### Prevalence of Unmet Need for Family Planning and Factors Associated With It among Libyan Women with Children in Libyan Schools in Klang Valley, Malaysia

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**Abstract: Introduction:** Unmet need for family planning is still high in the developing countries of the world, especially in Sub-Saharan Africa. The studies among migrant women are few and no previous studies on migrant Libyan women have been reported in the literature.

**Objectives:** This study is to determine the prevalence and associated factors of unmet needs for family planning among Libyan women with children in Libyan schools in Klang Valley, Malaysia. **Methods:** A cross sectional study was conducted among 308 Libyan women whose children were studying in five Libyan Schools in Klang Valley, Malaysia. Respondents were selected based on stratified sampling and a pretested questionnaire was self-administered. Data was analysed using IBM Statistic package for Social Science (SPSS) version 23. Descriptive statistics was used to describe the characteristics of the participants and inferential statistics applied were chi square test and independent t-test. The final model of predictors of unmet need for family planning was analysed using multiple logistic regression.

**Result:** The response rate was 67.2%. The contraceptive prevalence rate was 68.5%, with oral contraceptive pills as the most common method used at 43.8% and sourced from the pharmacy by 80.3% of the women. The prevalence of unmet need for family planning in this study was 29%. Unmet need was significantly associated with age (P=0.03), employment status (P=0.003), religious influence (P<0.001), decision making power (P<0.04) and gender power (P<0.001). In multiple logistic regression models, religious influence (OR=5.11, P=0.006), employment status (OR=7.72, P=0.011), and gender power (discuss with husband) (OR=4.80, P=0.011) were significant predictors of unmet need.

**Discussion:** The higher contraceptive prevalence rate as well as the lower unmet need as compared to the home country could be explained by the socio-demographic characteristics of this group of migrant Libyan women who were generally of a high education level. The findings from this study can help in policy formulation for family planning by the Libyan government for her citizens, both domestic and migrant populations.

Keywords: Unmet need, family planning, Migrant, Malaysia, Libya.

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### I. Introduction

Unmet need for family planning is still high in the developing countries of the world, especially in Sub-Saharan Africa, where around 85 million women want to avoid pregnancy but do not use modern family planning methods or use traditional methods. While the practice of family planning among women generally has been extensively studied, studies among migrant women are few and no previous studies on migrant Libyan women have been reported in the literature. The goal of this study is to know the prevalence of unmet need for family planning and factors associated with it among Libyan women with children in Libyan schools in Klang Valley, Malaysia. This study was conducted by distributing a questionnaire to mothers of students studying in the Libyan schools in Klang Valley, Malaysia.

The importance of family planning is to improve health and reduce maternal and perinatal mortality and morbidity in developing countries (WHO, 2015). Worldwide, contraceptive prevalence rate was 63.3% in 2010 (Alkema et al., 2013). While in Libya, Contraceptive Prevalence Rate (CPR) was 78% in 2016 (Mohamed, 2017) in comparison to Malaysia at 52%, reported from last national survey done in 2014(Hassan et al., 2017).

Unmet need for family planning is defined as "those who are sexually active and do not want any more children or want to delay the next childbirth but are not using any contraceptive methods. Unmet need concept points to the gap between women's reproductive intentions and their contraceptive behaviours" (WHO, 2015).

The prevalence is higher in the Arab world, at 43% for Libya in 2014 Family Health Survey in comparison to 39% for Yemen in 2003(Roudi-Fahimi et al., 2012). While in Malaysia, unmet need among Malaysian women was 15.9% based on the preliminary results of the 2014 Malaysian Population and Family Survey(UNDP, 2016). The aim of study to understand the challenges women face in reproductive health, this study contributes to new knowledge and understanding of unmet needs for family planning among migrant Libyan women with children in Libyan schools in Klang Valley, Malaysia, an area which is not well studied.

### II. Materials and methods

The study design of this research is a cross-sectional study with sample size 308. The study was conducted over a period of 10 months from September 2017 to July 2018 and study area for this research was five Libyan schools in Klang Valley, Malaysia namely; AlhadattaDiwaleya Libyan School, Libyan School Damai, Libyan school Kuala Lumpur, Anas Libyan School and Khatawat al Mostaqbal Libyan school. The five schools are located in the Klang Valley: AlhadattaDiwaleya and Khatawat Al Mostaqbal Libyan Schools in Kajang, Libyan School Damai in Ampang, Libyan School Kuala Lumpur at JalanAmpang, DesaPahlawan and Anas Libyan School in Shah Alam.All Libyan mothers with children who are studying in the five Libyan schools in Klang Valley. Simple random sampling was used to select the respondents from all eligible mothers of Libyan students who were studying in each school; the sample size was proportionate to the total enrolment of each school.

