

# Relationship between Media Access and Social Support with Contraception Plans in East Java, Indonesia

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## Abstract

**Objectives:** The percentage of contraceptive prevalence rate (CPR) and total fertility rate (TFR) of woman were indicators of the 2015-2019 National Medium Term Development Plan (RPJMN). Total fertility rates in East Java had decreased significantly from 1971 to 2018. The achievement of the prevalence of modern contraceptive use (CPR) in East Java was 63.1 percent based on the results of the Program Performance and Accountability Survey (PPAS, 2018). This achievement was far better than the national achievement which only reached 57 percent. However, this target cannot be achieved by all districts and cities in East Java. According to Green's theory, the factors of predisposing, enabling and reinforcing are factors that can be related to behavior. The purpose of this study was to analyze the relationship between enabling factors (media access) and reinforcing factors (social support) related to contraceptive plans in women of childbearing age in East Java, Indonesia.

**Study Design:** This research was a non-reactive study using data from the IDHS (Indonesia Demographic and Health Survey) 2017. The unit of analysis in this study was all teenage respondents in East Java who met the requirements of the 2017 IDHS respondents.

**Results:** The results showed that the enabling factor associated with contraception selection plans was listening to information about contraception through radio (sig = 0.038), television (sig < 0.001) and newspapers (sig < 0.001). While the reinforcing factor associated with contraceptive selection plans was supports from health facilities (sig = 0.000) and from farmacy (sig = 0.023). The role of health workers was very minimal in providing information access to woman in the process of selecting contraception. It can be seen that almost all of the woman said that they did not get information either from field officers (41.91%), from health facilities (39.45%), from village clinics (42.52%), and from pharmacists (38.00%).

**Implication to the fields:** Based on the results of this study, there is a need for equal distribution of education in the selection of contraceptive methods to woman through optimizing the role of various health facilities, one of them through contraception officers, optimizing the use of mass media, especially television, radio and newspapers and magazines in disseminating information related to family planning.

**Keywords :** media access, social support, contraception plan, good health, well being

## Introduction

Indonesia is the fourth country with the most population in the world. Indonesia's population from year to year continues to increase. Indonesia's population in 2015 was 258.2 million, in 2016 as many as 261.1 million, and in 2017 as many as 264 million<sup>(1)</sup>. Government efforts in suppressing the high rate of growth in Indonesia by designing a Family Planning program that serves to balance between needs and population<sup>(2)</sup>.

Indonesia is one of the developing countries in the world with various types of problems faced, one of which is in the field of population, namely: population is still growing. Government in an effort to improve the welfare of the nation has been and is carrying out development in all to solve the population problem. One of the necessary efforts What the government does to solve the population problem is a program family planning. The family planning program is an effort to increase care and community participation through maturing the age of marriage, birth control, family development, welfare improvement small family, happy and prosperous<sup>(3)</sup>.

Family Planning was the four pillars with antenatal care, safe delivery, and postnatal care introduced by Safe Motherhood in 1987 to reduce maternal mortality in developing countries<sup>(4)</sup>. The government had carried out various promotions with the aim of encouraging people to realize the family planning program. The government was trying to influence the community through family planning program advertisements in various media. The increasing availability of media in the form of radio, television and print media in developing countries can be effectively used to influence people's behavior<sup>(5)</sup>.

The family planning program promoted by the government had become very important as control of the population explosion. Data from the National Population and Family Planning Agency in 2013 received 8,500,247 fertile age couples who were new family planning participants, with details of injectable

contraceptive users 4,128,115 participants (48.56%), pills 2,261,480 participants (26.60%), implants 784,215 participants (9.23%), condoms 517,638 participants (6.09%), uterine contraception 658,632 participants (7.75%), MOW (female surgery method) 128,799 participants (1.52%), MOP (male surgery method) 21,374 participants (0.25%), the above data shows injection contraception method was the most used method<sup>(6)</sup>.

In accordance with Green (1980) theory in Notoatmodjo (2003) that health behaviour including the selection of contraceptives was influenced by three factors namely predisposing factors (Knowledge, attitudes, Education, family economy), supporting factors (availability of medical devices, sources of information) and driving factors (family and community leaders support). The study analyzed anabling (media access) and reinforcing factors (social support) related to contraceptive plans in women of childbearing age<sup>(7)</sup>.

Some factors that influence the use of contraception include knowledge, information by family planning officers and husband's support. Knowledge was a significant relationship with the use of contraception, the better one's knowledge about contraception the more rational in using contraception. In addition, the high level of education of a person also support accelerating the reception of family planning information in couples of childbearing age. Good information from the officer helps the client in choosing and determining the type of contraception used. Good information will provide client satisfaction which has an impact on longer use of contraception so that it helps the success of family planning. In addition, husband's support also influences the use of contraception. Clients who are given support by their husbands will use contraception continuously while those who do not get husband support will use contraception less<sup>(8)</sup>.

