Family planning use in Benin Republic: Trends and determinants

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Abstract

Family planning remains one of the key components of reproductive health programme components set as human right, stated in international law and placed among the key indicators of Millennium Development Goals. This study investigates the levels and trends of contraceptive use among Beninese in union women over MDGs period, identifies recent associated factors. Similarities and differences across sub-regions are also examined using data from Benin DHS, applied to multiple logistic regressions. First, levels and trends of contraceptive prevalence drawn using data from the last three DHS highlighted a sharp variations across sub-regions and shown a decrease of contraceptive uptake over time. Among other, findings suggest fighting against sociocultural barriers especially among women in traditional religion. Empowering women and ensuring formal education to girls till secondary, will be useful everywhere in Benin to increase contraceptive prevalence rate and reduced unmet need for family planning. Besides, concerns regarding the side effects and health risks of methods were also revealed as important factors.

INTRODUCTION

Family planning remains one of the key components of reproductive health programme components set as human right, stated in international law (WHO 1994) and placed among the key indicators of Millennium Development Goals (UN 2014). Access and effective use of family planning is important tools enabling women to control their own fertility (WHO 1994) and an effective mean to face effectively the major obstacle of progress that sustained high fertility places in those countries where maternal and child mortality remain top priorities (Requejo and Bhutta 2015) especially in Sub Saharan Africa (SSA) countries (Kinney et al 2010, Lawn 2010, WHO 2005). Challenges are even more important in remote regions (Yavinsky et al 2015) like rural areas with limited health facilities where most of women live in poverty (Worley 2014). New investment framework especially in family planning in developing countries is one of the most-effective interventions to guide national health and development planning for the next 20 years beyond 2015 by decreasing numerous unintended pregnancies, cause of unsafe induced abortions with its associated risks for mother and infant mortality (Shareen, 2012). Gaining access to family planning services improves maternal health outcomes, and affords women more opportunities to become economically active (Blue Venture 2015).

Nevertheless, in Benin Republic like many others SSA countries especially those in Western African part, reproductive health issues remain the top priorities for people especially for reproductive age women. At first, none of the MDGs related to health, in particular to reproductive health namely MDGs 4 and 5 will not be achieved in Benin despite many efforts of government and partners (UNDP 2014). At present, the level of reproductive health indicators, including those relating to family planning are not better in this context. Benin belongs to those countries at high fertility where the population will still be growing until 2050s (PRB 2012) in spite of fertility decline already begun. The average births per reproductive age (15-49 years age) women is estimated at 5.8 in 2000 and has declined to about 4.9 in 2014 (UNDP 2014). The persistence of customs and traditions especially in case of fertility accounts for why fertility is still high among Beninese women. The social organization in this context favours not only the numerous descendants among women but also and mostly the polygamy because kid is considered as old age insurance for parents (Ela 1995) and a mean of perpetuation of the descendants (Arugu 2014). Contraceptive prevalence rate among Beninese women also corroborates with the persistence of customs and traditions in case of fertility in this context. Indeed, a weak appropriation over time of modern

contraceptives among these women has been noticed. The modern contraceptive prevalence rate, already low, has increased for only 4 points in 15 years from 5.7% in 2000 to 9.8% in 2014 (UNDP 2014). This low level hides huge disparities among sub-regions in Benin. For instance, in 2013 where on average 9 out of 100 women use modern contraceptive nationwide, only 3 out of 100 from department of Mono were using modern contraception. Likewise, the last three DHS data show a decrease in contraceptive uptake between 2001 and 2011-2012.

LITERATURE REVIEW

The needs for contraceptives use increase with marriage duration especially in SSA countries. In most SSA' societies, at the first marriage or first cohabitation the need for spacing, delaying or postponing is low or does not exist at all. Women have to prove their procreation abilities. Any need for spacing, postponing, or limiting comes at least after the first childbearing. Thereby, marriage duration is associated to contraceptive uptake. Along this side, married or in-union women's age is very significant in determining unmet needs particularly for spacing births and the odds of having unmet need for spacing and limiting births increase as the number of living children increases (Kisaakye 2013). One of the most important issues in advancing family planning's programs especially in Africa remains sociocultural barriers. In Muslim societies like Senegal where almost all population are Muslim (94%), the family planning challenges in this context are complicated not only by economic realities, but also and especially by the persistence of social and cultural realities. Resistance to family planning from religious leaders is particularly difficult and sensitive issue, especially relating to modern methods of contraception (Fleischman and Streifel 2014). Discussion between spouses is also known as important factor for contraceptives use in SSA countries (Letamo and Navaneetham 2015).

