
Revitalisasi Kader Sebagai Motivator Kesehatan Pra-Kehamilan Melalui Inovasi Media Komunikasi

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Abstract

Maternal Mortality Rate and Infant Mortality Rate is still far from the target of SDGs 2030 is an indicator depicting low society prosperity in Indonesia. One of the factors were due to Women of Fertile Age at risk of Chronic Energy Deficiency at age 15-19 years. This situation is exacerbated by the high age of marriage less than 20 years which certainly interfere with reproductive health. Nutrition motivationer program in Banyuwangi isn't optimal yet because it does not cover health aspect pre pregnancy and cadre isn't functioning as health motivationer. Therefore, it is necessary to empower the cadres to optimize the health service. The aimed to increase cadre knowledge about pregnancy and reproductive health as well as to improve cadre communication skill as health motivationer. The conducted in Segobang Village, District of Licin, Banyuwangi on September 2016. The target was Segobang Village cadres who are active in Posyandu. Then result was more than 67% knowledge of cadres were good and 94% of cadre knowledge increases. Communication skills were demonstrated by the evaluation of Women of Fertile Age that comes during simulation, almost all cadres can deliver well and clearly so understood by the woman. It was be concluded that almost all cadre increased him knowledge according to pre-test and post-test questionnaires. Communication skills of the cadres showed good results.

Keywords: Revitalization, Kader, Motivationer, Pre-Pregnancy

1. Introduction

At present the Maternal Mortality Rate (MMR) in Indonesia still have not reached the national index target. AKI in Indonesia is still relatively higher compared to ASEAN countries, which is 305 per 100,000 live births in 2015. This figure is far from the target of the (Millennium Development Goals (MDGs) of 102 per 100,000 live births. AKB in Indonesia in 2015 is 22 per 1000 live births, meaning that the MDGs target of 23 per 1000 live births has been achieved. Based on these data it can be concluded that high MMR are one indicator that illustrates the low welfare of the people in Indonesia so that health services need to be improved to achieve the 2030 (Sustainable Development Goals) SDGs target of 70 per 1000 live births [1].

The number of births in Indonesia in adolescents aged 15-19 years in 2007 reached 35 per 1000 live births and in 2012 increased to per 45 per 1000 live births while the target of BKKBN was 30 per 1000 live births. According to the results of Riskesdas 2007 and 2013, the prevalence of Woman of childbearing age affected by Chronic Energy Shortages was the highest according to the results of Riskesdas 2007 and the results of the 2013 Riskesdas were groups of 15-19 years old at 62.20% and 85.10%. Besides the results obtained, there is always an increase in the prevalence of Woman of childbearing age affected by Chronic Energy Shortages from 2007 to 2013 in all age groups. Woman of childbearing age of Chronic Energy Shortages risk age 15-49 years (pregnant and not pregnant) has increased prevalence from 2007 to 2013. The percentage of 2013 LBW in Indonesia is 10.2%, slightly lower than the percentage Weight of Low Birth Babies in 2010, but this figure is high because greater than the Weight of Low Birth Babies target of 7% [2]. Based on the above conditions, it is necessary to work hard and seriously from the government and the community to ensure that each Woman of childbearing age can have access to quality health services [3].

East Java has an IMR (Infant Mortality Rate) of 27,5 per 1000 live births in 2013 and decreased by 26,66 per 1000 live births in 2014, MMR in East Java in 2013 was 97,39 per 100.000 live births and in 2014 it was 93,52 per 100.000 live births [4]. Based on data of the number of East Javanese women whose first marriage age is 10-17 years, the results show that Banyuwangi is in the 12th rank of 28.15% above the average East Java of 26.33%. Health problems for women start with the high age of marriage under the age of 20 years. Age of pregnant women affects maternal and child health. Younger pregnant women, more serious due to physical pregnancy. Problems with pregnancy, birth and miscarriage are the main causes of death for women between the ages of 15-19 due to teenage pregnancy. In 2009-2013 there was an increase in IMR in Banyuwangi Regency from 4.4 per 1000 live births to 8.2 per 1000 live births. The achievement of MMR in Banyuwangi Regency in 2014 was 93.08 per 100,000 live births. If referring to the SDGs target of 2030, it will be necessary to strive to reduce MMR to <70 per 100,000 live births [5]

The Banyuwangi District Health Office has held a nutrition motivator program in the form of Posyandu cadre training which was attended by 155 people and divided into 5 classes with each batch trained for 2 days) in May 2013 [5]. Nutrition motivators carried out by the Banyuwangi Health Office have been focused on toddler nutrition, while the Health Office has a target in 2014 there will be 217 nutritional motivators spread throughout Banyuwangi Regency, so that nutrition motivators can recognize nutritional problems in each family. This nutrition motivator has a role as a health cadre (volunteer) and nutrition educator. The problem of underfive nutrition can be related to the health status of the baby as well as the nutritional status and reproductive health of Woman of childbearing age during pregnancy. This nutrition motivator program is not optimal because it does not cover the overall pre-pregnancy health aspects and the non-functioning Posyandu cadre as a health motivator [6].

