### Family Planning Information, Education and Communication with Contraceptive Use

### Komunikasi, Informasi dan Edukasi Keluarga Berencana dengan Penggunaan Kontrasepsi

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#### Abstract

Contraceptive use prevalence in Indonesia within the last decade (2002-2012) did not significantly increase, although many Family Planning Information, Education and Communication activities had been performed. This study aimed to determine socioeconomic demographic factors related to Family Planning Information, Education, Communication, any Information, Education and Communication elements related to contraceptive use and Information, Education and Communication elements affecting on contraceptive use. Analysis used Indonesia Demographic and Health Survey 2012 as data source with analysis unit namely married women aged 15-49 years. Samples were 33,465 married women. Analysis used odds ratio (OR) between women receiving Family Planning Information, Education, Communication toward women not getting access to Family Planning Information, Education, Communication in relation to contraceptive use. This study found that Family Planning Information, Education, Communication, both media and officers were important factors in contraceptive use. Information, Education and Communication through television and poster/flyer had a significant relation with contraceptive use (OR 1.6 and 1.3). Medical officers, Family Planning officers and informal figures among community played an important role in Family Planning information and contraceptive use (OR 2.2; 1.4; and 1.2). In line with results, visits of Family Planning officers and medical officers informing contraception to clients at healthcare facilities significantly affected on contraceptive use (OR 1.5 and 2.6).

Keywords: Family planning information education communication, media, prevalence of family planning

#### Abstrak

Prevalensi KB di Indonesia selama satu dekade terakhir (2002-2012) tidak meningkat secara signifikan, walaupun pelbagai kegiatan KIE KB telah dilaksanakan. Penelitian ini bertujuan untuk mengetahui faktor sosio ekonomi demografi yang berkaitan dengan KIE KB, pelbagai unsur KIE yang berkaitan dengan pemakaian KB, dan unsur KIE yang berpengaruh terhadap pemakaian KB. Analisis menggunakan sumber data Survei Demografi dan Kesehatan Indonesia 2012 dengan unit analisis perempuan berstatus kawin usia 15-49 tahun. Jumlah sampel yang dianalisis 33.465 perempuan berstatus kawin. Analisis menggunakan *odds ratio* atau rasio kecenderungan antara perempuan yang memperoleh KIE KB terhadap perempuan tidak mendapatkan akses KIE KB dalam hubungannya dengan pemakaian KB. Temuan bahwa pemberian KIE KB, baik media maupun petugas, merupakan faktor penting dalam pemakaian KB. KIE melalui televisi dan poster/pamflet memiliki hubungan bermakna dengan pemakaian KB (OR 1,6 dan 1,3). Petugas medis, petugas KB dan tokoh informal di masyarakat berperan penting dalam penyampaian informasi KB dan pemakaian KB (OR 2,2; 1,4; dan 1,2). Sejalan dengan hasil tersebut, kunjungan petugas KB dan petugas kesehatan menjelaskan KB kepada klien di fasilitas kesehatan berpengaruh secara bermakna pada pemakaian KB (OR 1,5 dan 2,6). **Kata kunci**: Komunikasi Informasi dan Edukasi, Keluarga Berencana, media, prevalensi Keluarga Berencana

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### Introduction

The program achievement within the last decade (2002-2012) as indicated by total fertility rate (TFR) and prevalence of contraceptive use was in less exciting condition. Results of Indonesia Demographic and Health Survey (IDHS) within the last decade (2002/2003-2012) showed TFR was stagnant at rate 2.6 children per woman. Meanwhile, contraceptive prevalence rate (CPR) within the same period was a little bit increasing. According to IDHS 2002-2003, CPR was 60.4% then it became 61.9% in IDHS 2012, so it increased only by 1.5% within the last decade (2002-2012).<sup>1-3</sup>

Prevalence of contraceptive use was not much increasing as many factors could affect. Based on theory of behavior Lawrence Green, health behavior including contraceptive behavior was affected by predisposing, driving and supporting factors. Predisposing factors were related to characteristics of individual background and contraceptive knowledge. Driving factors were related to encouragement from partners and public figures, meanwhile supporting factors were related to program factor, such as access to and quality of Family Planning Information, Education and Communication. In contraception program, activities of Family Planning Information, Education and Communication aim to improve contraceptive knowledge, attitude and practice, developing sustainability of contraceptive participants, then cultivating contraception among people.<sup>4-6</sup>

All aspects about Family Planning Information, Education and Communication activities addressed to any segments of target among people had been performed by the program. However, the achievement of prevalence of contraceptive use did not significantly increase. Based on such condition, this study aimed to determine socioeconomic demographic factors related to Family Planning Information, Education and Communication, any Information, Education and Communication elements related to contraceptive use and Information, Education and Communication elements affecting on the contraceptive use. Result of analysis hopefully could be used as recommendation for the program to complete the upcoming Family Planning Information, Education and Communication activities.