In *International Perspectives in Sexual and Reproductive Health*, Sidze and colleagues (2014) investigate young women's access to and use of contraceptives in urban Senegal. Their approach examined contraceptive use, method mix, unmet needs and method sources among women aged 15–29 who were either currently married or unmarried but sexually active and valued the role of providers' restrictions. Sidze and colleagues assessed survey data collected in 2011 for the evaluation of the Urban Reproductive Health Initiative and data from a sample of family planning providers in Senegal. They found, without surprise, that unmarried sexually active women are more likely to use modern contraceptives than married women

(27% against 20%). Their findings also highlighted that contraceptives providers constitute sometimes a barrier for contraceptives provision. They often set a minimum age restrictions for supplying some contraceptives like pill and injectable which are the most often used by young women in urban Senegal (2014).

In short, among other determinants of contraceptive uptake, sociocultural barriers, socioeconomic factors and other factors related both to supply-side and demand. Also, lack of contraceptive knowledge; access to family planning services; method cost; women's concerns about side effects; and women's husbands' or family members' objections to contraceptive use prevent contraceptives use in SSA countries. All, they play important role in access to, and adoption and continued use of, contraceptive methods among women.

RESEARCH GOALS

Given the low level of contraceptive use among Beninese women nationwide, on the one hand, and the variations across sub-regions highlighted by the last Beninese Demographic and Health Survey (DHS), on the other hand, the first objective of this study is to provide a better understanding of the these divergences. Determinants will be identified nationwide. The study also intends to assess the differences and resemblances across sub-regions by assessing specifics determinants in each sub-region. Prior these analyses, the levels and trends of contraceptive use between 2001 and 2011-2012 are examined.

MATERIALS AND METHODS

Data

Data are from the last three Demographic and Health Survey (DHS) conducted in Benin in 2011-2012, 2006 and 2001. Using a nationally representative sample the Measure DHS collects data on reproductive age women (15-49 years) on several areas such as contraceptive use. The study will be carried out nationwide and at sub-regions levels focusing on the ancient zoning: Atacora/Donga, Atlantique/Littoral, Borgou/Alibori, Mono/Couffo, Oueme/Plateau and Zou/Collines. The last three DHS data are used to draw the levels and trends of contraceptive use nationwide and by sub-regions while the most recent DHS data will be used for multivariate analyses.

Sample size distribution and prevalence of contraceptive use

Table 1 shows the prevalence of contraceptive use (any method) nationwide and in sub-regions at the time of the last three DHS. The proportions presented are based on normalized weighted frequencies of each DHS data. The prevalence of contraceptive use are computed as a percentage of total population (all married or in-union women including widowed and separated) of women who were using currently at least a contraceptive at each DHS time (2011-2012, 2006 and 2001).

Table 1 : Sample size at each DHS by region (Normalized weighted frequencies)

Region	Last DHS (2011-2012)			Next to Last DHS (2006)			Second from last DHS (2001)		
	No method	Any method	Any method (%)	No method	Any method	Any method (%)	No method	Any method	Any method (%)
Borgou/Alibori	1472	241	14.1	2287	191	7.7	757	79	9.4
Atacora/Donga	1505	167	10.0	1440	100	6.5	588	30	4.9
Atlantique/Litoral	2740	474	14.7	1944	856	30.6	778	248	24.2
Zou/Collines	1683	305	15.3	2198	485	18.1	758	240	24.0
Mono/Couffo	1443	178	11.0	1806	241	11.8	439	118	21.2
Oueme/Plateau	2138	259	10.8	2189	502	18.7	663	171	20.5
Nationwide	***10981***	***1624***	***12.9***	***11864***	***2375***	***16.7***	***3983***	***886***	***18.2***

