

## **DETERMINANTS OF CONTRACEPTIVE USE AMONG CURRENTLY MARRIED WOMEN IN MYANMAR\***

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### **Abstract**

This study attempts to investigate the factors affecting contraceptive use of currently married women aged 15-49 years in Myanmar. Data on contraceptive use were obtained from 2015-2016 Myanmar Demographic and Health Survey (MDHS). In this study, descriptive statistics, Pearson's Chi-square test and multinomial logistic regression analysis were used to explore the relationship between contraceptive use and demographic and socio-economic factors. According to the results of descriptive statistics, about 1% of women used traditional method whereas 50% of women used modern methods. The results of Chi-square test show that there exists association between contraceptive use and demographic and socio-economic characteristics. From the results of Multinomial logistic regression, demographic factors such as age of woman, place of residence viz, states/regions, number of living children, currently breastfeeding and currently residing with husband have statistically significant effects on the use of contraceptive methods. Socio-economic factors such as woman's educational level, husband's educational level, media exposure, wealth index etc. have statistically significant effects on contraceptive use. This study provides the background characteristics of currently married women who were reported to have been using the contraceptive methods and its determinants and the results of this study can provide the useful information for the government of Myanmar to set up the contraceptive plans and services.

**Keywords:** Contraceptive use, wealth index and multinomial logistic regression.

### **Introduction**

Contraception is generally defined as the intentional prevention of conception. It is one of the proximate determinants of fertility and the most important predictor of fertility transition and is also called birth control or family planning. The growing use of contraceptive methods has resulted not only improvements in health related outcomes such as reduced maternal mortality, fetal death and infant mortality but also improvements in economic outcomes such as better jobs, higher labor force participation and higher wages, especially for women. Giving women access to voluntary family planning is one of the most effective ways to combat maternal death. When women can access contraceptives, they can avoid unintended pregnancy and related risks including unsafe abortion. Therefore, ontraception has direct health benefits on maternal and child health.

The level of contraceptive use varies significantly by women's background characteristics. In order to study the contraceptive use in Myanmar, it is necessary to understand which demographic and socio-economic factors influence on contraceptive use. Therefore, this study intends to investigate the factors affecting contraceptive use among non-pregnant currently married women in Myanmar. Firstly, the situations of contraceptive use, demographic and socio-economic characteristics of currently married women aged 15-49 in Myanmar were provided and

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secondly, the relationship between contraceptive use, demographic and socio-economic characteristics was investigated. Then the determinants of contraceptive use among currently married women aged 15-49 in Myanmar were explored.

### **Literature Review**

Many studies around the world have found contraceptive use to be influenced by several demographic and socio-economic factors. In this study, some of these are as follows:

Palamuleni (2013) examined that demographic and socio-economic factors affecting contraceptive use in Malawi by using bivariate and multivariate logistic regression analyses. The study aimed to investigate the relationship between contraceptive use and social, demographic and economic characteristics of women and to identify the determinants of contraceptive use among women in Malawi. The results show that the major determinants of contraceptive use are age, respondents' and partners' approval of family planning, family planning discussion with partner, number of living children, work status, education and visit to health center.

Osmani et al. (2015) studied factors influencing contraceptive use among women in Afghanistan. Data were obtained from Afghanistan Health Survey 2012 and logistic regression analysis was used in the study. The main objective is to examine which explanatory factors influenced contraceptive use among currently married women aged 12-49 years in Afghanistan. From this research, age of women, place of residence, regions, women education, media exposure, wealth index, parity, number of living sons and child mortality experience were key factors of contraceptive use.

Al-Balushi et al. (2015) studied that the determinants of contraceptive use in Oman. Contraceptive prevalence study has been done using binary logistic regression model. The purpose of the study is to explore the true effect of factors which are affecting the regulation of fertility through contraception. The finding suggests that age of women, region, number of living children, education, place of residence and living arrangement have the most significant effects on contraceptive use among women.