#### Method

Analysis used secondary data source from IDHS 2012. This study used cross-sectional design. Population was all 15 – 49-year-old women of childbearing age in Indonesia. Samples were married women aged 15 – 49 years included in the study. Respondents were 15 – 49-year-old women of childbearing age as many as 33,465. Independent variables were Family Planning messages through printed and electronic media, health officers, Family Planning officers and informal figures in commu-

nity. Other independent variables were home visits of Family Planning officers to inform Family Planning messages as well as health officers informing Family Planning messages to clients at healthcare facilities. Control variables were maternal age, number of child, domicile, education and wealth index. Dependent variable was contraceptive use. Data analysis used distribution of frequency, cross tabulation and multivariate. Multivariate analysis was conducted by using binary logistic regression.

### Results

#### **Characteristics of Respondents**

The highest percentage of respondents was at the age group of 30-39 years (37.7%), meanwhile the lowest was at the age group of 15-19 years (2.7%). In term of number of child, the highest percentage was at women who had 1 - 2 children (57.3%), meanwhile the lowest (8.2%) was at women who had five children or more. Based on education, the highest percentage was at women graduated from elementary school level of education (27.0%) and the lowest was at women graduated from higher education (10.0%). According to domicile, 50.8% showed women were in rural areas, and the remaining were in urban areas. Women were almost evenly distributed at five quintiles of wealth index (18-22%). There were more women respondents with employment status (63.3%).

#### Access to Family Planning Information by Mass Media

Media take an important role in spread of Family Planning message. Based on number of target, media are differentiated into mass media and media between individuals. Mass media are to inform Family Planning messages, both printed and electronic media.

At national scale, married women received Family Planning message from mass media, especially through television (45.3%), then followed by poster/flyer (27.6%), newspaper/magazine (13.6%) and the lowest was radio (9.5%). If results of IDHS 2012 was compared to results of IDHS 2002, there was a shift of the use of radio and poster/flyer in spreading Family Planning messages. The use of radio as broadcaster of Family Planning messages during that time was decreasing to 9.5% from 19%. Meanwhile, the use poster/flyer was increasing to 27.6% from 12.7%.

Although the percentage was low (9.5%), Family Planning messages through radio was more accessed by women aged 15-19 years, having 1-2 children or not yet having a child, graduated from higher education and senior high school level of education, living in urban areas, with wealth index as middle upper and uppermost, and more accessed by employed women.

Family Planning message through television was more accessed by women (45.3%). The message was almost

evenly accessed by women at all groups of age, received more by those who had no child yet and had 1 - 2 children, were graduated from senior high school and higher education, living in urban areas, at middle upper wealth index and accessed more by unemployed women.

Access to Family Planning information from newspapers or magazines was still low (13.6%). Reading Family Planning message on newspapers or magazines was accessed more by women aged 30 - 39 years, among women who had no child yet or had 1 - 2 children, were graduated from higher education, more living in urban areas, at middle upper wealth index and accessed more by employed women. Acceptance of Family Planning message from poster/flyer media had the similar pattern with Family Planning message from newspapers/magazines.

# Access to Family Planning Information from Media with Contraceptive Use

Women who both accessed and did not access Family Planning messages from media showed contraceptive use 61.9%, the remaining (38.1%) did not use. Family Planning message from radio was less related to contraceptive use. Contraceptive use among women who listened to Family Planning message from radio was 60.8%, meanwhile contraceptive use of those who did not access Family Planning message from the similar media was higher (62.0%). A similar pattern occurred on the access to Family Planning message through newspaper/magazine.