The working area of Licin Health Center is a village built by community service activities by the Airlangga University Public Health Study Program in Banyuwangi because in the area it is prone to malnutrition and bad nutrition. Based on data from the Family aware that the Nutrition of Licin Puskesmas in 2015, the number of families aware of nutrition in the work area of the Licin Health Center is 60.8%. The number of families that implemented a nutrition conscious family based on the criteria of a family aware of nutrition, namely weighing regularly (75.3%), giving exclusive breastfeeding (61.1%), varied eating (78.5%), using iodized salt (72.3%), taking nutritional supplements as recommended (86.1%). It can be concluded that the achievement of the family is aware that nutrition in the working area of the Licin Health Center in Banyuwangi Regency is still less than the standard criteria for nutrition conscious families [6].

Table 1. Health Indicator of Licin District, Banyuwangi Regency 2014 and 2015

Public Health Center	Number of Posyandu	Cadre in 2015	Population Tahun 2015	Pregnant women of CES (%)	Child of Mal-nutrition (%)	MMR (%)		IMR (%)		BBLR		Birth attendant (permil)	
						2014	2015	2014	2015	2014	2015	2014	2015
Licin	8	29	4.171	0	0.9	0	0	4.08	0	4.08	4.08	0	0
Tamansari	9	27	7.021	12.5	0.818	1.13	0	4.55	2.308	5.68	0	0.28	0.712
Gumuk	3	15	2.296	0	3.38	0	0	0	0	0	0	2.178	1.307
Jelun	3	15	2.487	0	2.54	0	0	4.55	2.703	4.545	0	0.804	0.402
Banjar	4	14	3.482	10	0.662	0	0	0	6.67	0	3.33	0	0.2872
Segobang	6	21	7.110	18.18	1.62	0	0	1.20	1.33	2.41	0	0.2813	0.2813
Kluncing	6	20	3.644	0	1.05	0	0	1.67	0	0	0	0.823	0.5489
Pakel	5	15	4.727	28.57	0	0	0	2.78	2.56	0	2.56	0	0.846

Source: Licin Public Health Center in 2016

Segobang Village is a working area of the Licin Health Center which is included in the top 3 regions with the highest prevalence of Chronic Energy Shortages among pregnant women among 8 villages and the top 3 in the highest child malnutrition. The survey results obtained by nutrition motivator training have never been done at the Licin Health Center. The number of cadres in Licin District is 156 people, but only 6 people have participated in nutrition motivator training at the Banyuwangi District Health Office. IMR in Segobang Village is included in the top 2 in Licin District and the number of birth attendants is permanent.

Lecturers with the Tridarma of Higher Education are obliged to succeed in development especially in improving the welfare of the community in the health sector. Through community service activities this can be used as a spearhead in the participation of Universities to improve the health status of the community in collaboration with local cadres. Empowerment of cadres is expected to train cadres in transferring health knowledge to Woman childbearing age in order to obtain optimal services from health services.

The general objective of this activity is to improve the skills of Posyandu cadres as pre-pregnancy health motivators for Woman Childbearing age in Segobang Village, Licin District, Banyuwangi. The specific purpose of this activity is to increase the knowledge of Posyandu cadres about pre-pregnancy health and reproductive health; improve communication skills of Posyandu cadres as pre-pregnancy health motivators.

2. Method

Location of community service activities in the Village Segobang, Licin District,, Banyuwangi. This counseling activity was held on Saturday (September 17, 2016), Sunday (September 18, 2016), Saturday (September 24, 2016), Sunday (October 25, 2016). The target of the activity was 16 Posyandu cadres in Segobang Village, Licin District, Banyuwangi Regency. The community service activities are in the form of posyandu cadre training consisting of sensitization, improvement of knowledge and communication skills and evaluation of achievement of targets. After posyandu cadres receive all training materials, posyandu cadres will be tested for skills improvement through a simulation at the posyandu. The details of the training activities are as follows:

- a. Sensitization is a process of organisms made to be more responsive (sensitive) to certain aspects of the environment, so that the association or relationship between the stimulus-response becomes stronger.