Source: Estimations based on DHS data

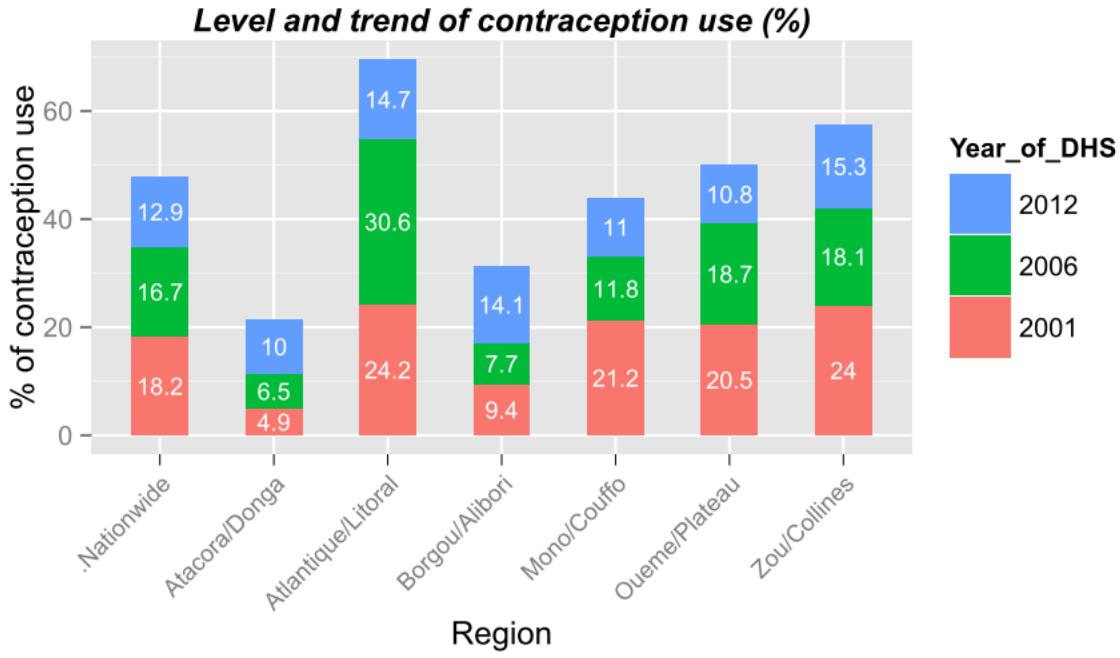
Levels and trends in contraceptive use

Examining the last three DHS, the already low level of contraceptive use estimated in 2001 has decreased over time nationwide with sharp variations across sub-regions. Indeed, the trend of contraceptive use (any method) among married or in-union women including widowed and separated was at the most recent DHS 12.9% nationwide. Prior, it was estimated at 16.7% and 18.2% in 2006 and 2001 respectively (Figure 1).

Compared to the nationwide level and according to the most recent DHS, contraceptive use is lower in Atacora/Donga, Mono/Couffo and Oueme/Plateau. Before the time of DHS 2011-2012, the issue of contraceptive use seemed to be predominant in the northern part (Atacora/Donga and Borgou/Alibori) of Benin. For instance, while contraceptive prevalence had been estimated at 18.2% and 16.7% respectively in 2001 and 2006 nationwide, it was 4.9% and 6.5% respectively in Atacora/Donga, the most disadvantaged sub-region. There was a regular decreasing of contraceptive use over time in

some sub-regions as nationwide. Regular descrease of contraceptive use has been noticed among women dwelling in Zou/Collines, Oueme/Plateau and Mono/Couffo between 2001 to 2011-2012.

Figure 1 : Level and trend of contraceptive use (any method) in Benin



Data source: Estimations based on DHS data.