In contrast to roles of radio and newspaper/magazine, role of television and poster/flyer toward contraceptive use showed the opposite pattern. Women who accessed Family Planning message through television showed 63.2% contraceptive use, meanwhile contraceptive use of women who did not receive Family Planning information from the similar media was lower (60.8%). The similar tendency with the role of television occurred on poster/flyer. Contraceptive use among women who received Family Planning message from poster/flyer was 63.8%, meanwhile the contraceptive use among women who did not receive Family Planning message from poster/flyer was how did not receive Family Planning message from poster/flyer was bower (61.1%).

Women who ever received Family Planning message from media (TV, radio, newspaper/magazine, poster/flyer), the highest contraceptive use was generally at those aged 30 - 40 years, having 3 - 4 children, graduated from junior high school, living in rural areas, at middle upper wealth quintile index and among unemployed women. Otherwise, the low contraceptive use was among those who accessed Family Planning message from media that commonly occurred at the age group of 15 - 29 years and older age (older than 40 years), those who had no child yet and had five children or more, more living in urban area, at lower and upper wealth index and among employed women.

By multiple logistic regression analysis approach (Table 1), relation between Family Planning message through media to contraceptive use was vary. Results showed that odd ratio between women who received Family Planning message from radio compared to the women who did not receive did not significantly relate to contraceptive use (OR 0.9). Family Planning message through newspaper and magazine also less gave opportunity to contraceptive use, although showed significant, but odd ratio was less than 1. Meanwhile, Family Planning message through television, poster/flyer significantly related to contraceptive use (p < 0.05). Women who watched Family Planning message on television had 1.5 times more likely to be contraceptive users than women who did not watch. Likewise, women who read Family Planning message on poster/flyer were 1.3 times more likely to be contraceptive use than women who did not read.

# Access to Family Planning Information from Officers with Contraceptive Use

Family Planning message communication officers included Family Planning field officers, medical officers (doctors, midwives) as well as informal figures in community (teachers, public figures, religious leaders, national housewives association namely Support for the Prosperous Family). At national level, 25.1% of 15 - 49year-old women of childbearing age received explanation Family Planning from medical officers; 10.4% from Family Planning field officers and 8.3% from the informal figures in community. Women receiving Family Planning message from medical officers were mostly 20 – 29 years old, having 1 - 2 children, graduated from senior high school and higher education level, living in urban and rural areas, at middle upper quintile wealth index and unemployed women.

Women who accessed Family Planning information to Family Planning field officers were mostly 20 - 39 years old, having 1 - 2 children and 3 - 4 children, graduated from junior high school level, living in rural areas, almost evenly at five wealth index and employed women.

Table 1. Relation of Mass Media to Contraceptive Use

Media for Family Planning Message	В	Standard Error	Significance	Odd Ratio
Radio	-0.060	0.041	0.140	0.941
Television	0.450	0.021	0.000	1.568
Newspaper/magazine	-0.117	0.037	0.002	0.889
Poster/flyer	0.297	0.028	0.000	1.345

Remarks:

Reference group: women receiving Family Planning message from media Comparison group: women not receiving Family Planning message from media Table 2. Percentage Distribution of Married Women within The Last Six Months Receiving Family Planning Information Based on Contraceptive Use

	Contraceptive Users		Non Contraceptive Users		Total	
Family Planning Information	Ν	%	Ν	%	Ν	%
Visited by Family Planning field officers <sup>1)</sup> informing Family Planning	1.458	67.4	706	32.6	2.165	100.0
Receiving Family Planning information from medical officers	6.014	71.5	2.399	28.5	8.413	100.0
Receiving Family Planning information from other officers <sup>2</sup> )	1.898	68.2	884	31.8	2.782	100.0
Visiting health facilities <sup>3)</sup> for medical checkup	11.205	64.7	6.124	35.3	17.329	100.0
Health facility officers <sup>3</sup> ) discussing Family Planning	3.344	73.9	1.182	26.1	4.526	100.0
Receiving Family Planning information from special car for mobile information unit	248	61.0	159	39.0	407	100.0
Receiving Family Planning information from traditional art	63	58.2	45	41.8	108	100.0

Table 3. Relation of Family Planning Information from Officers, Special Car for Mobile Information Unit and Traditional Art to Contraception Use

Communicator of Family Planning Message	В	Standard Error	Significance	Odd Ratio
Family Planning officers <sup>1)</sup>	0.325	0.043	0.000	1.385
Medical officers <sup>1)</sup>	0.802	0.027	0.000	2.231
Other duties (public figures, religious leaders, duties of support for the prosperous family) <sup>1</sup>	0.175	0.046	0.000	1.191
Special car for mobile information unit <sup>2)</sup>	-0.184	0.108	0.089	0.382
Traditional art <sup>3</sup> )	-0.155	0.204	0.446	0.856

Remarks: comparison group:

1) not receiving Family Planning message from officers

2) not receiving Family Planning message from the car for mobile information unit

3) not receiving Family Planning message through traditional art

Percentage of women who accessed Family Planning message from informal figures was higher at women aged 30 - 40 years, having 1 - 2 children, graduated from higher education level, living in urban area, at the highest quintile of wealth index and at the circle of employed women.