Hossain et al. (2018) stated that identifying factors influencing contraceptive use in Bangladesh by binary logistics regression model. The aim of the study is to explore the socio-economic, demographic and other key factors that influence the use of contraception in Bangladesh. The study finds that administrative division, place of residence, religion, number of household members, woman's age, occupation, body mass index, breastfeeding practice, husband's education, wish for children, living status with wife, sexual activity in past year, women amenorrhic status, abstaining status, number of children born in last five years and total children ever died were significantly associated with contracepted use in Bangladesh.

M. M. Wai et al. (2020) revealed that the dynamics of contraceptive use among married women in North and South Yangon, Myanmar. Chi-square test and logistic regression analysis are used in this study. It is observed that the contraceptive prevalence of modern methods was 66% with better coverage in rural than in urban women. Contraceptive use varied by age and parity, demonstrating lower prevalence in the oldest age group (45-49) and high parity (five and above). The mean duration of contraceptive use rose with increased age and parity, except in the oldest age and high parity groups.

N. M. M. Myint et al. (2021) explored that the determinants of family planning among Myanmar women by using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The results show that socio-demographic factors (age, level of education,

marital duration, number of living children, religion, occupation, income), cognitive factors (knowledge), affective factors (attitude and motivation including support from health care providers, family, friend as well as husband and health education) and availability of service (distance from health care place, service available for 24 hours, cost) are the influencing factors on Family Planning.

Lun et al, (2021) examined that utilization of modern contraceptive methods and its determinants among youth in Myanmar: Analysis of Myanmar Demographic and Health Survey (2015-2016) by multivariable binary logistic regression analysis. This study included those individual characteristics that were age, sex, marital status, education, employment, previous exposure to family planning messages, sexual activity, and desire for more children and household characteristics were the residence, geographical zone and wealth index. This study pointed out the country's contraceptive prevalence rate among youth and factors influencing those conditions, which might help promote youth's family planning health services by pointing out the area to emphasize.

### **Data and Methods**

Data from the 2015-2016 MDHS were used to examine the determinants of demographic and socio-economic factors on contraceptive use among currently married women aged 15-49 in Myanmar. According to this survey, interviews were done on 12,885 women. In this study, 7348 currently married women aged 15-49 were investigated by using descriptive statistics, Chi-square test and multinomial logistic regression analysis.

### **Variables Description**

In this study, determinants of contraceptive use are classified into two categories: demographic factors and socio-economic factors. Demographic factors such as age of woman, place of residence, states/regions, number of living children, sex of household head, currently breastfeeding and currently residing with husband and socio-economic factors such as woman's educational level, husband's educational level, woman's occupation, media exposure and wealth index are used in this study. The categories of contraceptive use (dependent variable) and demographic and socio-economic factors (independent variables) are classified and shown in Appendix (A).

### **Multinomial Logistic Regression**

Multinomial logistic regression is a classification method that generalizes logistic regression to multiclass problems. Therefore, multinomial logistic regression model requires that the response variable be more than two outcomes. The explanatory variable can be either dichotomous (i.e. binary) or continuous (i.e. interval or ratio). To construct the logits in the multinomial case, one of the categories must be considered the base level and all the logits are constructed relative to it. Any category can be taken as the base level, because there is no ordering. Multinomial logistic regression allows the simultaneous comparison of more than one contrast, that is, the log odds of three or more contrasts are estimated simultaneously (Garson 2009). Multinomial logistic regression is known by a variety of names, including polytomous LR, multiclass LR, softmax regression, multinomial logit (mlogit), the maximum entropy (MaxEnt) classifier, and the conditional maximum entropy model.

The multinomial logistic regression model may be presented as:

$$\text{Logit}(Y_j) = \ln \left[ \frac{P(Y=j/X)}{P(Y=J/X)} \right] = \beta_{j0} + \beta_{j1}X_1 + \beta_{j2}X_2 + \dots + \beta_{jk}X_k \quad , j= 1,2,\dots,J-1.$$

where,

$P(Y=j/X)$  = the probability of Y being some categories of j for the predictor variables X

$Y_j$  = outcome variable Y with j categories

$X_1, X_2, \dots, X_k$  = independent variables

$\beta_{j0}$  = intercept

$\beta_{j1}, \beta_{j2}, \dots, \beta_{jk}$  = slopes of the regression

Intercept and slopes are also called coefficients of regression.

