



## Analysis of Factors Affecting *Unmet Need Kb* Program on PFA (Partner of Fertilized Age) In Siantar District, Simalungun Regency

Megawati Sinambela

Institut Kesehatan Deli Husada Delitua Medan

### Abstract

**Background:** *Unmet need* for family planning are couples of childbearing age who do not use contraception, but want to space out the next birth or do not want more children, or are pregnant with an unwanted pregnancy or a desired pregnancy later. *Unmet need* is one of the main indicators for monitoring family planning programs.

**Objective:** This study aims to analyze the factors that influence the occurrence of *unmet need* for family planning in couples of childbearing age (PUS) in Siantar District, Simalungun Regency in 2020.

**Methods:** The independent variables in this study are age, education, income, number of children, knowledge, device failure, previous contraception, husband's support and distance of family planning services. The dependent variable is unmet need KB Program. The type of research used is quantitative research with a cross sectional approach. The sample of this study was taken using a non-probability technique. Respondents are selected from the population until the required number is met. The population in this study was couples of childbearing age in Siantar sub-district with a sample of 56 people. Data were analyzed by chi square test and multiple logistic regression analysis.

**Results:** the variable that affects the occurrence of *unmet need* for family planning in PUS in Siantar District, Simalungun Regency in 2020 is age (p value = 0.013 and Prevalence Ratio = 1.950), where the age variable is at risk of increasing 1.920 times for *unmet need* for family planning. Number of children (p value = 0.010 and Prevalence Ratio = 2.463), where the number of children at risk increases 2.463 times the unmet need for family planning. Husband's support (p value = 0.002 and Prevalence Ratio = 3.197), where husband's support increases unmet need for family planning by 3.197 times. Service distance (p value = 0.010 and Prevalence Ratio = 2.700), where service distance increases unmet need for family planning by 2.7 times. Husband's support has the greatest influence on unmet need for family planning.

**Conclusion:** that age, number of children, husband's support, and distance of service affect the unmet need for family planning. Husband's support has the greatest influence on the unmet need for family planning in couples of childbearing age (PUS) in Siantar District, Simalungun Regency in 2020.

**Keywords :** *Unmet Need*, KB, PUS

### INTRODUCTION

Achieving the highest level of maternal health is one of the development agendas covered by the development goals of the health section of the Sustainable Development Goals, namely achieving universal access to reproductive health services (1). Four parameters were used to assess access to reproductive health services, namely active participation in family planning, contraceptive (CPR) prevalence, and fertility among adolescent girls aged 15-19 (2;3).

*Unmet Need* is a couple of childbearing age who do not use contraception. This situation can trigger uncontrolled population growth. Indonesia's population growth rate needs to be suppressed as low as possible to achieve the level of family welfare, so that the family is more prosperous. As a developing country, Indonesia needs to control its population (4).

Unmet need for family planning is a multidimensional problem as it is influenced by a variety of factors including demographics, socioeconomic characteristics, attitudes and access to services (5). In general, women who face financial, educational, geographic, and social barriers have an unmet need for family planning. Other factors in the community, such as culture, quality of services, availability of transport routes and regional

characteristics, also have an impact on contraceptive use (6).

According to the National Population and Family Planning Agency (7) it is projected that the population will reach 318.9 million in 2045. To contain this population growth, the BKKBN has made various programs, including through intensive counseling and research. Various methods were carried out, including the procurement of various contraceptives which were distributed free of charge and some were paid to the public (8). Among them there are male condoms, female condoms, birth control pills, birth control injections, implants, IUDs, spermicides, diaphragms, all done so that the number of births and population growth can be inhibited. And the goal of family planning can be achieved (9;10).

One of the obstacles in restraining the rate of population growth is that Unmet need is the main indicator for monitoring family planning programs which must be strived to reach zero (11).

In this study there are independent variables and dependent variables. The independent variables selected by the researcher were age, education, income, number of children, knowledge, previous contraceptive failure, husband's support and distance of family planning services. While the dependent variable is the unmet need for family planning. This study aims to analyze the effect of independent variables on the behavior of unmet need for family planning in couples of childbearing age (PUS).