# Family Planning Information through Special Car for Mobile Information Unit and Traditional Art

Family Planning message is not only informed by media and officers, but also by special car for mobile information unit as well as inserted through traditional art. Percentage of women receiving explanation of contraception through the car and traditional art media was relatively low (1.2% and 0.3%) (Table 2). Of relatively low percentage of those receiving Family Planning message from the car, 61.0% were contraceptive users and the remaining were not. Meanwhile, of women receiving Family Planning message from traditional art, 58.2% were contraceptive users and 41.8% were not.

According to results of odd ratio (Table 3), communication officers of Family Planning Information, Education and Communication that had a significant relation with contraceptive use were medical officers, then Family Planning officers and informal figures in community. Married women receiving Family Planning message from medical officers were 2.2 times more likely to be contraceptive users. Women receiving explanation from Family Planning field officers were 1.4 times more likely to be contraceptive users. The similar finding was that women who received Family Planning Information, Education and Communication from informal figures were 1.2 times more likely to be contraceptive users than women who did not receive. Meanwhile, Information, Education and Communication through the special car for mobile information unit and inserted message in traditional art showed no significant relation to contraceptive use.

# Contact to Family Planning Field Officers and Medical Officers

IDHS 2012 collected information about visits of Family Planning field officers to clients, clients' visits to healthcare facilities for medical checkup and about discussion on contraception at the time of the client's visit at the healthcare facilities. This information was meant to determine role of the officers in personally motivating women to use contraceptives nor developing contraceptive use.

Women respondents of childbearing age that were visited by Family Planning officers were relatively low (6.5%). Meanwhile, percentage of women visiting to healthcare facilities for medical checkup were relatively high that was 51.8% (17,329 women). Percentage of women at healthcare facilities who said that there were health officers informing contraception was 13.5%

#### Table 4. Percentage Distribution of Married Women, Receiving Family Planning Information from Officers Based on Contraceptive Use

Communicator of Family Planning Message	Contrace	Contraceptive Users		Non Contraceptive Users		tal
Communicator of Family Flamming Message	%	Ν	%	Ν	%	Ν
Visited by Family Planning officers informing Family Planning	67.4	1458	32.6	706	100.0	2165 (6.5%)
Clients visiting to healthcare facilities for mother and child medical checkup	64.7	11.205	35.3	6.124	100.0	17239 (51.8%)
Medical officers at healthcare facilities discussing Family Planning with clients	73.9	3344	26.1	4.526	100.0	4526 (13.5%)

Communicator of Family Planning Message	В	Standard Error	Significance	Odd Ratio
Visits of Family Planning officers informing Family Planning <sup>1)</sup>	0.416	0.048	0.000	1.515
Medical officers informing Family Planning <sup>2)</sup>	0.975	0.035	0.000	2.650

Remarks: comparison groups included

1) Not having visits of Family Planning officers explaining contraception,

2) Officers not informing Family Planning.

Table 6. Relation between Characteristics of Women, Family Planning Information, Education and Communication and Contraceptive Use

Variable	В	SE	Significance	OR
Age of women	0.376	0.031	0.000	1.456
Living children	0.175	0.029	0.000	1.191
Education of women	0.133	0.028	0.000	1.142
Domicile	-0.035	0.028	0.208	0.966
Quintile wealth index	0.036	0.030	0.223	1.037
Working status	0.082	0.026	0.002	1.086
Media of Family Planning Information, Education and Communication	0.043	0.027	0.117	1.043
Communicator of Family Planning Information, Education and Communication	0.482	0.029	0.000	1.620
Constant	0.297	0.031	0.000	1.346

(Table 4). Condition in which women visited to healthcare facilities, yet had no discussion on Family Planning is called 'missed opportunity' of the officers in conducting development of contraceptive users or motivating clients to be contraceptive users.