Data was collected using a self-administered structured questionnaire, adopted from previous studies (Vouking et al., 2014; Allen-Alebiosu, 2010; Abdul Manaf et al, 2012). The questionnaire was developed in English and translated into Arabic. Content validity was carried out by distributing the questionnaire to an expert in the field. The expert reviewed the questionnaire and corrections were made based on the recommendations (Krejcie& Morgan, 1970). Assessment of reliability was done using SPSS statistics, version 23. Internal consistency of scales used in the questionnaire measured attitude scale by using Cronbach's alpha and the result was 0.758.

Data were analysed using IBM Statistic Package for Social Science (SPSS) package version 23. Descriptive analysis was performed by using frequencies, proportions, means, standard deviations, median, and inter quartile range regarding unmet need for family planning, socio-demographic, decision making factor, culture factors, knowledge and attitude towards family planning. Chi-square test was used to measure relationship between two categorical variables. Between-group comparison, independent sample t-test was used to examine any significant difference in mean score of knowledge and attitude. For multiple logistic regressions analysis was used for the predictors of factors of unmet need for family planning among Libyan women with children in Libyan schools in Klang Valley, Malaysia. Test of hypotheses were two sided and level of significance was set at 0.05.

Ethical clearance was obtained from CUCMS' Research Ethics Review Committee (CRERC). Permission to conduct the study was taken from the person in charge in the Libyan Embassy in Malaysia, Academic Affairs, and Libyan schools' managers in Klang Valley.

#### III. Result

The questionnaire was distributed by hand to 308 students to pass it to their mothers in five Libyan schools located in Selangor State and 207questionnaires were returned. The response rate was almost 67.2 %, while the non-response rate was 32.8%. The seven questionnaires excluded were due to extensive missing answers.

#### **3.1 Socio-demographic characteristics of the Respondents**

Table (1) shows that the mean age of respondents was 36.5 years with standard deviation (SD) of 5.9. The median age of the respondents was 37 years. The youngest age of the respondents was 18 years while the oldest was 45 years.

Table 1, showed that the women have at least secondary school level of education with the majority (88%) having a high level of education. Likewise, all the husbands (100%) have a high level of education. In addition, 69% of the respondents are worker, while 17% of them are house wives. Table 1 also illustrated that 83.5% of the respondents think that religion allows family planning practice, while the remaining 16.5%, think it does not. As illustrated in the table below, more than half of the women have a monthly total household income of less than RM7, 000 while only 12% were from the high-income group earning more than RM10, 000.A total of 137(68.5%) respondents reported current use of family planning. The reported reasons for the

current use of family planning were for spacing at 37.2%, limiting number of children at 18.2%, health problem at 30.7% and economic reasons 13.9% (Table1).

Among the current users, the most popular methods were oral contraceptive pills at 43.8% and condoms at 32.1%, intrauterine device (21.2%), injectable at 0.7%, implants at 0.7% and withdrawal method at 1.5%. Thirty-one percent of the respondents do not use contraceptives. The current users of family planning received their supply from pharmacy (80.3%), followed by private hospital or clinic (16.8%) and public hospital or clinic (2.9%).

Variable	Table 1: Socio-de Frequency	Percentage	Mean ± SD	Median(IQR)
Age (year)	requency	1 or comment	$36.5 \pm 5.9$	37(8)
Level of education			0000 - 010	27(0)
No formal education	0	0		
Primary	0	0		
secondary	24	12.0		
High level of education	176	88.0		
Employment				
House wife	34	17.0		
Students	28	14.0		
Worker	138	69.0		
Religion influence				
Yes	167	83.5		
No	33	16.5		
Monthly income				
Less than 7000	102	51.0		
70001- 10000	74	37.0		
More than 10000	24	12.0		
Want to get pregnant, N=200				
Yes	63	3	1.5	
No	137	6	8.5	
Using family planning meth N=200	nods now,			
Yes	137	6	8.5	
No	63	3	1.5	
Reason for use, N=137				
Spacing	51	3'	7.2	
Limitation of children	25	1	8.2	
Economic reasons	19	1.	3.9	
Health status	42	30	0.7	
Methods used, N=137				
Pill	60		3.8	
IUD	29		1.2	
Condoms	44		2.1	
Injectable contraceptive	1	.7	,	
Implant	1	.7	1	
Withdrawal	2	1.	.5	
Source of family planning metho	ods, N=137			
Private Hospitals/clinics	23		6.8	
Pharmacy	110		0.3	
Public hospitals	4	2.	.9	

### 3.2 Prevalence of unmet need of family planning among Libyan women with children in Libyan schools in Klang Valley, Malaysia.