### Descriptive Statistics

The contraceptive use, demographic and socio-economic characteristics of currently married women are presented in Appendix Table (1). Concerning the contraceptive use, 51% of women use modern contraceptive method, 47.7% do not use any method and only 1.3% use traditional method. In terms of woman age, 63.4% of currently married women are aged 20 - 39 years, 33.8 % of them are 40-49 years and only 2.8% are 15-19 years. Nearly the three-fourth of respondents resided in rural area and only one-fourth of currently married women are residents of urban area. The highest proportion of currently married women is found in Sagaing region (7.9%) and the lowest proportion is found in Taninthayi region (5.6%). Regarding the number of living children, 9.6% of the currently married women have no child, 25.7% of them have two children and 23.8% of those have only one child. Concerning about the sex of household head, the 86.8% of head of household are male and 13.2% are female. Regarding currently breastfeeding, 73.6% of currently married women are not currently breastfeeding and 26.4% of them are currently breastfeeding. Dealing the currently residing with husband, 91% of women are residing with husband compared to only 9% of women are not. In terms of woman education level, 46.4% of the currently married women have primary educational level and only 7.7 % have higher educational level while 15.4% have no education. With regard to husband education level, 38.8% have primary educational level, 38.7% have the secondary educational level and only 6.3% have higher educational level. Regarding the women occupation, about 5% of currently married women are professional workers, 16.2% are agriculture workers, 24% are unskilled workers, 5.1% are unskilled workers, 19.6% are other workers and 29.9% were unemployed workers. Concerning the media exposure, 15.3% currently married women have media exposure and 84.7% have no media exposure. Dealing with wealth index, 37.8% of women are in rich quintile, 20.6 are in middle quintile and 41.6% are in poor quintile.

### Bivariate Analysis

Chi-square analysis is used to determine the relationship between contraceptive use and demographic factors and socio-economic factors. The results of Chi-square analysis are shown in Appendix Table (1). It can be seen that the demographic factors such as age of woman, place of residence, states/regions, number of living children, sex of household head, currently

breastfeeding and currently residing with husband and socio-economic factors such as woman's educational level, husband's education level, woman's occupation, media exposure, and wealth index are statistically significant at 1% level. Therefore, there exists relationship between contraceptive use and demographic factors and socio-economic factors.

### **Multinomial Logistic Regression Analysis**

According to the results of Appendix Table (2), the value of Chi-Square statistics is 1610.101 and p-value is 0.000. It can be concluded that the MLR model is significant at 1% level. Therefore, this model can explain the association of contraceptive use and demographic factors and socio-economic factors. Cox & Snell R-Square, Nagelkerke R-Square and McFadden R-Square values are 0.197, 0.253 and 0.146 respectively, suggesting that 19.7% to 25.3% and 14.6% of the variance in contraceptive use can be explained by variation of independent variables used in the model. The parameter estimates for the multinomial logistic regression model for contraceptive use among currently married women are presented in Appendix Table (3).

By comparing traditional contraceptive method versus non-use of contraceptive method, the coefficient of women aged at 20-39 years old is statistically significant at 1% level and positively related to the use of traditional method. The odds ratio of 2.749 indicates that women aged at 20-39 years are 2.749 times more likely to use traditional method than none use of any method.

It has been found that Kayah state and Naypyidaw region are statistically significant at 1% level, Kachin state, Yangon region and Magway region are statistically significant at 5% level and Kayin state is statistically significant at 10% level. The coefficients of all significant states/regions are positive and related to use traditional contraceptive method. It shows that women in Kayah state, Naypyidaw region, Kachin state, Magway region, Yangon region and Kayin state are more likely to use traditional method over those who do not use of any method.

With regard to number of living children, the coefficients of women have one living child, women have two living children and women have three living children are statistically significant at 1% level and positively related to use traditional method. The odds ratios are 4.355, 5.132 and 5.904 respectively. It shows that women have one living child, women have two living children and women have three living children are 4.355, 5.132 and 5.904 times more likely to use traditional method. The coefficient of women who have no living children is statistically significant at 5% level and positively related to use traditional method. The odds ratio of 2.376 illustrates that women have no living children are 2.376 times more likely to use traditional method.

