

# Model RuPe PUS<sup>Plus</sup>-SMS To Improve Knowledge and Attitudes of Eligible Couple Against Long-Term Contraception Method

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**ABSTRACT**— *Background: This study makes a development model, which is called "RuPe PUS<sup>Plus</sup>-SMS" by the communications media reminder message for elucidation LTCM extension given to MAC. Methods: This research uses Respondents MAC intervened LTCM uses a RuPe PUS<sup>Plus</sup>-SMS model to determine differences in knowledge and attitudes MAC before and after intervention. Results: Results of study showed after intervention, LTCM used in Dusun Lingsar Taman (Intervention Group) (73.33%) in Dusun Lingsar Tengah (Control Group) (4.75%), in Banteng Kurus (intervention group) after intervention (43.33%) whereas in Dusun Iting Bengkel (Control Group) (3,33%). For variable knowledge and attitudes difference before and after the intervention RuPe PUS<sup>Plus</sup>-SMS LTCM both in Desa Lingsar and Desa Ungga, with a p-value (0037) for the variable knowledge and p(0.000) attitudinal positions for variables. Conclusion: Intervention cultivation models RuPePUS<sup>PLUS</sup>-SMS LTCM to enhance the knowledge and attitudes of respondents.*

**Keywords**— *RuPe PUS<sup>Plus</sup>-SMS, Mature of Age (MAC), Long-Term Contraception Method (LTCM)*

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## 1. INTRODUCTION

Improve the quality Indonesian of human life the priority agenda of 5th (fifth) development. BKKBN is a one of main institution of government following the success of the achievement of the policies and national strategy particularly in the development of population and family planning (KB) contained in the medium nationally term development plan (MNTD) 2015 – 2019.

Total the projected number of birth total in Indonesian decrease periodict 2010 – 2015 is an 2.442 to 2.212 million periodict 2020 – 2025 and will reach 1.990 million the period 2030 – 2035. Total result project number of birth in Provinsi Nusa Tenggara Barat (NTB) in the period 2010 – 2015 2.653 million decrease to 2.512 million in period 2015 – 2020 and reach 2,154 in period 2030 – 2035 next. [1]

Age Between 15 – 49 years old is an age mature for a woman because these age ranges possibility of women of birth big enough. The greater number of mature age couple (MAC) then opportunities man children today are also getting bigger. Those limiting the number of children need to be notice by optimizing KB program one trough the Long-Term Contraception Method (LTCM). [2]

In development plants national medium term year 2009 – 2014, stated that in order to speed up fertility control through use of contraception, family planning national program in Indonesian directed to the use of Long-Term Contraception Method (LTCM). [3]

LTCM previously known as Effective Contraceptive Selected Method (ECSM). Effective Contraceptive Selected Methods is a long term contraceptive methods in use, have the effectiveness and use of a high survival rate with numbers failure of the lowest. Type of methods are include in ECSM is an method safe contraception (man and women), implant, and *Intra Uterine Device* (IUD).

User LTCM has many advantages, in addition to accelerating the decline number of birth total, used contraceptive LTCM more efficient because it can be used for a long time as well as more secure and effective. LTCM very appropriate in a crisis situation experienced by most Indonesian people, especially people who are poor. Profit LTCM showed a failure rate lower than KB that Non-LTCM. [4]

The monitoring results MAC through mini survey of Indonesia in 2013 a user indicates LTCM tends to decrease, used KB dominated by KB hormonal method that is injection (36,0%) and pill (15,1%), next IUD (4,7%), implant (5,2%) and female sterilization (2,2%). Used LTCM consists of IUD, Implant, MOW dan MOP 12,4%. [5]

Riskesdas 2013 also shows the variation of use KB according to the type of period of effectiveness (LTCM dan Non LTCM) that is the proportion of use non LTCM highest in Kabupaten Lombok Tengah 57,9% and lowest in Kota Bima 34,1%. used KB with LTCM highest in Kabupaten Lombok Utara 17,0% while the smallest is in Sumbawa Barat 8,2%. [6]

The spread of the use of contraceptives in younger women tend to use injectables, pil and implant. While older women tend to prefer to use long-term contraception, likes IUD and steril. Short term contraceptive use causes the survival rate of contraceptive use tends to decline the impact on *fertility rate*. To overcome the problems of the current population, the government launched a program of contraception LTCM through improved access and quality of service KB priority to the extension and improvement of services KB to the dissemination of communication, information and education about KB especially LTCM to the public. [7]