The training activity took place semi-formally, which was initiated by sensitization activities by inviting trainees to observe the surrounding environment about nutrition and then look at the problems encountered and take photos to be presented at the beginning of the training. Participants are then asked to explain why the problem can occur. After sensitization activities

are complete, then enter the topics mentioned above. For each topic presented, trainees will also have the opportunity to practice the theory and material that has been obtained. At the end of the training, participants will conduct a direct simulation in the field during the Posyandu activities in accordance with the material that was obtained in the previous days.

- b. Providing material on pre-pregnancy nutrition and reproductive health. The scope of the material provided is pre-pregnancy nutrition which will discuss the characteristics of pregnancy, changes experienced during pregnancy, the importance of nutrition for pregnancy preparation, the importance of planning for pregnancy. The scope of reproductive health material namely Reproductive Organs, Family Planning and Sexually Transmitted Infections. In addition, the second material is the exercise of communication skills and the introduction of types of communication media, namely the ability of health facilitators which includes effective communication, how to convey health messages well, and how to motivate targets along with the ability of visitors to develop health promotion media including: introduction to media, features effective media features
- c. Evaluation of target achievement consists of: Pre and Post Test evaluations to measure knowledge, communication training and promotion training. This evaluation is carried out during the training in the form of answering questions on a piece of paper. Evaluation of improving communication skills through promotional simulations directly with WUS. The overall value of the evaluation results will be analyzed to see changes in knowledge and skills due to the training provided.

Output targets in this activity include: It is said that the knowledge of all posyandu cadres increases if it is > 67. It is said that the posyandu cadres' communication skills increase if almost all cadres deliver clear and felt benefits on WUS for each material with > 90%.

3. Results and Discussion

- a. Increase knowledge of Posyandu cadres about pre-pregnancy health and reproductive health

Occurs after people do sensing a certain object. Sensing occurs through the five human senses. Most human knowledge is obtained through the eyes and ears. When someone learns about something, someone knows something new. Knowledge is not the end result, but knowledge is also something that directs someone to learn something new [7]. Knowledge is closely related to the level of education even though it is not absolute, meaning that someone with a low education is not necessarily low-knowledge and vice versa. The high level of one's knowledge is determined by various factors, including: the level of education, the location of residential areas, the number of contacts with communicators either through print media or electronic media, and others. The level of one's knowledge has an effect on the speed of catching messages. Low knowledge will hinder the development of a person's attitude towards new values introduced [8].

Level of knowledge is influenced by two factors, namely internal factors (education, work, age, interests, experience) and external (socio-cultural, environmental, information) [9]. Counseling is an effort to change human behavior carried out through an educational approach. Educational approaches are defined as a series of activities carried out systematically-planned-directed, with the active participation of individuals, groups or communities to improve health knowledge for the community with one of the evaluations in the form of pre-test and post-test questions in order to change behavior [10]. The results of the pre-test and post-test for the revitalization of Posyandi cadres in Segobang Village can be shown in the following table.

Table 2. Pre-Test and Post Test Results for Revitalization of Posyandu Cadres in Segobang Village, Licin District, 2017

Peserta	Point of Pre-Test	Point of Post Test	Interpretation
Respondents 1	73	88	Knowledge increases
Respondents 2	40	55	Knowledge increases
Respondents 3	70	94	Knowledge increases
Respondents 4	43	67	Knowledge increases
Respondents 5	55	55	Fixed knowledge
Respondents 6	73	94	Knowledge increases
Respondents 7	70	91	Knowledge increases

Respondents 8	73	79	Knowledge increases
Respondents 9	52	67	Knowledge increases
Respondents 10	37	79	Knowledge increases
Respondents 11	52	55	Knowledge increases
Respondents 12	61	79	Knowledge increases
Respondents 13	64	79	Knowledge increases
Respondents 14	64	76	Knowledge increases
Respondents 15	49	88	Knowledge increases
Respondents 16	55	76	Knowledge increases

Based on table 1, it can be concluded that almost all mothers (15 mothers) knowledge about pre-pregnancy nutrition and reproductive health increased while only 1 mother whose level of knowledge remained after being given a post-test. Besides this community service activities have fulfilled the output target, namely the knowledge of all posyandu cadres has improved to be good if > 70% (11 people) received a post test score > 70. In this case it is in line with the results of research conducted by Lubis et al. that cadre knowledge and skills can be categorized as good, if the score is > 67%; Enough, if the score is 33% -67% and less, if the score is <33% (Arikunto, 2009).

b. Improve communication skills of Posyandu cadres as pre-pregnancy health motivators.