Variables and measures

The target population is all in union women (married women or women living with partner) 15-49 years and were not currently pregnant at each DHS time. The dependent variable is the current use of contraception regardless the type of method (any method) by these women at the DHS. It is categorized into two categories: 1 (Using of contraception) and 0 (Not using) based on the current use as collected at each DHS. The independent variables included several individual and contextual factors drawn based on their practical relevance and from past studies. The explanatory variables include marriage duration, spousal age gap, level of education, partner's level of education, place of residence, occupation, partner's occupation, household wealth index, religion, ethnicity, age gap between spouses, education gap between spouses, marital status (married or consensual union), type of union (Monogamous or polygynous) respondent's current age, prior discussion about family

planning, number of living children, status of last birth (Wanted or not), time since the first cohabitation.

Methods and analytical approach

The target population of this study is all in union women (married or living with partner women) 15-49 years and were not pregnant at each DHS. In addition to descriptive analyses presented above, data analysis are conducted in bivariate and multivariate level. Cross tabulation and Pearson chi-squared test are involved at bivariate level to examine the association between the outcome and explanatory variables. Logistic regression models are performed to assess the determinants of contraceptive use nationwide. To examine the similarities and differences, logistic regressions models are also performed separately for each of the six sub-regions: Atacora/Donga, Atlantique/Littoral, Borgou/Alibori, Mono/Couffo, Oueme/Plateau and Zou/Collines. The relationships between explanatory variables are also examined each other using Chi-square test. The estimation revealed that education gap between spouses was correlated with partner's highest education. Then education gap between spouses was dropped out from the analyses.

Results

Table 2

Table 2 presents percent distribution of study population (all in union women which are not pregnant at survey time) by selected background characteristics. In addition, the associate chi-squares p-value highlighting the strength of the relationship between each variable and contraceptive use are also presented. Except tree variables, all selected background characteristics seem to be significantly associated with contraceptive uptake. Among these variables we have the respondent`s marital status (married or living in consensual union), the type of union (living in monogamous or in polygynous union) and at last, the number of living children.

Table 2 : Percentage distribution of the study population by selected background characteristics with associate chi-squares p-values (Pearson)

Variables	Categories	Frequency (population=9807)	p-value
Region	Atacora/Donga	16.4	0.000
	Atlantique/Littoral	19.8	
	Borgou/Alibori	15.5	
	Mono/Couffo	13.5	
	Oueme/Plateau	17.3	
	Zou/Collines	17.5	
Place of residence	Urban	37.7	0.000
	Rural	6.3	
Household wealth index	Poorest	22.4	0.000
	Poorer	21.6	
	Middle	21.5	
	Richer	19.4	
	Richest	15.1	
Religion	Traditional	17.0	0.000
	Muslim	25.7	
	Christian	51.6	
	No religion	5.7	
Marital status	Married	78.4	0.261
	Consensual union	21.6	
Type of union	Monogamous	61.2	0.059
	Polygynous	38.8	
Partner`s highest education	No education	59.2	0.000
	Primary	19.8	
	Secondary or above	21.0	
Partner`s occupation	Not working	1.6	0.000
	White collar	12.4	
	Saes/services	16.5	
	Agriculture	51.5	
	Manual/domestic	18.0	
Age gap between spouses	Wife older	4.5	0.021
	Same age	3.0	
	Husband older:		
	1-4 years	22.8	
	5-9 years	34.8	
	10-19 years	26.3	
	20 years or above	8.6	
Age (Wife)	15-24 years	17.3	0.000
	25-29 years	22.6	
	30-34 years	20.4	
	35-39 years	17.4	
	40-49 years	22.3	
Education (Wife)	No education	75.4	0.000
	Primary	14.8	

	Secondary or above	9.8	
Occupation (wife)	Not working	34.2	0.000
	White collar	2.6	
	Saes/services	37.9	
	Agriculture	19.9	
	Manual/domestic	5.2	
Discussed about FP	No	12.7	0.000
	Yes	87.3	
Number of living children	None	3.7	0.082
	1-3 kids	50.0	
	4-5 kids	29.3	
	6 or more	17.0	
Wanted last child	Wanted then	57.6	0.000
	Wanted later	8.6	
	Wanted no more	5.2	
	No birth within last 5 years	28.6	
Time since first cohabitation	0-4 years	17.7	0.001
	5-9 years	19.8	
	10-14 years	24.2	
	15 or above	38.4	