The 137 who did not want to get pregnant, 29% had unmet need as they were not on modern methods of contraceptive with 12% wanting to limit the family size and 17% for spacing. This is also illustrated in Table 2 below.

Table2. Prevalence of unmet need of family planning among Libyan women with children in Libyan schools in

Klang Valley, Malaysia						
Category	Frequency(N)	Percentage (%)				
Unmet need	39	29				
Spacing	23	17				
Limiting	16	12				
Met	98	71				

# **3.3** Decision making Power and Gender Power among Libyan women with Children in Libyan schools in Klang Valley, Malaysia.

As shown in Table 3 below, the majority (84%) reported that only the wife and both husband and wife together decided on family planning use while only 16% said it was solely the husband's decision. The majority (86%) of the women reported gender power on family planning methods but 80% had gender power on determining family size and spacing.

**Table3.** Decision making power and gender power among Libyan women with children in Libyan schools in Klang Valley. Malaysia (N - 200)

Variable	Frequency	Percentage	
Decision making on family	planning		
Husband	32	16.0	
Wife	19	9.5	
Both	149	74.5	
Discuss with husband on f	amily planning		
method			
Yes	172	86.0	
No	28	14.0	
Discuss family size			
Yes	160	80.0	
No	40	20.0	

# 3.4 Comparison and Association between factors and unmet needs among Libyan women with children in Libyan schools in Klang Valley, Malaysia

Table 4, showed the age difference of respondents between the met and unmet need for family planning groups and it is measured by independent t-test. The mean age of the unmet need group was lower at 36.9 as compared to 38.9 in the met need group, and this difference was statistically significant (P=0.03).

Table5, depicts the association between the dependent variable and all the socio-demographic characteristics of the respondents. There is significant association between employment status and unmet need for family planning (P=0.003), and also there is significant association between religious influence and unmet need for family planning (P<0.001). However, the level of the education of the respondents and the monthly income were not significantly associated with a P value of > 0.05.

**Table4.**Comparison in age groups between met and unmet needs for family planning among Libyan women with children in Libyan schools in Klang Valley. Malaysia

Variables	Met Unmet		Test-value	P-Value	
	Mean± SD	Mean ±SD			
Age	38.9±4.7	36.9±5.1	t = -2.196	0.03*	

\*P<.05, t =Independent -t test

 Table 5 Association between factors and unmet needs among Libyan women with children in Libyan schools in Klang Valley, Malaysia

Variables		Contraceptive use		ics		
Variables	Met	Unmet	$- \chi^2$	df	P-value	
	N (%)	N (%)	χ	ai		
Level of education				1		
Secondary school	15(75)	5(25)	0.138		0.710	
High level of education	83(70.9)	34(29.1)				
Employment				2		
House wife	18(66.7)	9(33.3)	11.801		0.003*	
Students	6(37.5)	10(62.5)				
worker	74(78.7)	20(21.3)				
Religion influence				1		
Yes	88(79.3)	23(20.7)	17.236		< 0.001*	
No	10(38.5)	16(61.5)				
Monthly income						
Less than 7000	45(72.6)	17(47.6)	4.850	2	0.088	
70001-10000	42(77.8)	12(22.2)				
More than 10000	11(52.4)	10(27.4)				
Decision making on famil	y planning					
Not Empowered	6(33.3)	12(66.7)	6.379	2	0.04*	
Empowered	33(58.3)	86(41.7)				
Gender power						
Discuss with husband						
Communication	91(77.1)	27(22.9)	13.037	1	< 0.001*	

No communication Discuss family size	7(36.8)	12(63.2)			
Communication	83(76.9)	25(23.1)	7.089	1	<0.001*
No communication	14(48.3)	15(51.7)			

\*P<.05

## 3.5 Predictors of unmet needs of family planning among Libyan women with children in Libyan schools in Klang Valley, Malaysia.