In currently breastfeeding, the coefficient of women who are currently breastfeeding is statistically significant at 1% level and negatively related to use traditional contraceptive method. The odds ratio of 0.266 points out that women who are currently breastfeeding are 0.266 times less likely to use traditional method compared to modern contraceptives.

With regard to the currently residing with husband, the coefficient is statistically significant at 1% level and positively associated with traditional contraceptive method. The odds ratio of 3.177 suggests that women who are currently residing with husband are 3.177 times more likely to use traditional method than the use of any other method.

It is found that the coefficient of higher educational level of women is significant at 1% level and positively related to traditional contraceptive method. The odds ratio of 5.713 expresses that women have higher educational level are 5.713 times more likely to use traditional method compared to the use of any other method.

It can be seen that the coefficient of higher educational level of husbands is significant at 5% level and positively related to traditional contraceptive method. The odds ratio of 3.371 indicates that husbands have higher educational level are 3.371 times more likely to use traditional method than none use of any method.

In case of media exposure, the coefficients of women having media exposure is statistically significant at 5% level and positively related to traditional method. The odds ratio of 1.816 means that women have media exposure are 1.816 times more likely to use traditional method compared to the use of any other method.

By comparing modern contraceptive method versus non-use of contraceptive method, the coefficients of women aged at 15-19 and 20-39 years old are statistically significant at 1% level and the odds ratios are 8.963 and 4.137 respectively. It points out that women aged at 15-19 are 8.963 times and women aged at 20-39 years are 4.137 times more likely to use modern method than the use of any other method.

Concerning the place of residence, the coefficient of urban areas is significant at 1% level and positively related to modern method. The odds ratio of 1.276 indicates that women in urban areas are 1.276 times more likely to use modern method than the use of any other method.

According to the states/regions, the coefficient of the Kachin state, Kayah state, Kayin state, Mon stae, Rakhine state, Shan state and Naypyidaw region, Sagaing region, Tanintharyi region, Bago region, Mandalay region, Mgway region, Yangon region and Ayayarwaddy region are statistically significant at 1% levels and positively related to use modern contraceptive method. It means that women in the significant states and regions are more likely to use modern method than none use of any method.

It can be seen that the coefficients of women have no living children, one living children, two living children and three living children are statistically significant at 1% levels and positively related to modern method. The odds ratios are 3.974, 6.094, 6.588 and 5.514 respectively. It suggests that women have no living children, one living children, two living children and three living children are 3.974, 6.094, 6.588 and 5.514 times more likely to use modern method than none use of any method.

In the case of currently breastfeeding, the coefficient of women who are currently breastfeeding is statistically significant at 5% level and negatively related to modern contraceptive method. The odds ratio of 0.863 indicates that women who are currently breastfeeding are 0.863 times less likely to use modern method than none use of any method.

It has been found that the coefficient of women is currently residing with husband is statistically significant at 1% level and positively associated with modern contraceptive method. The odds ratio of 4.415 reveals that women who are currently residing with husband are 4.415 times more likely to use modern method than none use of any method.

In woman's educational level, the coefficients of primary, secondary and higher educational levels of women are significant at 1% levels and positively related to modern

contraceptive method. The odds ratios are 1.558, 2.018 and 2.340, respectively. It specifies that women have primary, secondary and higher educational levels are 1.558, 2.018 and 2.340 times more likely to use modern method than none use of any method.

In terms of husband's educational level, the coefficients of primary and secondary educational levels of husbands are significant at 1% levels and positively related to modern contraceptive method. The odds ratios are 1.309 and 1.364, respectively. It illustrates that husbands have primary and secondary educational levels are 1.309 and 1.364 times more likely to use modern method than none use of any method respectively.

Regarding with wealth index, the coefficients of rich quintile and middle quintile are statistically significant at 1%, 10% levels and positively related to modern method. The odds ratios are 1.258 and 1.149, respectively. It indicates that women from rich quintile are 1.258 times and women from middle quintile are 1.149 times more likely to use modern method than the use of any other method.