Source: Estimation based on Benin DHS data, 2011-2012

Risk factors of contraceptive uptake among in union women (15-49) nationwide

The results of logistic regression models on contraceptive use in the whole sample are presented in Table 3. The multivariate analyses confirm the difference across sub-regions in contraceptive use noticed in the context and forecasted at the bivariate level, despite the differences are not so sharp between sub-regions each other. Relatively to the reproductive age women who were in union from the departments of Atlantique/Littoral (Southern part), contraceptives are more used among their homologous from the departments of Zou/Collines (Middle part) and Borgou/Alibori (Northen part). Compared to those dwelling in Atlantique/Littoral, women from Zou/Collines and Borgou Alibori were about 42% and 32% respectively more likely to use family planning.

Like region of residence, some others variables play key roles in initiating contraceptive uptake among Beninese in union women in 2011/2012. These are: household index, religious membership, partner`s highest education, respondent`s current age at the survey, her occupation, respondent`s prior discussion about family planning, the number of living children, the status of the last birth (wanted or not) within the last five years preceding the survey. On the other hand, factors such as duration of the cohabitation (time since first cohabitation), age gap between women and their partners, occupation of the partners, type of

union (Monogamous of Polygynous), marital status (formal marriage of consensual union), and place of residence.

Even if contraceptive services seem to be cheap through commitments (of policy-makers) and affordable by majority, household wealth index, indicator of level of access to goods and services market discriminates Beninese in union women before contraceptive uptake. Compared to women from the poorest household, those from middle or above wealth index household, were about 30% to 50% more likely to initiating contraceptive uptake. Women`s religious membership also influence contraceptive in this context. Relatively to women from Traditional religion, Muslim in union women were 37% more likely to use contraceptive. Another factor pertaining to respondent`s partner also influences their odds for contraceptive uptake. It is the partner`s highest education attainment. Legally married or living in consensual women with partner who has attend formal school (at least primary), increase the odds of contraceptive use relatively to their homologous with no educated partners. The chance for contraceptive use increase with the increasing of the partner`s education attainment. Likewise, respondent`s won education level determines her ability for contraceptive use. Well educated women (secondary or above) were about 40% more likely to use contraceptives than the non-educated ones.

The odds of contraceptive use increase with women`s current age at the survey. Except the eldest women (40 – 49 years old), contraceptive use increases with respondent`s age, relatively to the young women (15-24 years old). Be unemployed or not working was not favourable to the odds of contraceptive use. All women who carrying out a job even the agriculture were more likely to use contraceptive, relatively to theirs homologous who were not working. The number of living children has a positive relationship with contraceptive use among Beninese in union women. Relative to women who had no living child at the survey, the odds of contraceptive use increase with the number of living children among the mothers. These odds are about 60% and 90% more among mothers with no more than 3 children and those with 4 or more living children, relatively to women with no living kid. Along this, the status of the last birth that women have given birth to within the last five years influences the contraceptive uptake. Women with unwanted (wanted later) last birth within the last five years preceding the survey are about 23% more likely to use contraceptive. As regard to women with no live birth during the last five years preceding the survey were about 50% more likely to contraceptive uptake.

At last, the estimation showed also a negative relationship between discussion about family planning and its uptake. Prior discussion about family planning plays a leading role in contraceptive uptake. But in reverse and unexpected. Prior discussion about family planning is not favourable for its uptake among Beninese women, surprising, isn't it? Women who had no prior discussion about family planning within the preceding month of the survey were about three time (2.8) more likely to have recourse de contraceptive relatively to their homologous who had discussed about it within this period.

