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Relation of Number of Living Children and Long-Acting and Permanent Contraceptive Methods in West Nusa Tenggara Province (ICMM 2015)

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Abstract

Long Acting and Permanent Contraceptive Methods (*LAPMs*) is a highly effective contraceptive method for fertility control. The use of LAPMs in NTB is still low compared to non- LAPMs use. This study aimed to determine the correlation between the number of live children and the use of LAPMs after controlled by age, education, occupation, decision making and information exposure from health workers in NTB. This cross-sectional study was conducted to all married woman aged 15-49 years, with the samples of the woman of childbearing age who use contraception, using data of Monitoring and Evaluation on Contraceptive Use in East Java and NTB Province 2015 conducted by Center for Health Research Universitas Indonesia. Data were collected through interview guidelines, and multivariate analysis was performed by binomial log regression test. The results showed that the proportion of > 2 live children was 24.9%, and the proportion of the number of live children ≤ two children was 15.2% and had a significant relationship to the use of LAPMs (p = 0.005 OR = 1.63 CI 95% = 1.118 - 1.80). Recommendations for the woman of childbearing age in NTB who have children > 2 were counseled on the use of LAPMs, and for the woman of childbearing age who had live children, ≤ two children were given health promotion related to the LAPMs preference to set the number of children.

Keywords: Contraception, Log Term Contraceptive Method, Number of live Children

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1. Introduction

Indonesia Demographic Health Survey (IDHS) 2012, Total Fertility Rate (TFR) in Indonesia is 2.6. This means that women in Indonesia had 2-3 children during their reproductive years. These results indicate that there are still many provinces that have high fertility above the national figure. One effort to reduce TFR is the increase in contraceptive users [1].

In West Nusa Tenggara, the Population Growth Rate is around 1.17% per year, Total Fertility Rate (TFR) 2.8, Contraception Prevalence Rate (CPR) 56% where IUD (3.8%), MOW (1, 4%), MOP (0.1%) and Implant (5.4%). From this outlet, West Nusa Tenggara Province is below the national average. That is why NTB has low achievement from the national average. This is the reason why NTB became a family planning program, in particular, the use of long term contraception [2].

LAPMs is a long-term contraceptive, more than two years, effective in nesting or terminating a pregnancy in couples who do not wish to add a child. The types of methods included in this group are steroid method (male and female), implant, and Intra Uterine Device (IUD). IUD and Implant can restore fertility after not using with a period of 3 to 12 years while sterilization is a permanent method [3].

Factors woman's behavior in choosing LAPMs is demographic characteristic, reproduction history, knowledge, and discussion with health care, decision-making, belief or local customs relating to family planning [4, 5]. In encouraging the woman to determine the choice of contraceptive methods, government policies play an important role due to government policies to enact legislation within the constraints of mass media to promote advertising of contraceptive methods and provide information on the place and time of service, develop and provide procedures to health care and provide quality educational facilities so that communities can Understand health information [6].

A study in district Northwestern, Ethiopia where the number of children affecting woman ages 15-49 to choose long term contraceptive method as a contraceptive needs, where if the client has a number of children living more than five or more chances of using long term contraceptive greater than woman who have children 0 to 4 [7, 8]. While woman aged 15-49 years in the Southwest has children lives a little, and much does not affect the needs of long term contraceptive election [4].

LAMPs in NTB on the use of IUD (12.23%), MOW (2.12%), MOP (0.57%) and Implants (15.66%) [9], although it is known that Long term contraceptive method is very effective for controlling Fertility, but the rate of use is quite low when compared with the use of other modern methods such as injections, pills, and condoms. From this study wanted to see the number of children living on the use of Long term contraceptive method by doing further analysis related to Monitoring and Evaluation of Contraceptive Use in West Nusa Tenggara Province 2015.

2. Methods

This research uses secondary data with a structured questionnaire consisting of several topics: household members, reproduction characteristics, family planning knowledge, history of contraceptive, family decision making, the perception of innovation from Improving Contraceptive Mix Method (ICMM) in East Java and NTB at 2015 with non-experimental study and cross-sectional design. Quantitative approach with binomial log regression analysis. The research was conducted in six districts, West Lombok, East Lombok, Central Lombok, North Lombok, Bima, and Sumbawa.

Variables of this study consist of the main independent number of children with Dependent use of LAMPs which has confounding variables of age, education, occupation, decision making, and exposure information. The population of this study wreas all married woman aged 15-49 years who were in the region of six selected districts. The sample of the woman married to the age of 15-49 years who have a history of using tools/ways to delay/prevent pregnancy at the time of the interview. The sample used a hypothesis test of different proportions which obtained 631 respondents and criteria as the inclusion of 12,943 so that the data available to meet the minimum sample requirement.

3. Results

Demographic characteristics of woman respondents in NTB where the age of 20-35 years 64448 (49.8%), in most of primary school 3028 (23.4%), and occupation of respondents dominated by housewive 7573 (58.5%) (table 1). In determining the method of tools used by respondents 6149 (47.5%) chose to discuss with husband (Table 2). The information relating to contraception to be used very important regarding the purpose of the respondents using KB, for NTB the respondent's information is not getting information related to KB 11652 (90%) (table 3). The use of LAMPs in NTB is only 2327 (18%) where the 3-year implant device is selected 1109 (8.6%) (table 4) and in woman dominance with the number of children $\leq$ two children

9217 (71.2%) than > 2 children Life (table 5). The relation between the number of children and the use of LAMPs with positive results (p-value <0.05) (table 6) was then performed logistic regression analysis on age, education, occupation, decision and exposure variables showed that there were no interaction variables and became variable Confounding on the relationship of the number of live children and the use of LAMPs (table 7).