## **Research methods**

The research was conducted in a quantitative model, correlation descriptive, with a cross sectional approach. A cross-sectional study is a type of research design in which you collect data from many different individuals at a single point in time. In cross-sectional research, it is observed variables without influencing them (12;13).

Researchers in economics, psychology, medicine, epidemiology, and the other social sciences all make use of cross-sectional studies in their work (14). For example, epidemiologists who are interested in the current prevalence of a disease in a certain subset of the population might use a cross-sectional design to gather and analyze the relevant data (15).

The sample of this study was taken using a non-probability sampling technique with consecutive sampling type. Samples are taken until the researcher feels that it is quite in accordance with what is desired. The total population is couples of childbearing age in one of the KB Service Posts, Siantar District, Simalungun Regency. The sample is determined by inclusion criteria and exclusion criteria. in this study are:

Married woman. Childbearing age (15-49 years), lives at home with husband, not pregnant. Willing to be a respondent by signing the informed c The number of samples determined to be studied is 57 Umet Need couples of various ages.

### **Method of collecting data**

There are two methods of data collection, namely by using primary data collection and secondary data collection. The primary data used in this study were obtained from questionnaires given to respondents which contained questions about research variables.

### **Data analysis**

Univariate analysis serves to summarize the data set of results in such a way that the data set can be in the form of statistics and tables (16). Univariate analysis is carried out by using descriptive frequencies (17). The analysis is carried out on each research variable, namely age, education, income, number of children, knowledge, previous contraceptive failure, husband's support, service distance and unmet need for family planning. This analysis produces the distribution and percentage of each variable. Bivariate analysis was carried out on two variables that were thought to be related or correlated made in the distribution table. Bivariate analysis is an analysis conducted on two variables that are thought to be related (18;19). Bivariate analysis was carried out by Chi-Square test for categorical data (nominal or ordinal) using Confidence Interval (CI) of 95% ( $\alpha=0.05$ ). In the multivariate analysis, all independent variables that influence the unmet need for family planning in couples of childbearing age (EFA) in the Bivariate analysis. Multivariate analysis using Logistic Regression test (20;21).

## **Results**

**Univariate :** A total of 56 couples of reproductive age (PUS) of healthy reproductive age (15-31 years) as many as 36 people (64.3%) and unhealthy reproductive age (32-49 years) as many as 20 people (35.7%). Higher education 31 people (55.4%) and education low 25 people (44.6%). High income 35 people (62.5%) and income low 21 people (37.5%). The number of children 1 is 18 people (32.1%). The level of knowledge is less about family planning as many as 52 people (92.9%). And good knowledge only 4 people (7.1%). Experienced KB

Program failure before 29 people (51.8%). And did not fail 27 people or 48.2%. Having husband's support in using family planning, 38 people (67.9%). Not supporting 18 people or 32.1%. Remote service distance is 39 people (69.6%). And 17 people or 30.4% close service distance. Providing information on respondents doing unmet need for family planning to 31 people (55.4%). And did not do unmet need 31 people (55.4%).

**Table 1. Frequency Table of Age**

|   | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|-----------|---------|---------------|--------------------|
| Valid 15-31 year old (Healthy reproduction)   | 36        | 64.3    | 64.3          | 64.3               |
| Valid 32-49 year old (Unhealthy reproduction) | 20        | 35.7    | 35.7          | 100.0              |
| Total   | 56        | 100.0   | 100.0         |                    |

**Table 2. Frequency Table of Education**

|            | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Low  | 25        | 44.6    | 44.6          | 44.6               |
| Valid High | 31        | 55.4    | 55.4          | 100.0              |
| Total      | 56        | 100.0   | 100.0         |                    |

**Table 3. Frequency Table of Income**

|            | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Low  | 21        | 37.5    | 37.5          | 37.5               |
| Valid High | 35        | 62.5    | 62.5          | 100.0              |
| Total      | 56        | 100.0   | 100.0         |                    |