Table 3 : Multiple logistic regression models with family planning use (any method) in the whole sample (B-DHS: 2011-2012)

Variable *Reference*	**Categories**	**Odd Ratio**
Region		
Atlantique/Littoral	Atacora/Donga	0.92
	Borgou/Alibori	1.32 **
	Mono/Couffo	1.90
	Oueme/Plateau	0.93
	Zou/Collines	1.42 ***
Place of residence		
Urban	Rural	1.04
Household wealth index		
Poorest	Poorer	1.16
	Middle	1.36 ***
	Richer	1.33 **
	Richest	1.53 ***
Religion		
Traditional	Muslim	1.37 ***
	Christian	1.14
	No religion	0.73 *
Marital status		
Married	Consensual union	1.00
Type of union		
Monogamous	Polygynous	0.91
Partner`s highest education		
No education	Primary	1.22 **
	Secondary or above	1.34 ***
Partner`s occupation		
Not working	White collar	1.11
	Saes/services	1.42
	Agriculture	1.11
	Manual/domestic	1.17
Age gap between spouses		
Wife older	Same age	1.08
	Husband older:	
	1-4 years	1.22

	5-9 years	1.22	
	10-19 years	1.10	
	20 years or above	1.24	
Respondent`s current age			
15-24 years	25-29 years	1.26	**
	30-34 years	1.29	**
	35-39 years	1.48	***
	40-49 years	1.17	
Respondent`s education			
No education	Primary	1.06	
	Secondary or above	1.38	***
Respondent`s occupation			
Not working	White collar	1.40	**
	Saes/services	1.18	**
	Agriculture	1.28	***
	Manual/domestic	1.31	**
Discussed about FP			
Yes	No	2.82	***
Number of living children			
None	1-3 kids	1.61	**
	4-5 kids	1.88	***
	6 or more	1.91	***
Wanted last child			
Wanted then	Wanted later	1.23	**
	Wanted no more	0.86	
	No birth within last 5 years	1.51	***
Time since first cohabitation			
0-4 years	5-9 years	1.17	
	10-14 years	0.86	
	15 or above	0.99	

Risk factors of contraceptive use among in union women (15-49) by sub-region

Results highlighting specific risk factors for contraceptive use within sub-regions are presented in Table 4. First, it is worth mention that almost all significant variables within sub-region follow the same direction (positive or negative) as showed with the results nationwide presented earlier. Besides, only one common factor discriminates every women within the sub-regions. It is: prior discussion about family planning, seen above as the most important leading factor with the highest odds. Here, same outcome across sub-regions each other.

In addition to prior discussion about family planning, the estimation showed specifics risk factors for contraceptive uptake among women within each sub-region. In departments of Atlantique/Littoral, the leading risk factors pertaining to women’s religious membership, her

partner's highest education attainment. Also, in these departments, the eldest women (40-49 years old) were more likely to initiating contraceptive use and the household wealth index seems not to be positively associated. Among women from Atacora/Donga, the leading risk factors are: household wealth index, her partner's education and occupation alike. Likewise, have been already had unwanted birth within previous five years for the survey did not even constitute a good experience to have recourse to family planning service. However, in departments of Borgou/Alibori, household's wealth index, age gap between the women and her partners and the status of the last children (wanted or not) constitute their leading risk factors to initiating contraceptive uptake. In departments of Mono/Couffo where low contraceptive use has been noticed, the key risk factors for in union women to use contraceptive pertaining to her won occupation and the age gap between her and her partner in addition to her marital status. Women living in consensual union seem to have low chance to have recourse to contraceptive use. This is contrary to our expectation. We expected contraception use among the latters as a mean to claim formal union. On the other hand, women's current age, her religious membership, the number of living children and the status of the last child (wanted or not) followed by the duration of the union were the leading risk factors to contraceptive use among women in departments of Oueme/Plateau. At last, in the department of Zou/Collines where the betters chance to contraceptive use have been noticed above, women living in consensual union were about 80% more likely to initiating contraception use. Besides, household wealth index, the number of living children, wanted of last child, women's current age at the survey and her occupation were the key risk factors for family planning use among in union women.

