.com/spreadsheets/d/1QeSiwHoxWIP_dLXEbeJVEsRR-g22ZClj3GSbqqBuBVM/edit?usp= sharing, and partner post-test form 2: https://forms.gle/A2faXycthJWrRmbp7 and the result: https://forms.gle/ A2faXycthJWrRmbp7, the result: https://docs.google.com/spreadsheets/d/1pFmlqV0hodEF4NPiAUAoy6aZ_QxyQ2edit_ltI?usp= share. Students who significantly increase the proportion of pre-test scores get a pulse bonus with grades in stages (1,2,3 winners).

d. Determination of Peer Counselor Team participants: Participants' determination was carried out in coordination with the student department of both partners. Namely in the form of school decisions as their peer Counselor Team, which has the task of asking questions or consultants about PMS symptoms and preventing and reducing symptoms.

e. *Assistance and monitoring*

After finishing getting the material through pocketbooks and delivering zoom meetings and WA groups, participants were directed to identify PMS problems with their peers by sharing the PMS symptom identification form on Google with at least ten friends. PMS symptom survey forms for assistance to partner one https://forms.gle/YHvymC1QAJnpSGX27 Results: https://docs.google.com/spreadsheets/d/1KgWEsEirCDXHit7aALQLLZfnhBlq59A9EUK1DuhWvE0/edit?usp=sharing there are 36 of their peers who filled out the survey and their peers PMS symptom survey form for service to partners two https://forms.gle/w1Sa1Wub6aBjF38P7 results: https://docs.google.com/spreadsheets/d/1bL2GZ6LVuUC8eCMGZC07_yxCXK_6_sunJoKtMGQle_I/edit?usp=sharing 20 peers. After one week after sharing the google identification form, the results are fed back to participants according to their peers who have problems. Then participants apply PMS counseling according to the symptoms conveyed by their peers by including the name of friends, physical and psychological signs, experienced, and the efforts made has been made in the context of handling PMS problems of their peers. Then there is feedback or guidance and direction on the counseling exercise tasks carried out by the participants.

Evaluating is done to find out the shortcomings, inhibiting factors, and factors that support the implementation of the training process and its follow-up. Evaluating is done through the google form application, which is shared with participants, tutors, and school principals https://forms.gle/uNZRfnmSuVjfdRDM8). The number of participants who submitted training evaluations was 20 participants from Partners 1 and Partner 2. The evaluation results are attached.

Evaluating

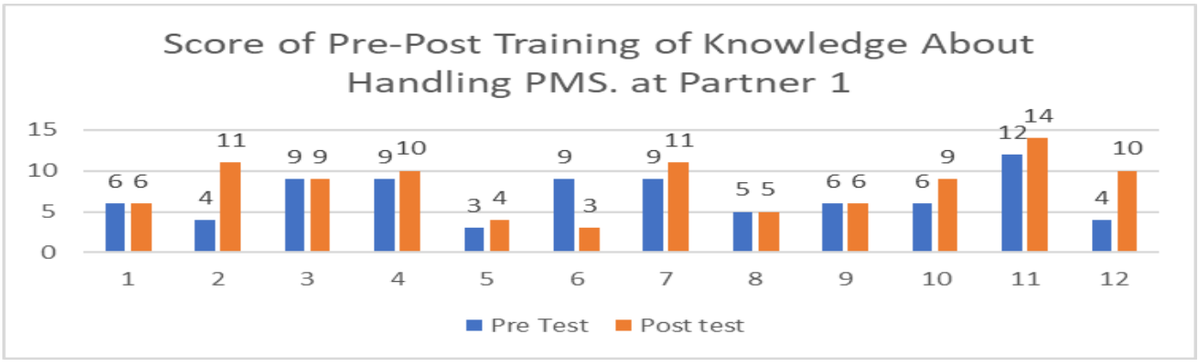
Based on the implementation of the training, the evaluation results show that there is enthusiasm from the participants and partners (principals, tutors, and students), which is reflected in the suggestions and inputs submitted in the survey results. Participants hope that training will be held again in other forms or themes, inc. the prevention of the spread of COVID-19.