Posyandu cadre communication skills are shown by evaluating the delivery of material by cadres and evaluating the benefits of the material obtained from the material presented. The two evaluations were carried out by Woman of childbearing age as the target actors preparing for pregnancy in Segobang Village. Submission of material by cadres is evaluated in each subject with a good or clear measurement results and Woman of childbearing age cannot understand it can be shown in the following table.

Table 3. Evaluation of Submission of Material by Posyandu Cadres

Submission of material for reproductive organs by cadres	Frequency
Clearly	7
Can't be Understood	1
Submission of material for menstruation by cadres	Frequency
Clearly	7
Can't be Understood	0
Submission of material sexually transmitted infections and reproductive tract infections by cadres	Frequency
Clearly	5
Can't be Understood	1
Submission of material pre-pregnancy nutrition by cadres	Frequency
Clearly	6
Can't be Understood	0
Submission of material clean and healthy lifestyle by cadres	Frequency
Clearly	5
Can't be Understood	1

Based on table 2 above, it can be shown that the success of delivering this material indicates that the material provided can be accepted and considered important by WUS. Things that need to be accustomed so that cadres can become good instructors, namely:

1. Information and suggestions are given based on the circumstances or problems of the participants who came to the Posyandu.
2. The suggestions conveyed are clear and quite practical so that they can be implemented by WUS, for example: types of nutritious food that is easily available and cheaply obtained by mothers in the village.
3. Explanations and suggestions are given in a language that is simple and easy to understand by the community, specifically an explanation of health languages such as immunization, contraception, tablets plus blood (iron tablets), blood loss (anemia), malnutrition, and so on.

4. Cadres are friendly in providing information and suggestions
5. not accompanied by criticism or scolding against WUS who have problems
6. Participants are given the opportunity to ask questions, not just listen
7. Knowledge of a good instructor also needs to be supported by a good counselor's attitude.

These attitudes include:

- a. Be patient: if you are impatient to see that the training process is not smooth enough to take over the process, then you have taken over the learning opportunities of the participants. Usually in participatory training, the process will be difficult in the initial stages because the atmosphere has not been smooth enough. However, the next process will be very alive if the instructor continues to be patient in encouraging the participant process.
- b. Listening and not dominating: because of the experience of the most important participants in learning, extension workers must be more observers and listeners to the training process. Extension workers must believe that how to properly manage Posyandu cannot come from itself, but rather comes from the process of exchanging experiences of cadres themselves so that they can learn for themselves how to do Posyandu activities better.
- c. Respect and be humble: the way to respect participants is to show genuine interest in their knowledge and experience. We as outsiders often consider the ability of Posyandu cadres to be completely behind, so we need to be aware of humility
- d. Want to learn: extension workers need to have enthusiasm to learn from participants because there are many things that can be learned from Posyandu cadres who are more experienced in terms of working in their own communities. In addition, extension agents will not succeed if they do not understand the ins and outs of the participants' experience because the material delivered in relation to the participants' experiences will be more meaningful
- e. Be equal and familiar: relationships with cadres should be done in an informal, intimate, and relaxed manner so that an atmosphere of equality can be created. Participants will learn more if they feel comfortable with the extension team. We recommend that we avoid the distance or difference between the Posyandu extension staff and cadres. For example, the extension team can try to wear the same clothes as Posyandu cadres.
- f. Not patronizing: the learning process takes place the same as adults. Adults have experience and establishment, because that will not work if the instructor acts as a taboo teacher. We should learn by sharing experiences, so that we get a rich understanding
- g. Not taking sides, assessing, and criticizing: perhaps in training differences of opinion can arise between participants. Extension agents may not judge and criticize all opinions, nor should they take sides. Extension agents must try to guide communication between different parties to seek agreement and exit points.
- h. Be open: extension workers don't hesitate to be honest if they feel they don't know something, from this example, cadres can learn that they can also have an open attitude with the village mothers.
- i. Be positive: an instructor should always build a positive atmosphere.

Evaluation of the benefits obtained from the material submitted was carried out by WUS to cadres on each subject matter. The assessment is done the same as the first evaluation by filling a piece of paper in a uniform format with the results of measuring knowledge or insight increasing and others as illustrated in the following table.