Table 4 : Multiple logistic regression models with family planning use (any method) by each sub-region (B-DHS: 2011-2012)

Variable *Reference*	Categories	Odd ratio					
		Atlantique Littoral	Atacora/ Donga	Borgou/ Alibori	Mono/ Couffo	Oueme/ Plateau	Zou/ Collines
Place of residence							
Urban	Rural	1.30	1.04	1.33	1.25	0.85	1.09
Household wealth index							
Poorest	Poorer	0.78	1.44	0.97	1.09	1.12	1.40
	Middle	0.58**	2.42***	1.53**	1.09	1.55	1.43
	Richer	0.81	1.75	1.35	0.67	1.35	1.75**
	Richest	0.63	2.08**	1.68	0.83	1.28	3.91***
Religion							

Traditional	Muslim	2.83***	1.77*	2.80	2.08	2.49***	0.76
	Christian	2.52***	1.41	3.16	1.14	1.48	0.91
	No religion	1.53	1.66	0.33	0.85	0.60	0.55*
Marital status							
Married	Consensual union	0.62	0.92	0.91	0.31***	1.19	1.80***
Type of union							
Monogamous	Polygynous	0.97	0.85	0.84	0.86	0.84	0.89
Partner`s highest education							
No education	Primary	1.46	1.37*	1.40	0.76	1.15	1.10
	Secondary or above	2.52***	1.32	1.29	0.84	1.32	1.49*
Partner`s occupation							
Not working	White collar	4.10	0.92	2.95	0.90	4.17	0.84
	Saes/services	4.16	1.10	4.37	0.60	6.45	1.40
	Agriculture	3.56	1.00	2.40	0.68	7.02*	0.69
	Manual/domestic	3.92	0.98	3.04	0.66	5.88	0.82
Age gap between spouses							
Wife older	Same age	1.13	0.89	1.17	2.47	0.87	1.15
	Husband older:						
	1-4 years	1.18	1.27	0.65	2.71	1.21	1.30
	5-9 years	1.20	0.93	0.83	2.28**	1.39	1.41
	10-19 years	1.24	0.97	0.58	2.27	1.40	1.00
	20 years or above	1.10	1.44	0.21**	2.28	1.80	2.00
Respondent`s current age							
15-24 years	25-29 years	1.63	1.18	0.87	1.63	1.95**	1.25
	30-34 years	1.51	1.21	1.00	1.29	2.35**	1.41
	35-39 years	2.04*	1.36	0.70	1.25	2.85***	2.17**
	40-49 years	2.52**	0.92	0.67	0.68	3.94***	1.23
Respondent`s education							
No education	Primary	0.98	1.00	1.07	1.16	0.96	1.34
	Secondary or above	1.37	1.59**	096	1.18	1.43	1.37
Respondent`s occupation							
Not working	White collar	0.61	1.47	1.21	5.38**	1.55	1.83
	Saes/services	0.74	1.18	1.08	5.31***	1.53*	0.60***
	Agriculture	0.44***	1.99**	1.38	5.10***	0.52*	1.18
	Manual/domestic	0.52	1.80**	1.37	4.25***	1.91*	0.75
Discussed about FP							
Yes	No	4.3***	2.33***	2.39***	1.51*	5.10***	3.91***
Number of living children							
None	1-3 kids	1.18	1.21	1.60	1.21	5.10*	2.70*
	4-5 kids	0.88	1.79	1.66	1.73	4.33**	2.78*
	6 or more	0.86	1.51	1.86	1.88	5.44**	3.6**
Wanted last child							
Wanted then	Wanted later	0.51	1.17	1.34	0.90	1.21	1.78**
	Wanted no more	1.22	0.44**	1.05	0.47	2.22**	0.95
	No birth within last 5 years	1.52*	0.8	2.48***	1.14	2.33***	1.63**
Time since first cohabitation							
0-4 years	5-9 years	0.65	1.29	1.42	1.52	0.79	1.19
	10-14 years	0.84	1.15	0.55*	0.74	0.58*	0.87
	15 or above	0.96	1.37	1.27	0.86	0.37***	0.88
Number of obs		1,605	1,942	1,522	1,323	1,696	1,719