Multiple logistic regressions were used to determine the predictors of unmet needs of the family planning, adjusted for age, employment status, religion, decision making power and discussion with husband for using family planning. All the important variables were selected using FORWARD-LR or BACKWARD-LR methods. The findings of logistic regression analysis factors associated with unmet need for family planning among Libyan women in Klang Valley, Malaysia are illustrated in Table6.

The variables included in the model were: age, employment status, religious influence, decision making power, and gender power. Three variables, namely, religious influence, employment and gender power were significant as shown in Table 4.12.

Religious influence had significant association with unmet need for family planning, the odds of unmet need among women who thought religion disallowed family planning use is five times higher than those who thought otherwise (OR =5.113, 95% CI =1.730-15.114, P=0.003). Analysis showed that odds of unmet among women who lacked discussion with husband was four times higher than those who did discuss and had significant association with unmet need for family planning (OR=4.803, 95% CI=1.436-16.062, P=0.011).

 

 Table6. Predictors of unmet needs of family planning among Libyan women with children in Libyan schools in Klang Valley, Malaysia

Factors	Wald	df	f Sig.	AOR	95% C. I	
					Lower	Upper
Religious influence						
Yes				1		
No	8.708	1	0.003*	5.113	1.730	15.114
Employment						
Housewife				1		
Students	6.401	1	0.011*	7.727	1.585	37.667
Gender power						
Yes				1		
No	6.491	1	0.011*	4.803	1436	16.062

Reference=1, P\*<0.05

### IV. Discussions

There are many factors related to unmet need for family planning and this study discussed some of the factors such as socio-demography, level of knowledge, attitude, decision making power and gender power.

The response rate was almost 67.2 %. The prevalence of unmet need for family planning in this study was 29% among Libyan migrant women, between the ages of 15-49 years, with school going children in Malaysia. This result was lower than the finding in the Libyan Family Health Survey in 2014 which was 43% (UNFP, 2018). Another study by Roudi-Fahimi et al (2012) among women in Yemen reported that the prevalence of unmet need for family planning was higher at 39% as compared to the current study.

The prevalence of unmet need for family planning from this current study is still high as compared to the host Malaysian population, which stands at 15.9 % (UNDP, 2016). It is lower than a migrant population in China, where the unmet need of rural-urban migrants is 46% (Decat et al., 2011). This study's finding is also higher than reported in a European study which showed that the migrant population had a higher unmet need at 10%, in comparison to the host population (WHO, 2001).

The current study showed that 68.5% of Libyan women are using contraceptive methods. The finding is high compared to a study done in Libya (2010) which reported a contraceptive prevalence rate of 56.1% (Alkema et al., 2013).

A total 137 of respondents was 71 % of women practice modern methods of family planning and only 29% of respondents' practice traditional methods (withdrawal) and not using modern methods. The most commonly used family planning method was oral contraceptive pills, at 43.8%. This may be due to the good knowledge on oral contraceptives as safe and effective and at the same time. This finding was compatible with the results of a study done by Mohammad et al. (2017) in Libya, where the most commonly used oral contraceptive pills was at 51.5% among the modern methods of family planning.

The association between the level of education of the respondents and unmet need for family planning was not significant (P=0.71), because most of respondent have good information about family planning. The relationship between employment status and unmet need for family planning was significant (P=0.003). Regarding the economic reasons, there is no significant association between household income and unmet need for family planning (P=0.088). It is because all of them are covered by insurance given by the Libyan government. In this study, 47.6% of those with unmet need come from low income group(<7000RM). Similarly a study conducted by Lakshmi et al. (2014) in Ethiopia, found that unmet need was higher among low income group (INR3001-6000) at 52.1%.

This study showed the unmet need is five times higher among those who thought religion did not allow them to use family planning as compared with those who thought religion allows its use. Similarly, according to Khalil et al (2017), 42.7% of unmet need for family planning in Saudi Arabia was due to religious prohibition. The predictors of unmet need for family planning among Libyan women with children in Libyan schools in Klang Valley, Malaysia are religious influence, employment status and gender power (discussing with husband).

### V. Conclusion

The present study used cross-sectional method to answer the main objective and specific objectives. The prevalence of unmet need for family planning in this study was 29%, and age, employment status, religion, gender power, and decision-making power were significantly associated with unmet need for family planning. The study was there are limited studies on unmet needs for family planning among migrant women and this study is the first one on Libyan migrants in a foreign country. This study does not represent the whole population of Libyan women in Malaysia. Understanding why the Libyan women in Malaysia do not use modern family planning methods despite its availability is also another area of study to improve uptake of contraception.

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