Table 3. Evaluate the benefits of the material obtained from the material presented

The material benefits of reproductive organs obtained by women childbearing age	Frequency
Knowledge increasing	8
another (.....)	0
The material benefits of menstruation by women childbearing age	Frequency
Knowledge increasing	7
another (.....)	0
The material benefits of sexually transmitted infections and reproductive tract infections by women childbearing age	Frequency
Knowledge increasing	6
another (.....)	0

The material benefits of family planning by women childbearing age	Frequency
Knowledge increasing	6
another (.....)	0
The material benefits of pre-pregnancy nutrition by women childbearing age	Frequency
Knowledge increasing	6
another (.....)	0
The material benefits of material clean and healthy lifestyle by women childbearing age	Frequency
Knowledge increasing	5
another (.....)	1

The training material that has been given to each subject is mostly beneficial. WUS felt its knowledge increase when the educational simulation took place. This success is certainly inseparable from the methods and media used during learning. The group approach method is often felt to be quite effective because the target is guided and directed to do something more productive activities on the basis of cooperation. In the group approach there are many benefits that can be taken, in addition to the transfer of information, there is also an exchange of opinions and experiences between the counseling target in the group and allows for feedback, and group interaction that provides opportunities to exchange experiences and influences on members' behavior and norms.

Media or teaching aids in health promotion can be interpreted as a tool for health promotion that can be seen, heard, touched, felt or kissed, to facilitate communication and dissemination of information. Usually props are used in combination, for example using a blackboard with photos and so on. But in using props, both in combination and singly, there are two things that must be considered, namely:

1. The props must be easily understood by the target community
2. The ideas contained in it must be acceptable to the target.

In this activity the media used are images or graphic media, such as posters, modules for cadres, paintings. A poster is a piece of paper or board that contains pictures with a few words. The words on the poster must be clear, precise and can be easily read at a distance of approximately 6 meters. Posters are usually affixed to a place that is easily seen and traveled by many people, for example on the walls of the village hall, roadside, bulletin boards, and others. Pictures in posters can be paintings, illustrations, cartoons, pictures or photographs. Posters are mainly made to influence people, give short messages. Therefore the method of making must be interesting, simple and only contains one idea or one reality. A good poster is a poster that has a long staying power in the memory of people who see it and can encourage it to act.

In addition to print media, this activity also uses optical media such as photos, slides, films. Slides are generally used with group or group goals. This slide is very effective for discussing a particular topic, and participants can examine each material carefully, because the slides can be repeated. Films are more towards mass targets, they are entertaining but educative. The most wanted material to be explored more deeply by WUS is the subject of Sexually Transmitted Infections and Reproductive Tract Infection because there are many teenagers who have experienced early marriage and are pregnant at a very young age. This condition can increase the risk of medical complications, both in the mother and in the child and correlate with maternal mortality and morbidity.

4. Conclusion

- a. This activity has fulfilled the output target, namely the knowledge of all Posyandu cadres has improved to > 67% (11 people). Almost all Woman childbearing age, 15 people experienced an increase in knowledge about pre-pregnancy nutrition and increased reproductive health and one mother's knowledge remained after being given a post-test.
- b. Submission of material provided by cadres is well and clearly accepted by Woman childbearing age. The training material provided by cadres in each subject was mostly felt by Woman childbearing age, namely knowledge increased when the educational simulation took place.

The recommendations of this activity are in the form of a follow-up plan aimed at increasing cadre knowledge and skills in forming and developing certain groups, namely training cadres to

have the ability: identifying potential members, maintaining group dynamics, developing Plan of Action, and forming Peer Support Groups.

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References

1. Kemenkes R. Profil Kesehatan RI 2015. Profil Kesehatan Indonesia Tahun 2015. 2015. 125 p.
2. Kemenkes R. Riset Kesehatan Dasar 2013. Vol. 7. 2013. 803–809 p.
3. Kemenkes RI. Profil Kesehatan RI 2014. Jakarta: Kementerian Kesehatan RI. 2014. 507 p.
4. Timur DKPJ. Profil Kesehatan Provinsi Jawa Timur 2014. 2014.
5. Dinkes Kabupaten Banyuwangi. Profil Kesehatan Kabupaten Banyuwangi Tahun 2014. Profil Kesehat. 2014;(031):32.
6. Dinkes B. Profil Kesehatan Kabupaten Banyuwangi Tahun 2016. Profil Kesehat. 2017;32.
7. Notoatmodjo, Soekidjo. 2003. *Pendidikan dan Perilaku Kesehatan*, Jakarta: PT Rineka Cipta: 114
8. Sarwono, Sarlito Wirawan. (2004). *Psikologi Remaja*. Jakarta: RajaGrafindo persada.
9. Mubarok wahit iqbal dkk. *Konsep Dasar Pendidikan Kesehatan*. 2007;
10. Suhardjo. 2003. *Berbagai cara pendidikan gizi*. Jakarta. Bumi Aksara