4. Discussion

This study shows that the use of long term contraceptive in West Nusa Tenggara Province is only 2,327 (18%) where this incidence is almost comparable to the research done in Debre-table long term contraceptive request (17%) [8] while lower in Mekele City with long term contraceptive use (12.3%) [10]. But it is higher than research in Adigrat City where the use of long term contraceptive is (48.4%) [11]. This may occur due to the different sample size and rural and urban environmental factors in Euthopia in access to information.

Implants are the most dominant methods selected by woman in NTB, and the result of research is supported in woman in the United States and Euthopia which prefer to use Long Term Contraception (Implant and IUD) because the failure rate of this product is very low, it is easier to use because it is not necessary Time-intensity each month to conduct inspection visits, the perceived contraindications are so limited and cost-effective that doctors strongly recommend that fertile women who want to use contraception [10-12]. The use of Long Term Contraception in West Nusa Tenggara only (18%) is

Table 1: Woman Distribution According Age, Education, Job at East Nusa Tenggara Province.

Variable	Total	Percentage
Age		
≥ 35	5.0990	46.3
20 - 35	64.448	49.8
< 20	505	3.9
Education		
Not educated	972	7.5
Not Finished Elementary	1.176	9.1
Elementary	4.205	32.5
Junior High School	3.028	23.4
Senior High School	2.689	20.8
Academi (D1/D2/D3)	255	2.0
University (S1/S2/S3)	618	4.8
Job		
Government Employee	238	1.8
Professional	74	0.6
Employee	151	1.2
Farmer, Fisherman	1.303	10.0
Entrepreneur	293	2.3
Trader	1.065	8.2
Blue Colar	1.773	13.7
Honorer	386	3.0
Wifehouse	7.573	58.5
Unemployment	45	0.3

Table 2: Woman Distribution According to Decision Making at East Nusa Tenggara Province.

Variable	Total	Percentage
Decision Maker		
Her Self	5.866	45.3
Her Self and Husband	6.149	47.5
Her Self and others	99	0.8
Husband and others	829	6.4

Table 3: Woman Distribution According Information Exposure from Health Care at East Nusa Tenggara Province.

Variable	Total	Percentage
Information Family Planning Exposure forms Health Care.		
Yes	1.291	10.0
No	11.625	90.0

not withby the Family Planning Program target set in the RPJMN 2015-2019, ie, the use of Long Term Contraception of 23.5%. (BKKBN, 2016). The use of Long Term Contraception

Table 4: Woman Distribution Methods at East Nusa Tenggara Province.

Variable	Total	Percentage
Long Term Contraceptive		
Tubektomi	175	1.4
Implant 5	247	1.9
Implant 3	1.109	8.6
Implant 2	77	0.6
IUD	719	5.6
Short Term Contraceptive		
Inject 3 Month	8.539	66.0
Inject 1 Month	284	2.2
Pil	1.711	13.2
Emergency Contraceptive	1	0
Natural (Breastfeeding, calendar, fasting)	52	0.4
Others	29	0.2

Table 5: Woman Distribution According to Total Child at East Nusa Tenggara Province.

Variable	Total	Percentage	Mean -Median	SD	Min - Mac
Total Child					
> 2	3,726	28.8	2.06	1.118	0 - 13
≤ 2	9,217	71.2	2.00		

Table 6: Relation of Number living Child and Ling Term Contraceptive Use at East Nusa Tenggara Province.

Total Living Child	Long Term Contraceptive Use						p-value	PR (95% CI)
	LAPMs		Non-LAPMs		Total			
	n	%	n	%	n	%		
> 2	927	24.9	2,799	75.1	3,726	100.0	0.005	1.63
≤ 2	1,400	15.5	7,817	84.8	9,217	100.0		(1.684 – 2.031)
Total	2,327	18.0	10,616	82.0	12,943		100.0	

Table 7: Model Logistic Regression.

Variable	p-value	PR	95% CI
Living Child	0.005	1.121	1.089 – 1.153
Age	0.005	1.054	1.030 – 1.078
Decision	0.005	1.033	1.014 – 1.052
Info	0.314	1.023	0.977 – 1.072

in NTB has not been fully accepted for family planning services for several reasons such as uncomfortable because the IUD insertion should open the inside vagina of femininity (cervix), pain complaints about implant use and considered to be contradictory by religion because it is permanent (MOW) [13].

In this study, there is a significant relationship between the number of children living with the use of Long Term Contraception. Respondents who have children > 2 have 1.6 times greater chance of using Long Term Contraception than respondents who have ≤ two children to use Long Term Contraception. The results of this study were supported by research conducted in Bahir Dar City and Amhara District indicated that women of infertile age who had children> 2 were more likely to use long-term contraception [14, 15], while in the study in Goba City showed no effect Number of children to use Long Term Contraception [4]. This is due to differences in location from data collection in urban and rural areas and the influence of communities in the environment.

5. Conclusions and Recommendations

The number of children and the use of long term contraceptive controlled with age, education, occupation, decision making and exposure of information from health care have no interaction and not as confounding variables.

The woman in NTB who have children > 2 were counseled on the use of LTCM, and for the woman of childbearing age who had live children, ≤ two children were given health promotion related to the LTCM preference to set the number of children.

Ethical Clearance

This study does not require ethical clearance due to the use of secondary data.

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