### **Conclusion**

The study revealed the factors influencing contraceptive use among currently married women in Myanmar. It can be seen that demographic factors such as age of woman, place of residence, states/regions, number of living children, currently breastfeeding and currently residing with husband and socio-economic factors such as woman's educational level, husband's educational level, media exposure and wealth index are significant predictors of contraceptive use in Myanmar.

In demographic factors, women age at 20-39 years has more chance to use traditional method and women age at 15-19 years and women age at 20-39 are more likely to use modern method. Women in urban areas have more chance to use modern method than women in rural areas. Because women in urban area are more educated, they have better knowledge about the contraception and easy access to family planning services. Women in Kachin state, Kayah state, Kayin state, Nay Pyi Taw region, Magway region and Yangon region have more chance to use traditional method than Chin state and all states/regions have more likely to use modern method than Chin region. This is because Chin state has the highest fertility and lowest use of contraceptive methods. Regarding with number of living children, women have no living children, one living children, two living children and three living children have more chance to use tradition method and modern method. This is because most of women in Myanmar do not want to have many children. So, they are using the family planning methods to attain their desired children. Concerning currently breastfeeding, women who are currently breastfeeding have less chance to use the traditional method as well as modern method. It has been found that women who are currently residing with husband have more chance to use traditional method and modern method.

In socio-economic factors, women and husbands with higher educational levels have more chance to use traditional method and women with primary, secondary and higher educational levels and husbands with primary and secondary educational levels have more chance to modern method. This is because educated women and husbands can decide their relationships, bodies and their lives. Women who have media exposure have more chance to use traditional method because they can get knowledge of family planning and learn the benefits of using contraception from media. In case of wealth index, women in rich and middle quintiles

have more chance to use modern method. This finding in this case, it is observed that the use of family planning methods depends on the wealth of the households.

Therefore, these factors are considered in the redesigning of family planning program in Myanmar. In addition, it is expected that the results of this study would be helpful for the government and policy makers when planning the policy about the contraceptive prevalence rate in Myanmar. Because of being studied by states and regions, the government can also be able to find out the status of contraceptive use among currently married women by region and can support the family planning plans and services to areas with low usage. Moreover, the government needs to hold health talk about contraception at public and to inform that contraceptive methods are easily available at public and government health care department and to encourage married couples to use contraceptive methods to avoid maternal mortality, fetal death and infant mortality.

This study only focuses on demographic and socio-economics characteristics of currently married women and contraceptive use. Since our variable selection is limited, further studies should perform to study the contraceptive use by adding other relevant independent variables. Moreover, further researchers are recommended to analyze the determinants of the contraceptive use from wider perspectives.

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### Websites

[http:// www.FAMILYPLANNING2020.ORG/MYANMAR](http://www.FAMILYPLANNING2020.ORG/MYANMAR)

<https://www.mmtimes.com>

[www.mohs.com](http://www.mohs.com)

[www.wekiperia.com](http://www.wekiperia.com)

## Appendix (A)

### Dependent variable

- Y = Contraceptive Use  
 = 1, if traditional method  
 = 2, if modern method  
 = 3, if none use of any method (reference category)

### Demographic factors

- X<sub>1</sub> = Age of Woman  
 = 1, if woman age group is at 15-19  
 = 2, if woman age group is at 20-39  
 = 3, if woman age group is at 40-49 (reference category)
- X<sub>2</sub> = Place of Residence  
 = 1, if urban  
 = 2, if rural (reference category)
- X<sub>3</sub> = States/Regions  
 = 1, if woman lives in Kachin  
 = 2, if woman lives in Kayah  
 = 3, if woman lives in Kayin  
 = 4, if woman lives in Naypyidaw  
 = 5, if woman lives in Sagaing  
 = 6, if woman lives in Tanintharyi  
 = 7, if woman lives in Bago  
 = 8, if woman lives in Magway  
 = 9, if woman lives in Mandalay  
 = 10, if woman lives in Mon  
 = 11, if woman lives in Rakhine  
 = 12, if woman lives in Yangon  
 = 13, if woman lives in Shan  
 = 14, if woman lives in Ayeyarwady  
 = 15, if woman lives in Chin (reference category)
- X<sub>4</sub> = Number of Living Children  
 = 1, if woman had no living child  
 = 2, if woman had one living children  
 = 3, if woman had two living children  
 = 4, if woman had three living children  
 = 5, if woman had four and more living children (reference category)
- X<sub>5</sub> = Sex of Household Head  
 = 1, if head of household is male  
 = 2, if head of household is female (reference category)
- X<sub>6</sub> = Currently Breastfeeding  
 = 1, if yes  
 = 2, if no (reference category)
- X<sub>7</sub> = Currently Residing with Husband  
 = 1, if yes  
 = 2, if no (reference category)