RESULTS

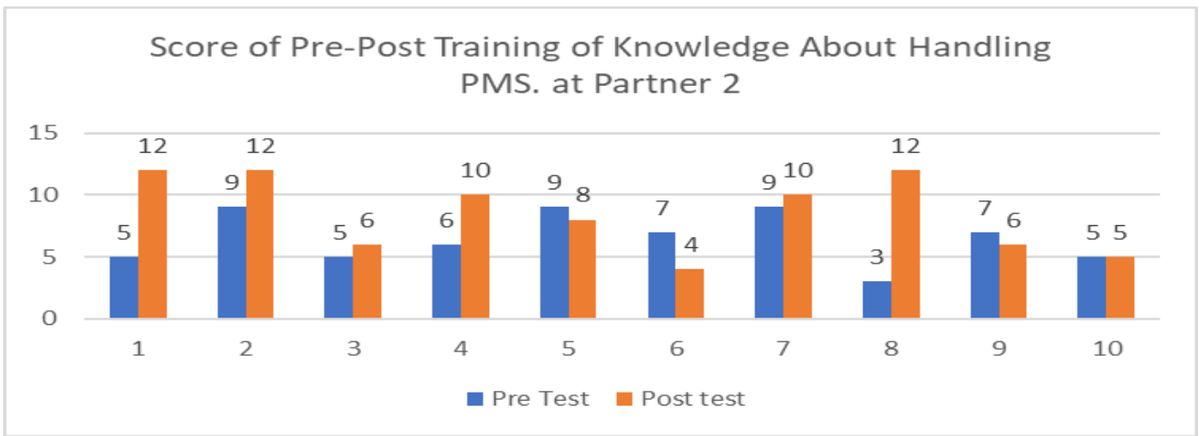
1. The formation of a PMS Counselor Team for Peers

   The number of peer counselor training participants on PMS, as many as 12 people, came from Partner 1, and 10 people came from Partner 2. They all represent classes in grades 10 and 11.

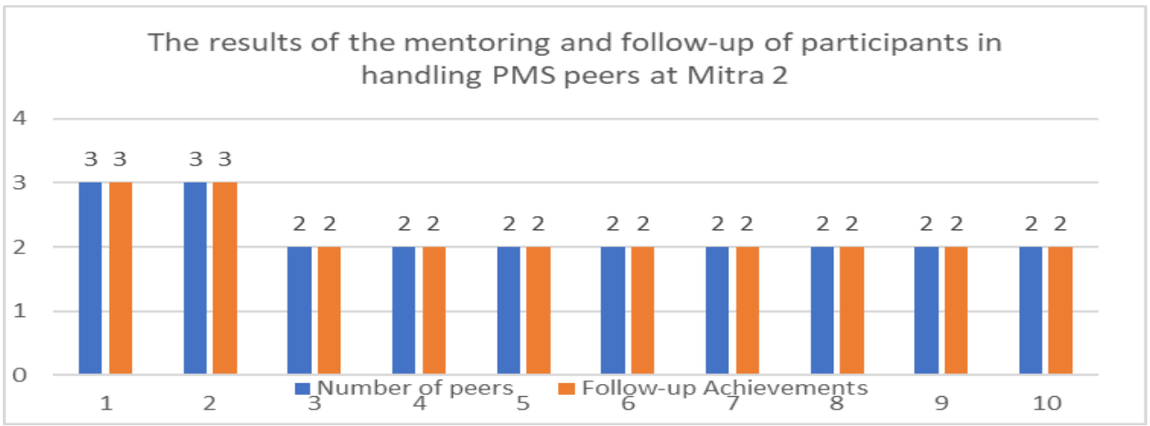
2. Increased knowledge of Peer Counselor Teams About Pre-Menstrual Syndrome Knowledge results was illustrated in the comparison of obtaining knowledge values before training with after training.