The highest contraceptive use (although the percentage was low) was among women who got Family Planning information by medical officers while medical checkup at healthcare facilities (73.9%), then followed by women visited by Family Planning officers informing Family Planning (67.4%) and the lowest contraceptive use was at those visiting healthcare facilities (64.7%) (Table 4).

### Women Having Visits of Contraception Officers, Visiting to Healthcare Facilities and Any Discussion on Family Planning at the Healthcare Facilities

At circle of women who had visits of Family Planning officers, visited to healthcare facilities as well as women at the healthcare facilities receiving Family Planning message from the officers, the contraceptive use generally occurred on the age group of 30 - 39 years, those who had 3 - 4 children, graduated from junior high school and higher, balanced between those living in rural and urban areas, at middle lower quintile wealth index, and more unemployed women.

Based on results of OR (Table 5), Family Planning officers' visit to women and informing Family Planning showed a significant influence, which was giving opportunity 1.5 times to be contraceptive users. Medical officers discussing Family Planning with women of childbearing age at the time of visit to healthcare facilities showed a higher influence, which was giving opportunity 2.65 times to be contraceptive users.

### Characteristics, Family Planning Information, Education and Communication and Contraceptive Use

Relation between independent variables (characteristics of women, Family Planning message from media, Family Planning message from duties) and dependent variable (contraceptive use) were presented in Table 6.

Women aged 15 - 29 years showed the highest ten-

dency that was 1.456 times to be contraceptive users as compared to older women. Women having 3 or more number of living children were also 1.191 times more likely to be contraceptive users than women who had less number of children (1 - 2 children). Women who were relatively high educated (graduated from junior high school and higher) were 1.142 times more likely to be contraceptive users than lower educated women (graduated from elementary school or lower). Of any media communicating Family Planning message, message from Family Planning officers showed the higher opportunity that was 1.620 times to be contraceptive users.

### Discussion

## Media of Family Planning Information, Education and Communication and Contraceptive Use

Spread of Information, Education and Communication through mass media was the important strategy to promote Family Planning, improve knowledge of Family Planning, attitude to Family Planning and change behavior to be contraceptive users.<sup>7-9</sup>

Analysis findings showed that of any media of Family Planning Information, Education and Communication, televisiom and poster/flyer contributed significant influence to contraceptive use. Women receiving Family Planning message through television were 1.6 times to be contraceptive users. Supporting finding of another study was that message through ad on television had a significant influence to contraceptive behavior.<sup>10</sup> The similar results were also obtained in Ghana and Post-Soviet Central Asia, exposure to Family Planning information through mass media had a strong influence to efforts to both use and receive contraception.<sup>11,12</sup> The strong influence of television could be explained by that exposure of information through this media had more advantages. such as pictures or visualization, beauty and attraction aspects, reach to wider target and being broadcasted repeatedly.<sup>5,6</sup> The similar finding on advantage of television also could be explained by results of study on Identification of Execution of Information, Education and Communication on Population, Contraception and Family Development in Central Java and Southeast Sulawesi in 2014.13 Study conducted in India in 2004 concerning on the use of television and radio resulted a little bit different depiction. The use of television and radio to spread Family Planning message in India was still low 14

Poster/flyer media communicating Family Planning Information, Education and Communication also showed significant relation to contraceptive use. Several concerns strengthening the role of poster/flyer were the increasing use of poster/flyer to 27.6% in 2012 from 12.7% in 2002/2003.<sup>1,3</sup> By the increase of poster/flyer use, it showed that reach of spreading of Family Planning

information through this media became wider.

This analysis found that radio as source of information about Family Planning media was less strong in influencing contraceptive use among people. There were only 9.5% of women who admitted that they listened to Family Planning message from radio. Limited access to Family Planning information through radio also was found in results of study in urban area of Bangladesh and Post-Soviet Central Asia in 2015.<sup>12,15</sup> Family Planning message through radio was relatively low accessed by women because less competitive with any kind of broadcasting in form of entertainment.<sup>5,6</sup>

