

## COMMUNITY SERVICE PROGRAM: TRAINING ON RATIONAL SUPPLEMENTATION OF MIDWIVES FOR PREGNANT WOMEN AND USING INSTAGRAM AS EDUCATION MEDIA

Bernadette Dian Novita <sup>1\*</sup>  
Sianty Dewi <sup>2</sup>  
Evelyn Ongkodjojo<sup>3</sup>  
Maria Yuliastuti<sup>4</sup>

Universitas Katolik Widya Mandala Surabaya  
[novita@ukwms.ac.id](mailto:novita@ukwms.ac.id)

Corresponding author : Bernadette Dian Novita\*

### ARTICLE INFO

*Article history:*

*Received : 07 Juni 2022*

*Revised : 20 Juni 2022*

*Accepted : 21 Juli 2022*



### **Key words:**

*Rational Drugs Use, Supplementation During Pregnancy, Instagram*

DOI:

<http://doi.org/10.33508/peka.v5i1.3906>

### ABSTRACT

Rational drugs use is a must know-knowledge in preventing disability and death due to the unnecessary drug use. Giving supplementation during pregnancy aims to reduce infant mortality and disability. Refreshing the rational use of supplementation in pregnancy and sharing knowledge in how to use Instagram as an education and communication media between midwives and pregnant women aims in improving the midwives' skills as educators and good communicators. The method of this activity was divided into three stages, preparation, implementation and evaluation. In the implementation stage, midwives' knowledge about supplementation rational and social media use were increasing. In the evaluation stage showed that the midwives could use Instagram as education and communication media between midwives and pregnant women

### A B S T R A K

Penggunaan obat secara rasional merupakan pengetahuan penting yang dapat mencegah kecacatan dan kematian akibat penggunaan obat. Pemberian suplementasi selama kehamilan bertujuan untuk menurunkan angka kecacatan dan kematian bayi. Penyegaran kembali penggunaan suplementasi secara rasional pada kehamilan dan pelatihan memanfaatkan Instagram sebagai media edukasi bidan kepada ibu hamil merupakan kegiatan yang bertujuan untuk meningkatkan kemampuan bidan sebagai edukator dan komunikator yang baik. Metode kegiatan ini terbagi menjadi tiga tahapan, yaitu persiapan, implementasi dan evaluasi. Hasil pada tahap implementasi terdapat peningkatan pengetahuan tentang penggunaan suplementasi rasional pada kehamilan dan penggunaan media sosial. Hasil pada tahap evaluasi adalah para bidan peserta dapat memanfaatkan Instagram sebagai media edukasi dan komunikasi bidan dan ibu hamil.

## BACKGROUND

Midwives as health workers become one solution to decrease lacking physicians distribution in the community, especially for pregnant mothers. The role of midwives is vitally important to improve the quality of health services in Indonesia. Midwife services focus on ante natal care (ANC) for pregnant women, breastfeeding mothers, and mothers who are using contraception. The Surabaya City Branch of the Indonesian Midwives Association as an organization that supervises midwives in the Surabaya area provides theoretical refreshers to midwives continually.

According to midwives' competencies, as regulated in Undang-Undang No. 4 of 2019, midwives can provide several supplements, contraception, and other drugs in the management of pregnancy and childbirth (Presiden Republik Indonesia, 2019). To support the competencies, basic knowledge of pharmacology and pharmacotherapy needs a special refresher (Gupta et al., 2012; Jakovljević, 2013; Novita et al., 2013). Pharmacological management in pregnant women needs vigilance because 1) some drugs are teratogenic and can cause fetal defects; 2) the use of pharmacological therapy in breastfeeding mothers should avoid drugs whose excretion is through breast milk or can affect breast milk production, and 3) the choice of contraception according to mother's condition (Brunton et al., 2018; Golan et al., 2012; Katzung et al., 2018).

In harmony with the community empowerment program, especially in the use of technology, this community service provides training and assistance to midwives under the Surabaya City Branch of the Indonesian Midwives Association regarding the use of rational supplementation for pregnant women using social media, especially Instagram. Previous research on the Role of Communication between Doctors - Nurses and Pharmacists in the use of Rational Therapy in 2012 by Bernadette Dian Novita has shown that rational drug

administration needs to be refreshed regularly (Novita et al., 2013). The use of digital information media as an educational medium is considered quite effective (Anand et al., 2013; Cepova et al., 2018; Kurniawati et al., 2020).