Mass media was the main strategy to increase demand for health services. This was a process that

helps communities to identify their own needs and to respond to and address needs<sup>(9)</sup>. The previous research showed that there was a significant p-value = 0.012 (< 0.05) relationship between the source of information and the use of contraception<sup>(10)</sup>. Previous research also showed factors related to the use of the Contraceptive Method from environmental factors, including the role of partners, the role of family and friends, the role of officers, the role of community leaders and the role of the mass media<sup>(11)</sup>.

Apart from the mass media, the factors of staff, both Family planning field workers, health workers, village clinic officers, and pharmacists also greatly influenced the use of contraception. The knowledge gained by the community can be used as a material consideration in determining the contraception to be used<sup>(12)</sup>. The purpose of this study was to analyze the relationship between enabling factors (media access) and reinforcing factors (social support) related to contraceptive plans in women of childbearing age in East Java, Indonesia.

### Methods

This research was a non-reactive study using data from the Indonesia Demographic and Health Survey (IDHS) 2017. The unit of analysis in this study was all teenage respondents in East Java who met the requirements of the 2017 IDHS respondents. Three types of questionnaires used were the Household, Women's, and Men's Questionnaire. The IDHS sample includes 1,970 census blocks covering urban and rural areas. Respondents of women of childbearing age aged 15-49 were 59,100, 24,625 respondents were unmarried young men aged 15-24 years, and 14,193 married men aged 15-54 years. The IDHS sample frame uses the Master Census Block Sample from the 2017 Population Census data in this study.

### Result and Discussion

Based on this research, most respondents have plans to use injection contraception. Respondents with

plans to use injection contraception get information from radio and newspapers / magazines (Table 1). The media in the form of radio, television and newspapers / magazines are related to contraceptive use plans<sup>(13)</sup>. The findings show that mass media impacts positively on family planning practice and using radio proved to be most effective means of informing people about family planning with 64.7%. Majority (62.7%) of the women were not practicing family planning, 63.08% had primary level of education, 82.78% were rural women, majority were married(81.09%), the biggest percentage of 49.97% of the women were self-employed and nearly 100% half mark of the respondents were poor (46.22%), As regards using contraceptives, most respondents were using Injections (16.75%), followed by implants (6.61%). Analysis shows that mass media in addition to other five socio-economic variables were significant thus can be used to explain variations in the family planning practices. These are income status, marital status, education level, religion and age. The multivariate regression results indicate that place of residence and occupation (women who never responded) are not statistically significant in the model. We recommend continued use of mass media since it proved an important factor in practice of family planning and that facilities providing family planning services are made more user friendly to accommodate all age groups<sup>(14)</sup>.

Radio was a good mass media strategy in providing program information and using contraceptive methods<sup>(15)</sup>. Radio reached a wide and diverse audience. Radio station specialization based on the age, taste and even gender of the listener allows more selectivity in reaching the audience segment. In addition, because placement and production costs are less for radio than television, radio can deliver public health messages in more detail. Thus, radio is always considered to be more comfortable and efficient<sup>(16)</sup>.

**Table 1. Percentage of contraceptive use plans for women of 15-49 years of age based on enabling factors**

		IUD	Women's Sterilization	Men's Sterilization	Periodic absence	Implant	LAM	Injection	Total	P-value
<b>Knowing Contraception from the Radio</b>										
Yes	N	619	1.719	644	492	318	7	1.885	6.683	0.038
	%	90.36	90.34	85.96	89.45	89.44	100	91.81	90.42	
No	N	66	184	105	58	38	0	257	708	
	%	9.64	9.66	14.04	10.55	10.56	0	8.19	9.58	
Total	N	685	1.903	749	550	356	7	3.143	7391	
	%	100	100	100	100	100	100	100	100	
<b>Knowing Contraception from TV</b>										
Yes	N	234	782	289	252	145	1	1.450	3.152	0.001
	%	34.17	41.08	38.62	45.78	40.71	10.16	46.13	42.64	
No	N	451	1.121	460	298	211	6	1.693	4.239	
	%	65.83	58.92	61.38	54.22	59.29	89.84	53.87	57.36	
Total	N	685	1.903	749	550	356	7	3.143	7391	
	%	100	100	100	100	100	100	100	100	
<b>Knowing Contraception from the Newspaper/magazine</b>										
Yes	N	565	1724	640	495	291	4	2.895	6.614	0.001
	%	82.46	90.62	85.44	89.98	81.91	60.16	92.12	89.48	
No	N	120	179	109	55	65	3	248	777	
	%	17.54	9.38	14.56	10.04	18.09	39.84	7.88	10.52	
Total	N	685	1.903	749	550	356	7	3.143	7391	
	%	100	100	100	100	100	100	100	100	
Note: Total N is the total number of samples of women of childbearing age 15-49 years who were weighted										

Respondents who did not get information from television could be caused by restrictions on the display of public service announcements about family planning specifically on contraception. Public service announcements about family planning were only aired on certain television stations that are not in great demand by a wide audience. One of family planning idea dissemination in massive and wide coverage is television ads. Ads could influence the change of people’s knowledge, attitude, belief dan behavior who watches the ads. This article discusses effects of television ads toward (1) cognitive, (2) affective, (3) behavior level. This study shows that exposure of television ads has affected knowledge level. Meanwhile, exposure of television ads does not have any effect on attitude and behavioral level. Respondents have positive attitude toward family planning program and strong willingness to adopt the program in the future. There is also indication that family planning program acceptance is not affected by only television ads, but it could be influenced by

other aspects such as economy, family, environment and etc. Therefore, family planning television ads role as stimulator that could persuade people to adopt the program<sup>(17)</sup>. Television was a strong media to attract a wide audience and can reach people regardless of age, gender, education level, apparently not all families are able to buy and operate it because they need electricity. The findings from El-Bakly and Hess, state that in Egypt television contributes to an increase in contraceptive use. Television as the first source in obtaining family planning information<sup>(18)</sup>.