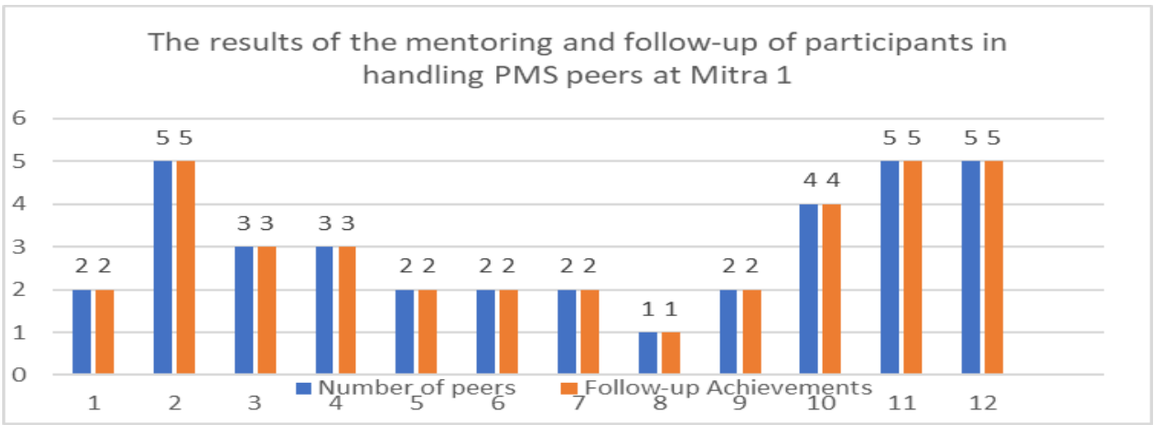
Graph 1. The value of the knowledge of Peer Team Counselor participants about PMS handling before and after training at Mitra 1 (Bhineka Karawang Vocational High School)



Graph 2. The value of the knowledge of Peer Counselor Team Participants regarding PMS handling before and after training at Mitra 2 (SMA Bhineka Karawang)



Graph 3. List of survey results on peer mentoring by participants in Mitra 1



Graph 4. List of peer survey results by participants in Mitra 2

The results between the pre-test and post-test showed seven participants had increased knowledge significantly. However, 4 participants experienced no increase in knowledge (Chart 1). Chart 2 looks outcome between the pre-test and post-test Knowledge assessment on Partner 2 shows that 6 participants experienced a significant increase in knowledge. However, some did not experience an increase in understanding, but overall the participants showed an increase.

After the participants had received knowledge and were assigned as a peer counselor team, they directed to identify PMS problems with their peers by sharing the PMS symptom identification google form with at least ten friends. The survey results were conducted on Mitra 1's peers, as many as 36 who responded to the survey form. The survey results showed that all of them had been followed up. It was done to identify their peers further, so that young female students who experienced menstrual disorders got solutions that did not encounter obstacles. In learning activities. As stated by Tadakawa et al. (2016), several factors in absenteeism are caused by the presence of premenstrual syndrome symptoms.

The follow-up results were depicted in graph 3: it can be seen from the 12 participants who participated in spreading the training survey link (assistance) to their peers, 36 respondents filled in. Form the survey, a description of the problems of their peers was obtained, which was then followed up by 36 respondents. The participants were given online counseling or consultation according to the problem. They assisted, while in graph four, it can be seen that 10 participants participated in spreading the exercise survey link as material. Mentoring peer counselors obtained 22 respondents who filled out the survey. In the survey, describe the problems of their peers were brought. Participants gave as many as 22 respondents online counseling according to the issues and assistance.