The mentoring evaluation was carried out by the team to midwives so that they could create educational content about the Rational Use of Supplements for Pregnant Women. To attract participants, the evaluation model was designed in the form of competition. This program is part of the Faculty of Medicine, Widya Mandala Surabaya Catholic University, namely Family Medicine for the welfare of the community. Training as a content creator was given by colleagues from the Faculty of Communication, Widya Mandala Surabaya Catholic University.

## METHODS

The implementation of a community service program was carried out for eight months. The implementation method in this community partnership program is divided into three parts:

### Preparation

Based on the team's discussion and surveys, the training module was developed into three parts, consisting of :

1. Rational Drug Use Module for pregnant women focused on supplementation
2. Supplementation Needed during Pregnancy Module
3. The Use of Digital Information Media Module focused on the use of social media (Instagram) to educate pregnant women.

### Implementation

Rational Drug Use training and the use of information media, with a topic, Understanding the Use of Rational Supplementation in pregnant women. At the implementation stage, activities are carried out online. Training is given using Zoom considering Indonesia, especially Surabaya is still in the condition of the Implementation of

Community Activity Restrictions (PPKM) due to the COVID-19 pandemic. Firstly, a pre-test will be conducted to determine the midwife's level of knowledge about Rational Drug Use. At the end of the implementation phase, a post-test was performed.

### Evaluation

What is seen at this stage is how the participating midwives can take advantage of the initial training. Educational content competition's assessment is carried out by the team and also some administrators of Surabaya City Branch of the Indonesian Midwives Association. The best work at this stage is well documented and can be used by members of the Indonesian Midwives Association Surabaya City.

### Assessment

Assessment is conducted through several methods, namely 1) Knowledge change using pre and post-test and 2) the ability to create content about Rational Drug Use using social media. Some good educational content as leaflets or films can be

used and accessed by all Surabaya City Branch of the Indonesian Midwives Association members.

This community service program's team consists of three lecturers as specified by their field of expertise. Two lecturers from the Faculty of Medicine and one lecturer from the Faculty of Communication, Widya Mandala Surabaya Catholic University. This program also involved the Alumni Association and medical students of the Faculty of Medicine Widya Mandala Surabaya Catholic University.

## RESULTS AND DISCUSSION

This community service program was performed in two days. The implementation stage was held on Saturday, September 18, 2021, with Youtube Link: <https://youtu.be/z1MJofpTu4I>.

This activity was attended by 238 participants, with 185 participants who filled out the pretest and posttest completely. The results of the addition of knowledge can be seen in Figure 1.

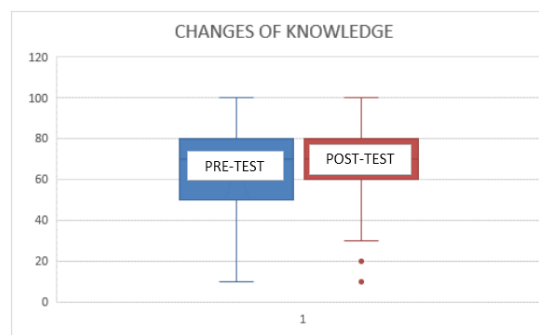


Figure 1 : Changes of Knowledge in Implementation Stage

In Figure 1, it can be seen that the lowest pretest score is 20 while the lowest posttest score is 40. The highest score for pre-test and post-test is 100. This shows that the midwives already have sufficient knowledge concerning the rational use of supplementation in pregnancy. The addition of knowledge can be seen by assessing the lower gap between the lowest and the highest scores in the post-test than in the pre-test.

Knowledge refresher needs to be done regularly and continuously. Consistent with the research by Bardosono, et al in 2018 which stated that continuing education for midwives can increase knowledge retention by up to 50% after three months (Bardosono et al., 2018).

Based on our program's feedback form, several interesting topics were

proposed by participating midwives which is needed to be refreshed:

1. Pregnancy and COVID-19
2. COVID-19 vaccination in pregnancy
3. Use of Vitamin D in pregnancy
4. Sign and Symptoms during a high-risk pregnancy
5. All about baby blues syndromes

6. Midwives as good educators and communicators

The evaluation stage was performed two weeks after the implementation stage, held on Saturday, October 2, 2021, in form of educational content competition, with Youtube  
Link:  
<https://youtu.be/IZSHlaOCuQs>.



Figure 2 : Example of Educational Content about Rational Use of Supplementation in Pregnancy

Figure 2 is an example of educational content that won the competition in the evaluation stage. The use of Instagram, as a good educational medium for patients, is one of the effective education efforts for patients become new strategy accomplished by midwives.