**Table 4. Frequency Table of Total Children**

|                      | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------|-----------|---------|---------------|--------------------|
| Valid 1 orang        | 18        | 32.1    | 32.1          | 32.1               |
| Valid $\geq 2$ orang | 38        | 67.9    | 67.9          | 100.0              |
| Total                | 56        | 100.0   | 100.0         |                    |

**Table 5. Frequency Table of Knowledge**

|                | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid Not Good | 52        | 92.9    | 92.9          | 92.9               |
| Valid Good     | 4         | 7.1     | 7.1           | 100.0              |
| Total          | 56        | 100.0   | 100.0         |                    |

**Table 6. Frequency Table of Previous Contraception Failure**

|  | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------|---------|---------------|--------------------|
|--|-----------|---------|---------------|--------------------|

|       |         |    |       |       |       |
|-------|---------|----|-------|-------|-------|
|       | No      | 27 | 48.2  | 48.2  | 48.2  |
| Valid | Failure | 29 | 51.8  | 51.8  | 100.0 |
|       | Total   | 56 | 100.0 | 100.0 |       |

**Table 7. Frequency Table of Husband's Supported**

|       |             | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------|-----------|---------|---------------|--------------------|
|       | Unsupported | 18        | 32.1    | 32.1          | 32.1               |
| Valid | Supported   | 38        | 67.9    | 67.9          | 100.0              |
|       | Total       | 56        | 100.0   | 100.0         |                    |

**Table 8. Frequency Table of Distance Service**

|       |                  | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------------|-----------|---------|---------------|--------------------|
|       | Near Less 2.5km  | 17        | 30.4    | 30.4          | 30.4               |
| Valid | Much more 2.5 km | 39        | 69.6    | 69.6          | 100.0              |
|       | Total            | 56        | 100.0   | 100.0         |                    |

**Table 9. Frequency Table of Unmet need KB**

|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
|       | No    | 25        | 44.6    | 44.6          | 44.6               |
| Valid | Yes   | 31        | 55.4    | 55.4          | 100.0              |
|       | Total | 56        | 100.0   | 100.0         |                    |

**Bivariate:** age affects the behavior of unmet need for family planning in couples of childbearing age (PUS). The results of this study also found a prevalence ratio (RP) of 1,920; 95% CI (1,231-2,994). The number of children has a significant effect on the incidence of unmet need for family planning in couples of childbearing age. The value of the prevalence ratio (RP) is 2.463; 95% CI (1.134-5.350). Husband's support has a strong effect on the incidence of unmet need for family planning in couples of childbearing age (PUS). The value of the prevalence ratio (RP) is 3.197; 95% CI (1.316-7.769). Obtained p-value = 0.010 It was concluded that service distance has a strong effect on the incidence of unmet need for family planning in couples of childbearing age (PUS). The value of n prevalence ratio (RP) = r 2,700; with a 95% confidence level. Couples of childbearing age (PUS) with long distance services are at risk of 2,700 times the unmet need for family planning.

**Table 10. Risk Estimate of Age Ratio**

|  | Value | 95% Confidence Interval |        |
|--|-------|-------------------------|--------|
|  |       | Lower                   | Upper  |
| Odds Ratio for Age (32-49 y.o / 15-31 y.o) | 5.600 | 1.556                   | 20.150 |
| For cohort Unmet_Need_KB = Yes             | 1.920 | 1.231                   | 2.994  |
| For cohort Unmet_Need_KB = No              | .343  | .137                    | .859   |
| N of Valid Cases                           | 56    |                         |        |

**Table 11. Risk Estimate of Total of Children**

|  | Value | 95% Confidence Interval |        |
|--|-------|-------------------------|--------|
|  |       | Lower                   | Upper  |
| Odds Ratio for Total of Children (> = people / 1 people) | 5.633 | 1.634                   | 19.420 |
| For cohort Unmet_Need_KB = Yes                           | 2.463 | 1.134                   | 5.350  |
| For cohort Unmet_Need_KB = No                            | .437  | .253                    | .757   |
| N of Valid Cases   | 56    |                         |        |