Cell phone use is increasingly prevalent in all walks of life is the basis for choosing the media used in this study. According the data balitbang SDM Depkominfo (2007), the development of mobile phone telecommunication operation sooner and accordings Yanpraz (2007) user *Short Message Services* (SMS) has been pushing the boundaries of social strata, crossing geographical fence, reacher variety of purposes, and to help the community in the running The main functions of communication, namely information, persuasion, education, entertainment and supervision. Some research use SMS as a reminder can reduce absenteeism the patient eyes to re-examination (Koshhy *et al.*, 2008), lower the anxiety level of surgical patients' families (Huang *et al.*, 2006), increasing the number of clinic visits and more cost effective for their free SMS package.

To determine the success development model "Rupe PUSPlus - SMS" in Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat and Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah then do research on differences in knowledge and attitudes pair fertile age before and after the intervention of the media "" RuPe PUS<sup>Plus</sup> - SMS "

## 2. MATERIALS AND METHODS

### 2.1 T Age Characteristics and Respondents

The results showed that the age of the respondents in Dusun Lingsar Taman Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat in November 2015 which is the area the intervention group 50 % age between 20 – 35 years, 50% older than 35 years and no respondents aged less than 20 years. Age of respondents in Dusun Lingsar Tengah Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat in November 2015 which is an area of the control group 10 % aged less 20 years, 73% age between 20 – 35 years and 17 % older than 35 years. Age of respondents in Dusun Banteng Kurus Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah in November 2015 which is an area of intervention group 3% aged less than 20 years, 57 % aged between 20 – 35 years and 40% older than 35 years. Age of respondents in Dusun Iting Bengkel Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah in November 2015 which is an area of the control group 83 % aged between 20 – 35 years, 17% older than 35 years and no respondents aged less than 20 years.

### 2.2 Characteristics of Education Respondents

Last Education respondents in Dusun Lingsar Taman Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat in November 2015 is a 77% basic education, 23% Secondary education and none attain higher education. Last Education respondents in Dusun Lingsar Tengah Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat in November 2015 is a 67% basic education, 33 Secondary education and none attain higher education. Last Education respondents in Dusun Banteng Kurus Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah in November 2015 is a 63% basic

education, 37% Secondary education and no reach higher education. Last Education respondents in Dusun Iting Bengkel Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah in November 2015 is a 33% basic education, 60% secondary education and 7% High education.

### **2.3 The characteristic of the work of Respondents**

The work of the respondents in Dusun Lingsar Taman Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat in November 2015 there are 20 % of the work and 80 % did not work. The work of the respondents in Dusun Lingsar Tengah Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat in November 2015 there were 13 % and 87 % did not work. The work Dusun Banteng Kurus Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah in November 2015 is working 70 % and doesn't work 30 %. The work in Dusun Banteng Kurus Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah in November 2015 is working 70 % and doesn't work 30 %.

## **3. RESULTS**

### **3.1 Use of Contraceptives**

Use of Contraception in Dusun Lingsar taman Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat in November 2015 Non-term contraception method Long before the intervention of 100% (30 people) and after the intervention 27% (8), while using contraceptives term contraception method Long before the intervention of 0% and after intervention 73% ( 22 people). Use of Contraception in Lingsar Tengah Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat in November 2015 Nonterm contraception method Long before the intervention of 100% (30 people) and after the intervention 93% (28 people), while using contraceptives Use of Contraception in Dusun Banteng Kurus Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah in November 2015 Nonterm contraception method Long before the intervention of 100% (30 people) and after the intervention 57% (17 people), while using Use of Contraception in Iting Bengkel Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah in November 2015 Non Long-Term Contraception Method before the intervention of 100% (30 people) and after the intervention 97% (29 people), while using contraceptives LTCM before the intervention of 0% and after intervention 3 % (1 person).