### Socio-economic factors

- X<sub>8</sub> = Woman's Educational Level  
 = 1, if woman's educational level is primary  
 = 2, if woman's educational level is secondary

- = 3, if woman’s educational level is higher
- = 4, if woman’s educational level is no education (reference category)
- X<sub>9</sub> = Husband’s Educational Level
  - = 1, if husband’s educational level is primary
  - = 2, if husband’s educational level is secondary
  - = 3, if husband’s educational level is higher
  - = 4, if husband’s educational level is no education (reference category)
- X<sub>10</sub> = Woman’s Occupation
  - = 1, if woman is professional worker
  - = 2, if woman is agricultural worker
  - = 3, if woman is skilled worker
  - = 4, if woman is unskilled worker
  - = 5, if woman is other worker
  - = 6, if woman is unemployment
- X<sub>11</sub> = Woman’s Exposure to Media
  - = 1, if yes
  - = 2, if no (reference category)
- X<sub>12</sub> = Wealth Index
  - = 1, if woman is in rich quintile
  - = 2, if woman is in middle quintile
  - = 3, if woman is in poor quintile (reference category)

**Appendix Table (1) Percentage frequency distribution and the relationship between contraceptive use and demographic and socio-economic characteristics among currently married women aged 15-49 in Myanmar.**

Variables	Categories	Frequency	Percent	Chi-square
<b>Contraceptive use</b>	Non-use	3505	47.7	
	Traditional Method	95	1.3	
	Modern Method	3748	51.0	
<b>Age of Woman</b>	15-19	203	2.8	449.45***
	20-39	4661	63.4	
	40-49	2484	33.8	
<b>Place of Residence</b>	Urban	1940	26.4	72.129***
	Rural	5408	73.6	
<b>States/Regions</b>	Kachin	457	6.2	362.52***
	Kayah	430	5.9	
	Kayin	458	6.2	
	Naypyidaw	469	6.4	
	Sagaing	581	7.9	
	Taninthayi	411	5.6	
	Bago	561	7.6	

Variables	Categories	Frequency	Percent	Chi-square
	Magway	528	7.2	
	Mandalay	493	6.7	
	Mon	445	6.1	
	Rakhine	490	6.7	
	Yangon	555	7.6	
	Shan	483	6.6	
	Ayeyarwaddy	554	7.5	
	Chin	433	5.9	
<b>Number of Living Children</b>	1	705	9.6	281.717***
	2	1750	23.8	
	3	1888	25.7	
	4	1356	18.5	
	5	1649	22.4	
<b>Sex of Household Head</b>	Male	6377	86.8	14.831***
	Female	971	13.2	
<b>Currently Breastfeeding</b>	Yes	1937	26.4	48.995***
	No	5411	73.6	
<b>Currently residing with husband</b>	Yes	6684	91.0	207.219***
	No	664	9.0	

**Appendix Table (1) Distribution of contraceptive use and the relationship between demographic and socio-economic characteristics and contraceptive use among currently married women aged 15-49 in Myanmar (Continued)**

Variables	Categories	Frequency	Percent	Chi-square
<b>Woman's Educational level</b>	Primary	3408	46.4	219.248***
	Secondary	2245	30.6	
	Higher	566	7.7	
	No Education	1129	15.4	
<b>Husband's Educational Level</b>	Primary	2853	38.8	146.894***
	Secondary	2845	38.7	
	Higher	464	6.3	
	No Education	1186	16.1	
<b>Woman 's</b>	Professional labour	377	5.1	40.285***