**Table 12. Risk Estimate of Husband Supported**

|  | Value | 95% Confidence Interval |        |
|--|-------|-------------------------|--------|
|  |       | Lower                   | Upper  |
| Odds Ratio for Husband's Supported (Supported / Unsupported) | 8.591 | 2.309                   | 31.963 |
| For cohort Unmet_Need_KB = Yes                               | 3.197 | 1.316                   | 7.769  |
| For cohort Unmet_Need_KB = No                                | .372  | .213                    | .649   |
| N of Valid Cases   | 56    |                         |        |

**Table 13. Risk Estimate of Distance Service**

|  | Value | 95% Confidence Interval |        |
|--|-------|-------------------------|--------|
|  |       | Lower                   | Upper  |
| Odds Ratio for Distance Service (Far / Near) | 6.231 | 1.680                   | 23.111 |
| For cohort Unmet_Need_KB = Yes               | 2.700 | 1.125                   | 6.480  |
| For cohort Unmet_Need_KB = No                | .433  | .255                    | .735   |
| N of Valid Cases                             | 56    |                         |        |

**Multivariate:** That the age of EFA will have a significant effect on *unmet need*. This is indicated by the value of Exp (B) 7.455, where an old age has a risk of 7.455 times to perform an unmet need. Low income will affect 1,861 times to perform unmet need. This is indicated by the value of Exp (B) = 1.861. The number of children from EFA has no effect at all on unmet need. Shown the value of Exp (B) = 0.0000. The failure of the previous contraception device had 3,123 times the opportunity to perform an unmet need. This is indicated by the value of Exp (B) = 3.123. Husband's support will have a very strong influence for EFA to perform unmet need. Where this is indicated by the value of Exp (B) = 39,199. Where husband's support is very risky and has a perfect effect on doing unmet need and not doing unmet need. Long service distances are at risk of 2.00 times for unmet need.

**Table 14. Variables in the Equation a**

|                   | B      | S.E.      | Wal d | df | Sig. | Exp(B) | 95% C.I. for EXP(B) |        |
|-------------------|--------|-----------|-------|----|------|--------|---------------------|--------|
|                   |        |           |       |    |      |        | Lower               | Upper  |
| Step 1 a          |        |           |       |    |      |        |                     |        |
| Age               | 2.009  | .840      | 5.715 | 1  | .017 | 7.455  | 1.436               | 38.702 |
| Income            | .621   | .804      | .597  | 1  | .440 | 1.861  | .385                | 8.991  |
| Total of Children | -.2149 | 26391.301 | .000  | 1  | .999 | .000   | .000                | .000   |

|                                |        |           |        |   |      |                |      |        |
|--------------------------------|--------|-----------|--------|---|------|----------------|------|--------|
|                                | 7      |           |        |   |      |                |      |        |
| Previous Failure of KB Program | 1.142  | .731      | 2.438  | 1 | .118 | 3.134          | .747 | 13.143 |
| Husband's Supported            | 22.089 | 26391.301 | .000   | 1 | .999 | 3919903496.356 | .000 | .      |
| Distance Service               | .697   | 1.366     | .260   | 1 | .610 | 2.008          | .138 | 29.224 |
| Constant                       | -7.802 | 2.428     | 10.325 | 1 | .001 | .000           |      |        |

a. Variable(s) entered on step 1: Age, Income, Total of Children, Previous Failure of KB Program, Husband's Supported, Distance Service.