### **3.2 Analysis of the Pretest Knowledge and Postest**

The results of the research on the distribution of Knowledge Pre-test and Post-test in the intervention group in Dusun Lingsar taman Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat, November 2015. Based on the knowledge of the mother about granting RuPe PUS<sup>PLUS</sup> – SMS Long-term contraceptive method pre-test results showed most respondents value are in the category of less (47%) and pretty (47%) whereas the results of the post-test showed most respondents value are in the category either (60%). Willxocon test results obtained the value of  $p(0000) < 0.05$  the difference meant the value of knowledge in the intervention group before and after intervention (grant of RuPe PUS<sup>PLUS</sup> – SMS term contraceptive method which means there are Long). Distribution of Knowledge Pre test and Post test in the control group in Lingsar Tengah Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat, November 2015. Based on the knowledge of the mother about granting RuPe PUS<sup>PLUS</sup>–SMS Long-term contraceptive method pre-test results showed most respondents value are on enough category (60%) and the results of the post-test show the value of most respondents is enough category (60%). Willxocon test results obtained the value of  $p(0.014) < 0.05$  meaning < difference meant the value of knowledge in the control group before and after the granting of other activities.

The results of the research of the distribution of Knowledge Pre test and Post test in the intervention group in Dusun Banteng Kurus Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah, November 2015. Based on the knowledge of the mother about granting RuPe PUS<sup>PLUS</sup>–SMS Long-term contraceptive method pre-test results showed most respondents value are on enough category (50%) and the results of the post-test show the value of most respondents is enough category (56%). Willxocon test results obtained the value of  $p(0000) < 0.05$  that means there is a meaningful difference in the value of knowledge in the intervention group before and after intervention (grant of RuPe PUS<sup>PLUS</sup>–SMS Long-term contraceptive method). Distribution of Knowledge Pre test and Post-test control group in Dusun Iting Bengkel Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah, November 2015. Based on the knowledge of the mother about granting RuPe PUS<sup>PLUS</sup>–SMS Long-term contraceptive method pre-test results showed most respondents value are on Less category (43%) and Enough (43%) whereas the results of the post-test showed most respondents value are in the category either (77%). Willxocon test results obtained the value of  $p(0000) < 0.05$  that means there is a meaningful difference in the value of knowledge in the control group before and after the granting of other activities.

### 3.3 Analysis of Pretest and Posttest Attitude

The distribution of research results Attitudes Pre test and Post test in the intervention group in the Dusun Lingsar taman Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat, November 2015. Based on the mother's attitude about RuPe PUS<sup>PLUS</sup> – SMS Long-term contraceptive method results of pre-test showed most respondents agree with the choice (43%) and the results of the post-test showed most respondents with a choice of undecided (77%). The results of the test values obtained Willcoxon análisis p (0.033) 0.05 meaning < discrepancies means the value of the attitude of the intervention group before and after intervention (give RuPe PUS<sup>PLUS</sup>–SMS Long-term contraceptive method). The distribution of the attitude of the Pre test and Post-test control group in the Lingsar Tengah Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat, November 2015. Based on the mother's attitude about RuPe PUS<sup>PLUS</sup> – SMS Long-term contraceptive method results of pre-test shows most respondents agree with the choice (43%) and the results of the post-test showed most respondents with a choice of undecided (67%). The results of the test values obtained Willcoxon análisis p (0000) < 0.05 that means there is a meaningful difference value attitudes in the control group before and after intervention with other activities.

The distribution of research results Attitudes Pre test and Post test in the intervention group in the Dusun Banteng Kurus Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah, November 2015. Based on the mother's attitude about RuPe PUS<sup>PLUS</sup> – SMS Long-term contraceptive method the results of the test showed most respondents pre-loaded with a selection of undecided (50%) and the results of the post-test showed most respondents with a choice of undecided (57%). The results of the test values obtained Willcoxon análisis p (0.012) 0.05 meaning < difference means the value of the attitude in the intervention group before and after intervention (grant of RuPe PUS<sup>PLUS</sup> – SMS Long-term contraceptive method). The distribution of the attitude of the Pre test and Post-test control group in the Dusun Iting Bengkel Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah, November 2015. Based on the mother's attitude about RuPe PUS<sup>PLUS</sup> – SMS Long-term contraceptive method the results of the test showed most respondents pre-loaded with a selection of undecided (57%) and the results of the post-test showed most respondents agree with the choice (83%). The results of the test values obtained Willcoxon análisis p (0025) < 0.05 that means there is a meaningful difference value attitudes in the control group before and after intervention with other activities.