The previous research showed that there were no significant differences in magazines or newspapers, for the use of family planning. Reading the newspaper can positively influence adherence to family planning programs. Method selection is an effort made by a woman to find a method of choice that fits her situation, this is because the choice of choice is determined by the variety of existing methods<sup>(19)</sup>.

**Table 2. Percentage of contraceptive use plans for infertile women aged 15-49 years based on reinforcing factors**

		IUD	Women’s Sterilization	Men’s Sterilization	Periodic absence	Implant	LAM	Injection	Total	P-Value
<b>Field Officers Visited in the Last 12 Months</b>										
Yes	N	7	29	5	15	7	0	45	108	0.482
	%	0.93	1.52	0.73	2.73	2	0	1.43	1.46	
No	N	678	1,874	743	535	349	7	3,098	7,283	
	%	99.07	98.48	99.27	97.27	98.00	100	98.57	98.54	
Total	N	685	1,903	749	550	355	7	3,143	7,391	
	%	100	100	100	100	100	100	100	100	
<b>Obtaining information from Health Facilities</b>										
Yes	N	66	77	36	46	41	0	227	492	0.001
	%	9.57	4.03	4.84	8.31	11.41	0	7.23	6.65	
No	N	619	1,826	712	504	315	7	2,916	6,899	
	%	90.43	95.97	95.16	91.69	88.59	100	92.77	93.35	
Total	N	685	1,902	747	550	356	7	3,143	7,391	
	%	100	100	100	100	100	100	100	100	
<b>Obtaining information from the Village Clinic</b>										

**Cont... Table 2. Percentage of contraceptive use plans for infertile women aged 15-49 years based on reinforcing factors**

		IUD	Women's Sterilization	Men's Sterilization	Periodic absence	Implant	LAM	Injection	Total	P-Value
Yes	N	4	5	0	0	0	0	0	9	0.116
	%	0.59	0.29	0	0	0	0	0	0.13	
No	N	681	1,897	745	550	356	7	3,143	,381	
	%	99.41	99.71	100	100	100	100	100	99.87	
Total	N	685	1,903	749	550	356	7	3,143	7,391	
	%	100	100	100	100	100	100	100	100	
<b>Obtaining Information from the Pharmacist</b>										
Yes	N	48	159	55	41	26	0	334	663	0.023
	%	7.04	8.33	7.41	7.41	7.32	0	10.64	8.98	
No	N	637	1,744	693	509	330	7	2,808	6,727	
	%	92.96	91.67	92.59	92.59	92.68	100	89.36	91.02	
Total	N	685	1,905	749	550	356	7	3,143	7,391	
	%	100	100	100	100	100	100	100	100	
Note: Total N is the total number of samples of women of childbearing age 15-49 years who were weighted										

Based on table 2 it can be seen that most respondents had plans to use injection contraception. However, some of the respondents did not get family planning information from Family Planning Field Officers, from health facilities, from village clinics or pharmacists. In other research, showed that there was a correlation with education (p value = 0.001), knowledge (p value = 0.036) and the role of health workers with (p value = 0.034) with the use of IUDs. Advice for health workers by increasing counseling about contraception on an ongoing basis, either individually or in groups, on various types of contraceptives to increase knowledge<sup>(20)</sup>. Another research, showed that role of health workers in providing family planning counseling with the use of contraceptives  $p=0.009$  ( $\alpha<0.05$ ) means that there was a relationship between the role of health workers in providing family planning counseling with the use of contraception in women at Primary health care of Rafae. There was also found  $r = 0.348$ , which means the level of correlation between the variables role of health workers in providing counseling of family planning with the use of contraception in women have

low cohesion<sup>(21)</sup>.

## Conclusion

The use of mass media and social support related to the choice of contraceptive plans. Therefore, it is necessary to optimize the role of health workers and media access in the successful implementation of contraception programs.

**Conflict of Interest** : The authors declare that there is no conflict of interests.

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**Ethical Clearance**: Procedures and questionnaires for standard DHS surveys have been reviewed and approved by ICF Institutional Review Board (IRB). Additionally, country-specific DHS survey protocols are reviewed by the ICF IRB and typically by an IRB in the host country. ICF IRB ensures that the survey complies with the U.S. Department of Health and Human Services regulations for the protection of human subjects (45 CFR 46), while the host

country IRB ensures that the survey complies with laws and norms of the nation. DHS Program has collected, analyzed, and disseminated accurate and representative data on population, health, HIV, and nutrition through more than 400 surveys in over 90 countries

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