Discussion

Referring to the pre-test and post-training results of the peer counselor team, this is the first step in the formation of attitudes and behavior in participants and can carry out activities related to handling and reducing PMS symptoms that school-age girls often experience. The research results of Tadakawa et al. (2016) found that 11.9% were included in the absent category and had a significant difference in all premenstrual symptoms ($p < 0.001$), age ($p < 0.001$), in the salty food group ($p = 0.001$), and lack of regular exercise ($p = 0.03$) between symptomatic and asymptomatic groups. Multivariate analysis showed that premenstrual symptoms such as insomnia or hypersomnia had an OR = 2.27, 95% confidence interval (CI:1.46-4.17), and physical symptoms OR 2.24 (95%, CI: 1.37). -3.66), reduced social life activities OR=2.71 (95% CI 1.31-5.59), and preference for salty foods (OR 1.89, 95% CI: 1.20-2.98) are all of the risk factors for school absenteeism. The results of this study are a series of responses to the knowledge values possessed by respondents, meaning that behaviors such as consumption of salty foods, lack of exercise, insomnia (lack of sleep) are risk factors for PMS symptoms.

The results of epidemiological research conducted by Abdollahifard et al. (2014) have reported that 5-8% of women of reproductive age experience mild to severe premenstrual symptoms that interfere with their daily activities, administration of a combination of calcium and vitamin B6 is used as a control against premenstrual syndrome symptoms. Therefore, it is recommended to use a variety of calcium and vitamin B6 for women suffering from this syndrome. *Severe Premenstrual Syndrome is* accompanied by a decrease in daily activities and symptoms of psychological stress. Older age, residence in rural areas, early age of menarche, regular menstrual cycles, and positive family history may be risk factors for *premenstrual syndrome* (5) Depression, anxiety, aggressive, sensitive personality in the *Premenstrual Syndrome group*. Significantly higher than in the healthy group ($p<0.005$), and increased PMS was suffering from mild to severe (6). Increased incidence and the uneven and adverse effects of PMS against university students in Mekelle, health education, appropriate treatment, and counseling services, as part of the overall health care, must be used and reserved for women -women (7). Consumption of *thiamine* and *riboflavin* and food sources will be inversely related to the incidence of PMS. For example, women with the highest quintile of riboflavin taking 2-4 years before diagnosis had a 35% lower risk of developing PMS than the lowest quintile of *riboflavin* (*relative risk*: 0.65:95% CI: 0.45, 0.92: *P*-value = 0.02) (8).

A study conducted by Tolossa & Bekele (2014) showed a high prevalence and negative impact of PMS on Mekelle University students. Therefore, health education services, medical care, and appropriate counseling services should be provided as part of the overall health service. Besides that, education regarding menstruation is also essential to young women because this is related to stress during menstruation which affects the onset of PMS. The results of the study concluded that the menstrual cycle affects emotional and cognitive in all women. Referring to the secondary hypothesis that the menstrual cycle phase mediates stress levels only in women with PMS (3). Several cases also occurred because of PMS suicide in some research samples (9). In certain situations where young women are malnourished, nutritional intake such as vitamin D, calcium, and magnesium is essential because PMS is a common health problem among young women, so it is necessary to improve their health and nutritional status (10). The results also reinforce the importance of vitamin D and iron, where high intakes of iron and possibly zinc may be associated with a lower risk of PMS. In contrast, increased potassium intake may be associated with a higher risk (11).)

Conclusions

Based on the results of community service in the form of partnerships above, it can be concluded: 2 groups of peer education Counselor Teams had formed from 2 educational institutions, namely SMK Bhineka Karawang, with 12 students and SMA Budi Mulya Karawang 12 students.

There was an increase in pre-test and post-test knowledge in Mitra 1 as many as 7 participants and 6 participants from the training participant group at Mira 2 (Budi Mulya High School). The participant's companion in conducting peer education counseling as many as 36 peers have been followed up, and 22 peers have been followed up.

The evaluation results of the training activities showed a positive attitude and a pretty good level of enthusiasm. They hoped there would be more educational activities with different topics, such as preventing COVID-19 in the school environment.

Recommendation

Referring to the conclusion of the results, a policy set by the Educational Institution was recommended to form a forum in health education in every school. Cooperation needs to involve various related institutions to increase achievement effectively. Besides that, it is necessary to have an Education System and guidance not only offline. Still, it needs to be considered online with materials and modules made in E-modules.

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