The results of comparisons of Post-test Knowledge among the intervention group and The Control Group After The Awarding Of RuPe PUS<sup>PLUS</sup>– SMS Long-term Contraceptive Method, November 2015. As for the average value, the mother's knowledge after the awarding of RuPe PUS<sup>PLUS</sup>– SMS Long-term contraceptive method in the intervention group obtained the value of 26.20 while in the control group gained value 34.80. Based on the results of the Mann-Whitney test análisis value p (0.037) < 0.05. This shows there is a meaningful difference between the knowledge of the value of the intervention group with a control group. Comparisons of the results of the Post-test Attitudes among the intervention group and The Control Group After The Awarding Of RuPe PUS<sup>PLUS</sup> – SMS Long-term Contraceptive Method, November 2015. As for the value of the average mother's attitude after the awarding of RuPe PUS<sup>PLUS</sup> – SMS Long-term contraceptive method in the intervention group obtained the value of 22.92 whereas in the control group gained 38.08 value. Based on the results of the Mann-Whitney test análisis value p (0000) < 0.05. This shows there is a meaningful difference between the attitudes of value of the intervention group with a control group.

## 4. DISCUSSION

Approaches proven effective in improving acceptor LTCM has been developed by Erni, 2013 through space Eligible Couples Counseling (RuPePUS) in Kecamatan Lingsar on 8 hamlets. Fertility age percentage who have the understanding and awareness to use Long-Term Contraception Methods from 38.90% in 2012 to 41.35% in 2013 and became 59.09% in 2014.

The preliminary results of the study indicate that the media is very good RuPe PUS to trawl acceptors Family Planning Long-term Contraceptive methods but it has a few drawbacks namely requires time to collect MAC, the frequency of meetings is more than 1 times, requires a place or room to gather, material presented focus less acceptable audience due largely to bring the child so that the attention is divided with taking care of children, the decision to choose Long-term contraception method must communicate with the husband of fertile age, and post-counseling the decision to choose Long-term contraception method must communicate with the husband of fertile age, and post-counseling.

*The sustainability of the development model of cultivation RuPe PUS<sup>PLUS</sup> – SMS term contraception method is based on interviews with the spouses of fertile age in the Desa Lingsar and Desa Ungga on average they are favorable towards the development model of cultivation RuPe PUS<sup>PLUS</sup>-SMS Long-Term Contraception method . PLKB for power and average cadres are very supportive and helpful in gathering respondents and disseminate methods of cultivation model development of RuPe PUS<sup>PLUS</sup>-SMS Long-Term Contraception method. Likewise, Stakeholder that comes from health personnel ( health workers ) , public and religious leaders expressed readiness to support and provide information dissemination and socialization in each meeting so that people get to know about the development model development of RuPe PUS<sup>PLUS</sup>-SMS Long-Term Contraception Method.*

The application of the model RuPe PUS<sup>PLUS</sup>-SMS Long-term contraception method has several advantages, it does not require time to gather MAC, and requires no place or room to gather for materials delivered through the model. An important information is through the RuPe PUS<sup>PLUS</sup>-SMS Long-Term Contraception Method information also can focus more acceptable to respondents, the decision to choose Long-term contraception method must communicate with the husband of fertile age. As is RuPE PUS<sup>PLUS</sup>-SMS Long-Term Contraception Method respondents could more easily communicate and share information with her husband.

The policy recommendations are indispensable in planning programs for forwarding the results of model development cultivation RuPe PUS<sup>PLUS</sup>-SMS Long-Term Contraception Method so it can be applied in all areas Provinsi Nusa Tenggara Barat in particular and Indonesia in general. Furthermore, it is necessary to establish cooperation with Telkomsel or XL - center and center for the cultivation of the model development admin RuPe PUS<sup>PLUS</sup>-SMS Long-Term Contraception Method so as to reach all levels of society and the target of achieving long-term contraception method acceptors increasing.

## 5. CONCLUSION

An increase in knowledge and attitudes in decision making contraception tool use Long-Term Contraception Method After the intervention in Dusun Lingsat Taman Desa Lingsar Kecamatan Lingsar Kabupaten Lombok Barat of 0% to 73% (22 people). Use of Contraceptive LTCM in Dusun Banteng Kurus Desa Ungga Kecamatan Praya Barat Daya Kabupaten Lombok Tengah increased from 0 % to 43 % ( 13 people ).

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