## CONCLUSIONS

In the whole series of Community Service Program: Training in the Use of Rational Supplementation for Pregnant Women, it can be concluded that knowledge refresher needs to be formulated regularly and continuously. Knowledge about the benefit of social media as a medium to educate people is a new thing for midwives. Our recommendation from this activity is evaluation (in form of competition, for example) is necessary to be done periodically

to find out the increase of knowledge and ability of midwives to educate patients concerning the knowledge that has been obtained.

## Acknowledgements

We would like to thank the Institute of Research and Community Service (LPPM) Widya Mandala Surabaya, Catholic University for providing financial support so that this program can take place. We also express gratitude to the leadership of the Surabaya City Branch of the Indonesian Midwives Association, the participating midwives who have actively participated in this series of programs. Last but not least, to the Alumni of Faculty of Medicine Widya Mandala Surabaya, Catholic University who have worked hard as organizers, publishers, and communicators to organize this program

and to medical students who have helped so that this activity can run completely as planned.

## REFERENCES

- Anand, S., Gupta, M., & Kwatra, S. (2013). Social Media and Effective Health Communication. *International Journal of Social Science & Interdisciplinary Research*, 2(8), 39–46.
- Bardosono, S., Hildayani, R., Chandra, D. N., Basrowi, R. W., & Wibowo, Y. (2018). The knowledge retention after continuing health education among midwives in Indonesia. *Medical Journal of Indonesia*, 27(2), 60–65. <https://doi.org/10.13181/mji.v27i2.2413>
- Brunton, L., Hilal-Dandan, R., & Kollman, B. (2018). *Goodman & Gilman's The Pharmacological Basis of Therapeutic* (L. Brunton (ed.); 13th ed.). Mc Graw Hill. <https://doi.org/10.4324/9780203813034>
- Cepova, E., Cicvakova, M., Kolarcik, P., Markovska, N., & Geckova, A. M. (2018). Associations of multidimensional health literacy with reported oral health promoting behaviour among Slovak adults: A cross-sectional study. *BMC Oral Health*, 18(1), 1–9. <https://doi.org/10.1186/s12903-018-0506-6>
- Golan, D., Tashjian, A., Armstrong, E., & Armstrong, A. (2012). *Principal of Pharmacology: The Pathophysiologic Basis of Drug Therpay* (D. Golan (ed.); 3rd ed.). Wolters Kluwer : Lippincot Williams & Wilkins. <https://doi.org/10.1088/1751-8113/44/8/085201>
- Gupta, S. D., Lal, V., & S.V., V. K. (2012). Rational Use of Medicines: An Audit of Private Practitioners' Prescription. *Journal of Health Management*, 14(3), 297–303. <https://doi.org/10.1177/0972063412457511>
- Jakovljević, M. (2013). HOW TO INCREASE TREATMENT EFFECTIVENESS AND EFFICIENCY IN PSYCHIATRY: CREATIVE PSYCHOPHARMACOTHERAPY. *Psychiatria Danubina*, 25(3), 269–273. [http://www.hdbp.org/psychiatria\\_danubina/pdf/dnb\\_vol25\\_no3/dnb\\_vol25\\_no3\\_274.pdf](http://www.hdbp.org/psychiatria_danubina/pdf/dnb_vol25_no3/dnb_vol25_no3_274.pdf)
- Katzung, B. G. B. G. B. G., Mastres, S. B., & Trevor, A. J. (2018). Basic & Clinical Pharmacology. In *Basic and Clinical Pharmacology* (14th ed.). Mc Graw Hill Education (Asia).
- Kurniawati, F., Sabila, H., Anand, S., Gupta, M., & Kwatra, S. (2020). The Use of Animated Video to Increase Early Childhood Knowledge about Disability and Their Behaviorial Intention Towards Disabled Peers. *IJDS Indonesian Journal of Disability Studies*, 7(1), 72–80. <https://doi.org/10.21776/ub.ijds.2019.007.01.8>
- Novita, B. D., Soediono, E. I., Tamayanti, W. D., Anggakusuma, K., & Aditya, P. (2013). Peran Keterampilan Komunikasi Dokter, Perawat dan Apoteker pada Penggunaan Terapi Rasional. *Jurnal Widya Medika*, 1(2), 157–167.
- Presiden Republik Indonesia. (2019). Undang Undang Republik Indonesia No.4 Tahun 2019 tentang Kebidanan (Issue 004078).