Effectivity of the use of media for Information, Education and Communication was determined by many senses involved in message acceptance. The more senses were used, the more understandable communication of message was. To illustrate between radio and television, message through television needed more senses of communicators involved than message through radio.<sup>5,6</sup> The low access of Family Planning information was contrary to finding of study conducted in rural areas of Nigeria, Southwest Nigeria, Dandi Garo Bangladesh showing the high accessibility of information about contraception than television.<sup>16-18</sup> Results of analysis by using data of Indonesia Demographic and Health Survey 2007 provided recommendation that beside using national television stations, spread of Family Planning information a also optimalized local television stations.<sup>19</sup>

Family Planning message through radio was more accessed by younger, high educated women, middle upper wealth index, living in urban area and more among employed women, although generally target access to Family Planning information through radio was low. Based on characteristics of the listeners of Family Planning information through radio, the program was expected to be able to make package of Family Planning Information, Education and Communication appropriate with desires of target, increase of airing frequency and number of airing stations.

Family Planning message through newspaper/magazine was also less influential for women to be contraceptive participants. Based on the present data, women who accessed information about contraception from newspaper was relatively low. Newspaper/magazine was consumption of particular segment among people, which was among those old (30 - 39 years old), high educated, high quintile wealth index, more living in urban area and among employed women. That caused newspaper media as source of Family Planning information was less able to reach all levels of society. Different with in Indonesia, results of study in Pakistan very recommended the use of printed media in spreading Family Planning information.<sup>20</sup>

Any acceptance of Family Planning Information,

Education and Communication through media and the limited effect of media on contraceptive behavior were in line with advocacy activity and completed Family Planning Information, Education and Communication. Advocacy activity and Family Planning Information, Education and Communication along this time highlighted 'above the line media' (television, radio, newspaper/magazine). That was based on strategy of area level distribution in the use of prior Information, Education and Communication media, which was that the central government focused on improvement of cognition scope (knowledge). Meanwhile, province conducted Information, Education and Communication on 'through the line media' (billboard, banner) focusing on affection scope. Then district/city conducted Information, Education and Communication on 'below the line media' focusing on behavioral change. Such strategy was designed in condition on which National Family Planning Coordinating Board was still centralistic, with the assumption that all area levels had capacity of adequate support for operational management. However after regional autonomy, such strategy was less effective, especially at district/city level because support for operational management was decreasing drastically, so there happened the decrease of intensity of Family Planning program performance including Information, Education and Communication on Family Planning. Although there occurred the increase of budget support for the execution of Population and Family Planning program (including for Family Planning Information, Education and Communication), yet it occurred in the central, meanwhile budget support in district/city was still limited.<sup>5,6</sup>

# Officers of Family Planning Information, Education and Communication and Contraceptive Use

Family Planning officers as communicator of Family Planning information took the important role in influencing clients on contraceptive use. According to results of study, married women who received explanation from Family Planning officers were 1.4 times more likely to be contraceptive users than those who did not receive. This was acceptable considering that Family Planning officers were the keys that directly met target/people. The main duties of Family Planning officers were motivating and developing contraceptive users as well as maintaining communication relation with families around their area of development.<sup>21</sup> Family Planning field officers in performing Information, Education and Communication commonly used display in forms of posters, brochures.<sup>22</sup> The important role of the officers in term of communication aspect with people was less aligned with the decreasing number. Availability of Family Planning field officers nowadays was significantly decreasing compared to condition of number of the officers prior to regional autonomy. Before the regional autonomy, composition of Family Planning field officers compared to village was 1 : 1 (1 officer 1 village). Meanwhile, the condition today was that Family Planning officer had 2 - 6 development areas in average.

Medical workers as communicator of Family Planning information also had a very important role in affecting on the contraceptive use. Married women who received Family Planning information from medical officers within the last six months before the survey were 2.2 times more likely to be contraceptive users. Medical officers were the personnel officers who directly met, provided Family Planning counseling to prospective contraceptive user clients.<sup>19</sup> Medical officers in delivering counseling were expected to be able to transfer knowledge to clients, especially any related to contraceptive tools/ways from medical aspect, such as work mechanism of contraceptive tools/ways, side effects of contraceptive tools/ways. Ability and success of medical workers in delivering counseling made clients understand, firm and fit to the contraceptive tools/ways they chose, then clients were ready to use contraceptives. The more creative and sympathic way of communication between medical officers and clients would increase the degree of acceptance and continuity of contraceptive use.<sup>23</sup> For the success of Information, Education and Communication activity, results of study in India in 2004 recommended that execution of Information, Education and Communication activity should make a coordination with other relevant institutions which had budget support and the similar activity.14