#### Variables in the Equation

|                                | B      | S.E.      | Wal    | d | Sig. | Exp(B)         | 95% C.I. for EXP(B) |        |
|--------------------------------|--------|-----------|--------|---|------|----------------|---------------------|--------|
|                                |        |           |        |   |      |                | Lower               | Upper  |
| Step 1 a                       |        |           |        |   |      |                |                     |        |
| Age                            | 2.009  | .840      | 5.715  | 1 | .017 | 7.455          | 1.436               | 38.702 |
| Income                         | .621   | .804      | .597   | 1 | .440 | 1.861          | .385                | 8.991  |
| Total of Children              | 21.497 | 26391.301 | .000   | 1 | .999 | .000           | .000                | .      |
| Previous Failure of KB Program | 1.142  | .731      | 2.438  | 1 | .118 | 3.134          | .747                | 13.143 |
| Husband's Support              | 22.089 | 26391.301 | .000   | 1 | .999 | 3919903496.356 | .000                | .      |
| Distance Service               | .697   | 1.366     | .260   | 1 | .610 | 2.008          | .138                | 29.224 |
| Constant                       | -7.802 | 2.428     | 10.325 | 1 | .001 | .000           |                     |        |

a. Variable(s) entered on step 1: Age, Income, Total of Children, Previous Failure of KB Program, Husband's Supported, Distance Service.

## Discussion

The effect of age on unmet need for family planning in couples of childbearing age 32-49 years old (old/unhealthy reproductive) increases the risk of unmet need for family planning by 1,920 times (RP = 1,920; 95%, CI = 1,231-2,994). The results of this study are in line with Weinstein (1997), Hailemariam (2005), Husnah (2011), Ismail (2012), Khatulistiwa (2014), Nurjannah (2017), Suryaningrum (2017), Resta (2016), Sarlis (2018), Nurhalimah (2019) which show a significant influence of age on unmet need for family planning. Education has less effect on the unmet need for family planning for couples of childbearing age (PUS) with low levels of education increasing the risk of unmet need for family planning by 1,277 times (RP=1,277). This study is in line with research conducted by Nurul Hudha Fadhila (2015) in the city of Padang which states that education does not have a significant effect on unmet need for family planning. Income above the UMR (Regional Minimum Wage) as many as 35 people (62.5%). Data processing with SPSS shows that the income of couples of childbearing age (PUS) has an effect on the unmet need for family planning. The risk of Unmet Need for Family Planning is indicated by the value of RP = 1.725 times with a 95% confidence level. The results of this study are in accordance with those conducted by Nanlohy (2017), Huda (2016), Diasanti (2018), Purba (2020), Sulistyowati (2017) and Uljannah (2016). Fitri (2017). The number of EFA children to 56 respondents, 38 people (67.9%). Have 2 or more children. The number of children has an effect on the unmet need for family planning for couples of childbearing age with a minimum number of 2 children or more will increase the risk of Unmet need for family planning by 2,463 times with a value of RP = 2.463; and a 95% confidence level. The results of statistical tests show that there is no effect between the level of knowledge and the unmet need for family planning. Data processing with SPSS provides information on poor knowledge and has a weak effect on unmet need with a value of RP = 1.093. Some studies have Similar results to this study include research by Huda (2016), Nurhalimah (2019), Yolanda (2019). Effect of previous family planning failure with unmet need for family planning on couples of childbearing age.

Based on the results of the study, the frequency and percentage of failure to use KB EFA to 56 respondents, it

was found that the majority had failed to use KB as many as 29 people (51.8%). Couples of Childbearing Age (EFA) who experienced previous contraceptive failures will be at risk of Unmet Need KB 1.474 times, indicated by the value of  $RP = 1.474$ ; 95% confidence level. Husband's support of EFA to 56 respondents, found that the majority of husbands support using family planning as many as 38 people (67.9%). From the SPSS data processing, the  $RP$  value = 3.197, which means that husband's support increases the risk of Unmet Need for Family Planning by 3.197 times with a 95% confidence level. The distance of family planning services to 56 respondents, it was found that the distance of family planning services was far as many as 39 people (69.6%). The results showed that there was an effect of service distance on unmet need for family planning in couples of childbearing age. Long service distances increase the risk of unmet need family planning, indicated by the value of  $RP = 2,700$  where distances that are far above 1 km have a risk of 2.7 times for carrying out unmet need from the post of KB service.

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