

Analysis of the Effect of Age on Women's Reproductive Health Using the Mixed Method

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ABSTRACT

The increase in age has a major effect on life expectancy, especially for women, encouraging the wisdom of the elderly population, the increase in the number of the old population is not only interpreted as an increase in the level of welfare and the increase in health conditions but can also be interpreted as a burden because this old age group is no longer productive. Reproductive health problems need to be widely socialized so that women / future mothers know the reproductive problems they will experience and get a way out of these problems. In addition to the influence of age, another thing that affects reproductive health in women is the reproductive health organs themselves. Without knowing the reproductive health organs well, it is feared that the future mothers will be completely blind and may eventually result in the harmony of the husband and wife relationship. reproductive health is a good state of physical, mental and social well-being, not only free from disease or disability, but also healthy from aspects related to the reproductive system, its functions and processes. Based on the results of previous studies, the total population in Tumpatan Nibung Village, Batang Kuis district, is 6,898 people and 1,100 households this number is part of the total population in batang kuis district, Deli Serdang regency. The purpose of this study was to analyze the effect of age on women's reproductive health in Tumpatan Nibung Village, Batang Kuis District, Deli Serdang Regency. The method used in this study is Mixed Method Research (MMR) which is a research method that is applied and tested in terms of outcomes and processes with quantitative and qualitative approaches. The quantitative study population was 250 people, with a sample plan of 158 people. Quantitative analysis in a univariate, bivariate manner using chi-square with multivariate using multiple logistic regression at a confidence level of 95% ($\alpha=0.05$). The data obtained from the measurement results can be used as an analysis of the next program situation by using test analysis using SPSS on the running system and turning it into an Analysis system as outcomes.

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INTRODUCTION

Reproductive health is an important issue that needs attention, especially in adolescence. Youth is colored by growth, change, the appearance of reproductive health opportunities and is often at risk. This reproductive health risk is influenced by various interrelated factors, such as the need for marriage, access to education and employment, lack of attention to the hygiene of the reproductive organs, gender inequality, to the influence of young and old age. Adolescence is a transitional period between childhood and adulthood, beginning at the time of sexual intercourse. Juveniles have no clear place, neither in children's classes nor in adulthoods. The biological and psychological development of adolescents is influenced by environmental and social development. As a result, adolescents will find it difficult to break away from dependence on parents and seek to gain independence in order to be accepted and recognized as adults [3]. Socially, young women are often victims of sexual violence [4]. Adolescent reproductive health knowledge is all the information that adolescents have regarding reproductive health. The knowledge of adolescent reproductive health is essential to address adolescent changes and problems [5]. Tumpatan Nibung Village is one of the villages in Batang Kuis District which is currently in the midst of family planning programs to women's reproductive health for all its residents, especially for women from adolescence to adulthood. The problem that occurs in this village is the concern for knowledge about women's reproductive health which affects age. This results in a high rate of miscarriage of pregnant women to families that do not have children. Mixed Method Research (MMR) is used to focus on data collection and analyze and mix qualitative and quantitative data carried out directly in one or a series of studies simultaneously (combination). The specific purpose of this study is the Implementation of the Mixed Method (Mixed Method Research) in analyzing the influence of age on women's reproductive health with outcomes that will determine the highest or lowest level of influence in the range of adolescent women and adult women in the population of Tumpatan Nibung Village, Batang Kuis District, Deli Serdang Regency.

RESEARCH METHOD

Reproductive Health

Reproductive health is a state of complete physical, mental and social well-being, not solely free from disease or disability in all matters related to the re-production system, as well as its functions and processes. Juvenile or adolescence, comes from the Latin *adolescere* which means to grow ka direction of maturity. The maturity in question is not only physical maturity, but also social and psychological maturity. Adolescence is a transitional period characterized by the presence of physical, emotional and psychic changes. Adolescence is a period of maturation of the human re-production organs, and is often called the transitional period. Adolescence is a transitional period between childhood and adulthood [3].

Univariate, Bivariate, and Multivariate

Univariate Analysis, is an analysis carried out on each variable and the results of research and analyzed to find out the distribution and percentage of each variable. Then the results obtained are entered in the frequency table. The univariate analysis formula can be seen below [6]:

$$P = \frac{X}{N} \times 100 \%$$

Keterangan :

P : Presentase

X : Jumlah kejadian pada responden

N : Jumlah seluruh responden

Bivariate Analysis, is a data analysis carried out to find correlations or influences between two or more variables studied. In this study, before analyzing the data, first The data normality test was carried out to find out whether the existing data was normal or not. Normality examination is carried out by descriptive analysis, that is, by comparing the values of skewness and kurtosis:

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{(N\sum X^2 - (\sum X)^2)(N\sum Y^2 - (\sum Y)^2)}}$$

Multivariate Analysis, Multivariate analysis is performed to test the analysis of two or more variables. Multivariate analysis aims to find out which free variables have the greatest influence on free variables.

Mixed Methods Research

Mixed Method Research (MMR) is a research method that is applied when researchers have questions that must be tested in terms of outcomes and processes that involve a combination of quantitative and qualitative methods in one study. Because it focuses on outcomes and processes, MMR designs are often used in program evaluation. However, nowadays, MMR is often used for social service science, such as: counseling, psychosocial, behavior and organizational management Methodologically, MMR focuses on collecting, analyzing and mixing qualitative and quantitative data carried out in one or a series of studies. So that using qualitative and quantitative approaches simultaneously (combined) it is more than possible to bring a better understanding to the research problem used separately. The following figure 3 describes the ten-tang of combining quantitative and qualitative data in MMR [7].