Role of informal figures in community was also important and significantly related to contraceptive use. In relation to the decreasing condition of Family Planning field officers nowadays, which had development areas more than one village (2 - 6 villages), so in this situation it needed assistance of potential personnels to assist Information, Education and Communication, such as informal figures in community. Determination of traditional leaders/informal figures as communicator in communicating Family Planning message was based on considerations that they were the role models, well-known by people and surround the people. Furthermore, the role of tradional leaders/informal figures in socialization of Family Planningprogram became very important, especially in influencing, inviting, figuring and leading the participation of people around their environment in aim to support the success of program.<sup>24</sup>

Family Planning messages communicated through special car for mobile information unit or inserted through traditional art among people was very low accepted by respondents, each showed only 1.2% and 0.3%. The very low target access to Information, Education and Communication broadcasting media made

Family Planning messages to the target become insignificant in influencing on contraceptive use. Finding in another study on Information, Education and Communication showed that respondents said they ever saw the special car for mobile information unit, but they never saw/followed counseling informed through the car.<sup>13</sup> This condition was suggestion for the program to evaluate the whole about the use of car as media for spreading Family Planning information in the field.

Another important stuff was results of study showing that visits of Family Planning officers to women of childbearing age through face-to-face Information, Education and Communication contributed 1.5 times opportunity for the women to be contraceptive users. Role of medical officers communicating Family Planning Information. Education and Communication to targeted clients at healthcare facilities even showed higher influence that was 2.65 times to be contraceptive users than clients who did not receive. Condition in which there was no discussion on Family Planning at the time when clients came to healthcare facilities was called 'missed opportunity' for the officers to conduct development to contraceptive user clients or to motivate clients to use contraceptives.<sup>25</sup> In order to optimalize role of medical officers to inform about contraception to target (minimalizing 'missed opportunity'), it took a firm and harmonious cooperation and coordination between National Family Planning and Population Board and the local Health Agency. This recommendation was in line with study in India in 2004 that success of Information, Education and Communication activities needed coordination between institutions involved.14

Based on characteristics of target, activity of Family Planning Information, Education and Communication was prioritized and intensified among older women (40 years and older), having 1 - 2 children and among segment of lower educated women (graduated from elementary school or lower) both in urban and rural areas. In line with that, group of women with opposite characteristics still received Family Planning Information, Education and Communication, yet intensity (frequency) of the communication was relatively lower.

### Conclusion

Characteristics that have significant relation with contraceptive use are age, number of living children and women's education level. Of any types of media of Family Planning Information, Education and Communication, television and poster/flyer are source of Family Planning information that have significant relation with contraceptive use. Between communication officers of Family Planning Information, Education and Communication, Family Planning officers, medical officers and informal figures in community have significant role in communicating Family Planning Information, Education and Communication which finally make targets use contraceptives. Likewise, visits of Family Planning officers personally to clients show a significant relation to contraceptive use. Moreover, the role of medical officers informing Family Planning to clients at healthcare facilities shows the very high opportunity for clients to use contraceptives.

### Recommendation

Segmentation of target for Family Planning Information, Education and Communication activities shoud be prioritized among women aged 40 years and older, having 1 - 2 children and lower educated. It needs the strengthened materials for Family Planning Information, Education and Communication and increase of the Family Planning Information, Education and Communication activites through any media (especially television, poster/flyer) to women as the targeted segment, especially those who have not used contraceptives yet. Referring to experience on activity of Family Planning Information. Education and Communication in India about the importance of coordination with other relevant institutions, harmonious coordination and cooperation between National Family Planning and Population Board and the Health Agency should keep maintained, especially in term of availability of medical workers providing Family Planning Information, Education and Communication to clients at healthcare facilities. This is in aim to minimalize the 'missed opportunity' condition in provision of Family Planning Information, Education and Communication by medical officers at healthcare facilities. The importance of role of Family Planning field officers in term of communication of Family Planning Information, Education and Communication to the target, so it is necessary to strengthen quality and quantity of Family Planning field officers, and keep them at their position as Family Planning field officers/contraception officers, as well as not moved to other institutions. Cooperation with informal figures who are influential in community (public figures, religious leaders, women group in the community/Support for the Prosperous Family (PKK)) should be kept maintained in order to assist the main duties and functions of Family Planning field officers in term of Family Planning Information, Education and Communication.

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