<b>Occupation</b>	Agricultural labour	1194	16.2	
	Skilled labour	376	5.1	
	Unskilled labour	1766	24.1	
	Other worker	1439	19.6	
	Unemployment	2196	29.9	
<b>Media Exposure</b>	Yes	1121	15.3	48.437***
	No	6227	84.7	
<b>Wealth Index</b>	Rich	2779	37.8	78.863***
	Middle	1511	20.6	
	Poor	3058	41.6	

\*\*\*denotes significant at 1%level

Data source: MDHS (2015-2016)

**Appendix Table (2)**

**Model Fitting Information for Contraceptive Use with Independent Variables**

Model Fitting Criteria	$\chi^2$ value	df	p-value
-2 Log Likelihood	1610.101	72	0.000
Cox & Snell R-Square	0.197		
Nagelkerke R-Square	0.253		
Mc-Fadden R-Square	0.146		

Data source: MDHS (2015-2016)

**Appendix Table (3) Parameter estimates for the multinomial logistic regression model for contraceptive use among currently married women aged 15-49 in Myanmar**

Variables	Contraceptive use			
	Traditional Method		Modern Method	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
<b>Intercept</b>	-10.194		-5.862	
<b>Age of woman</b>				
15-19	1.118	3.058	2.193	8.963***
20-39	1.011	2.749***	1.420	4.137***

Variables	Contraceptive use			
	Traditional Method		Modern Method	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
<b>Place of Residence</b>				
Urban	.322	1.380	.244	1.276***
<b>States/Regions</b>				
Kachin	2.405	11.076**	.656	1.927***
Kayah	3.366	28.951***	1.273	3.572***
Kayin	2.041	7.696*	1.006	2.734***
Naypyidaw	3.456	31.696***	1.515	4.548***
Sagaing	.134	1.143	1.148	3.152***
Taninthayi	1.563	4.774	.918	2.505***
Bago	1.787	5.974	1.692	5.431***
Magway	2.595	13.392**	1.137	3.117***
Mandalay	.797	2.220	1.414	4.112***
Mon	1.086	2.964	1.278	3.588***
Rakhine	.415	1.515	.905	2.473***
Yangon	2.553	12.839**	1.614	5.024***
Shan	1.519	4.567	1.093	2.983***
Ayeyarwaddy	.471	1.601	1.507	4.513***
<b>Number of Living Children</b>				
1	.865	2.376**	1.380	3.974***
2	1.471	4.355***	1.807	6.094***
3	1.636	5.132***	1.885	6.588***
4	1.776	5.904***	1.707	5.514***
<b>Sex of Household Head</b>				
Male	.237	1.267	.033	1.033
<b>Currently Breastfeeding</b>				
Yes	-1.323	2.66***	-.147	.863**
<b>Currently Residing with Husband</b>				
Yes	1.156	3.177***	1.485	4.415***
<b>Woman's Educational level</b>				

Variables	Contraceptive use			
	Traditional Method		Modern Method	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
Primary	.417	1.517	.443	1.558***
Secondary	.759	2.136	.702	2.018***
Higher	1.743	5.713***	.850	2.340***

**Appendix Table (3) Parameter estimates for the multinomial logistic regression model for contraceptive use among currently married women aged 15-49 in Myanmar (Continued)**

Variables	Traditional Method		Modern Method	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio
<b>Husband's Educational Level</b>				
Primary	.303	1.354	.270	1.309***
Secondary	.753	2.123	.311	1.364***
Higher	1.215	3.371**	.142	1.153
<b>Woman's Occupation</b>				
Professional worker	-.503	.605	.042	1.043
Agricultural worker	-.263	.769	.001	1.001
Skilled worker	-.116	.890	.007	1.007
Unskilled worker	.375	1.455	.101	1.106
Other	-.309	.734	-.083	.920
<b>Media Exposure</b>				
Yes	.597	1.816**	.111	1.118
<b>Wealth Index</b>				
Rich	.407	1.502	.229	1.258***
Middle	-.227	.797	.139	1.149*

\*\*\*, \*\*, \* denote significant at 1%, 5% and 10% level

Reference Category = no use of contraceptive method

Data source: MDHS (2015-2016)