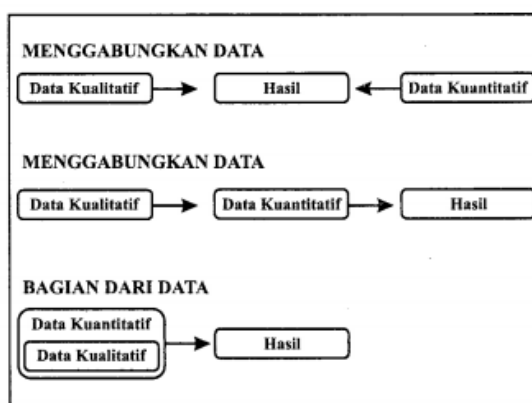


Figure 3. How to blend quantitative and qualitative data

RESULTS AND DISCUSSIONS

Based on the pre-study obtained, there is a population of 250 people with a sample plan of ± 158 people (young women to adult women) located in Tumpatan Nibung Village, Batang Kuis District, Deli Serdang Regency. Based on sample data, 60% of them do not know the ten-tang of women's

reproductive health and its effect on age. The feasibility study of the product developed is to map the factors of the influence of age on women's reproductive health both in terms of adolescents to adult women. This research has been conducted by previous research by discussing in terms of education / information on the effect of age on the re-production health of adolescent women, but research by implementing MMR has never been implemented, so this research is feasible to be carried out to provide input on appropriate policies and methods in analyzing the influence of age on women's reproductive health.

Data Analysis

The data analysis carried out is a validity and reliability test using SPSS with simultaneous results. The data were analyzed using univariate analysis to analyze the character of the study respondents, the effect of age on women's reproductive health. The procedure for processing the results of research data in this ongoing system uses a number of tests, namely:

- Descriptive Statistical Test, in this test can be seen the maximum, minimum, and standard deviation values.
- Normality Test, this is done to find out whether the data processed in this running system is distributed normally or not. This is done using the Kolomogorov-smirnov sam-pel test with statistical standards, namely if the significant value is >0.05 , which means it is normally distributed.
- Multicollinearity Test, this test is carried out to find out whether there is a linear relationship between dependent variables and independent variables by looking at the Tolerance and VIF values.

Factors That Affect Age on Women's Reproductive Health in the Work Area of the Puskesmas Desa Tumpatan Nibung Kecamatan Batang Kuis, Kabupaten Deli Serdang 202.

Usia Menopause	Jumlah	Persentase (%)
41-55 tahu	48	71,6
>55 tahun	67	28,4
Status Perkawinan		
Tidak Menikah	5	7,5
Menikah	62	92,5
Status Pekerjaan		
Tidak Bekerja	7	10,4
Bekerja	60	89,6
Paritas		
Tidak Pernah	5	7,5
Multipara	37	55,2
Grande multipara	25	37,3
Usia Menarche		
11-14 tahun	51	76,1
>14 tahun	16	23,9
Usia Melahirkan Anak Terakhir		
<20 tahun	5	7,5
20-35	39	58,2
>35 tahun	23	34,3
Penggunaan Kontrasepsi Hormonal		
Tidak Pernah	29	43,3
Pernah	38	56,7
Merokok		
Tidak Merokok	49	73,1
Merokok	18	26,9
Konsumsi Alkohol (Tuak)		
Ringan	42	62,7
Sedang	25	37,3
Diabetes Melitus		
Ya	23	34,3
Tidak	44	65,7
Riwayat Penyakit Kandungan		
Ada	5	7,5
Tidak Ada	62	92,5

Based on the table above, of the 67 respondents, 48 (71.6%) were aged 41-55 years, while 19 (28.4%) were over 55 years old. Among the respondents, as many as 62 (92.5%) were married, and as many as 5 (7.5%) of some respondents were unmarried. A total of 60 respondents (89.6%) worked, and as many as 7 (10.4%) did not work. Respondents had more than 2 children (multiple births) as many as 37 (55.2%) and as many as 5 (7.5%) respondents never became pregnant. A total of 51 respondents (76.1%) experienced menarche at the age of 11-14 years, while as many as 16 respondents (23.9%) experienced menarche at the age of 14 years. Respondents aged 20-35 who had

the last child were 39 (58.2%) and 5 (7.5%). Respondents who had used hormonal contraceptives were 38 (56.7%) and 29 had never used hormonal contraceptives (43.3%). A total of 49 respondents (73.1%) were non-smokers and 18 (26.9%) were smokers. A total of 42 (62.7%) respondents drank light alcohol, and as many as 25 (37.3%) drank moderate alcohol. Respondents did not have diabetes As many as 44 (65.7%) people with diabetes 23 (34.3%). 62 respondents who had no history of disease (92.5%), and as many as 5 (7.5%) had a history of disease.

Double Logistic Regression Test

Variabel	B	Sig.	Exp(B)
Status Pekerjaan	-3.531	.013	.029
Paritas	3.006	.011	20.205
Usia Melahirkan Anak Terakhir	3.881	.002	48.469
Alkohol	-2.771	.023	.063
Constant	-7.073	.007	.001

Diabetics were 44 people (65.7%) and diabetics were 23 people (34.3%). A total of 62 (92.5%) respondents had no history of disease, and as many as 5 (7.5%) had a history of disease.

CONCLUSION

Based on the results of the study on factors affecting women's reproductive health using the mixed method, researchers concluded that there was Menopause and marital status, smoking, alcoholism, diabetes, and a history of obstetrics had no effect.

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