Log likelihood	-491.44	-815.83	-590.91	-462.28	-581.17	-688.12

**p<0.10; **p,0.05; ***p<0.01*

DISCUSSION

This paper examined the levels and factors associated to contraceptive use among in union women in Benin (nationwide) and across sub-regions. Overall, findings from this study are consistent with previous ones. Descriptive results revealed a sharp variation in contraceptive prevalence across sub-regions. Logistic regression models have confirmed the differences across sub-regions forecasted at bivariate level and then confirming the specific effect of region of residence in the discrepancy in contraceptive use. Besides, the keys leading risk factor to contraceptive use were highlighted both nationwide and within each sub-region. Certain factors were not determinants nationwide and have discriminated women in some departments. Among them: the marital status which has revealed to have an ambivalent effect across sub-regions. While women living in consensual union in the departments of Zou and Collines were more likely to be favourable to contraceptive use, her homologous from Mono/Couffo were not. We were expecting that contraceptive methods may be a mean for women living in consensual union to claim formal union. Education level is also associated to contraceptive use. Better educated women with secondary level or higher have considerably less unmet needs than women with little or no education (Tessama et al. 2015). This finding is also consistent with this study.

Another thing, unexpected and revealed by the estimation from this study pertains to the prior discussion about family planning. Women who have discussed about family planning the previous month of the survey where less likely to use these services. This assume that current users of contraceptive were most the beginners and not old users. How surprising it may seem to be, it can, however, may be explained by possible side effects and health risks of methods. Indeed, previous studies showed that besides, breastfeeding and sexual activity, concerns regarding the side effects and health risks of methods were revealed as important factors to opposition to contraceptive use (Sedgh and Hussain 2014). Along this, it has revealed that adequate information about all aspects of contraceptive methods influence the woman's desire to use them. In the Netherlands, one of the important factors of the higher contraceptive utilization seems to be that Dutch women are very well informed about all aspects of contraception as a result of formal and informal education at school, in the families

and by the media. On the other hand Dutch women in general view their contraceptive choices as their own, they do not feel that they are very much influenced by the opinions of their physicians, who in general do not have a normative, patronizing and/or moralizing attitude regarding sexuality and contraception (Lunsen and Arnolds 1994).

On the other hand, one of the most important issues in advancing family planning's programmes especially in Africa is sociocultural barrier. In Muslim societies like Senegal (where almost all population are Muslim (94%)), the family planning challenges in this context are complicated not only by economic realities, but also and especially by the persistence of social and cultural realities. Resistance to family planning from religious leaders is a particularly difficult and sensitive issue, especially relating to modern methods of contraception (Fleischman and Streifel 2014). In Benin republic, the role of this factor is not lesser. Women, regardless to sub-region, form traditional religion were the one unfavourable to contraceptive use. Relatively to the latters, Beninese Muslim women were more likely to use contraceptive use. In certain departments like Atlantique and Littoral, in addition to Muslim women, Christian women were also favourable to contraceptive use.

The needs for contraceptives use increase with marriage duration especially in SSA countries. Indeed, in most SSA societies, at the first marriage or first cohabitation the need for spacing, delaying or postponing is low or does not exist at all. Women have to prove their procreation abilities. Any need for spacing, postponing, or limiting comes at least after the first childbearing. Thereby, married or in-union women's age is very significant in determining unmet need particularly for spacing births and the odds of having unmet need for spacing and limiting births increase as the number of living children increases (Kisaakye 2013). This study confirmed these findings. Indeed, this study revealed that, relatively to those women with no live children, the odd for contraceptive use increases over time with the number of living children. This odds were about 60% more among women with 1 to 3 living children and about 90% more among those with at least 4 living children.

CONCLUSION

This paper investigates the levels and factors associated to contraceptive use among in union women in Benin (nationwide) and across sub-regions using data from the last three Demographic and Health Survey conducted in this context in 2001, 2006 and 2011/2012. Levels and trends in contraceptive prevalence both nationwide and across sub-regions were drawn with aforementioned three DHS data. The last DHS data were used to assess current

risk factors to the low contraceptive prevalence noticed among in union women nationwide. Similarities and divergences were also highlighted across sub-regions in case of risk factors holding back contraceptive uptake among Beninese women. Overall, findings from this study are consistent with previous ones. Descriptive results revealed a sharp variation in contraceptive prevalence across sub-regions. Logistic regression models have confirmed the differences across sub-regions forecasted at bivariate level and then confirming the specific effect of region of residence in the discrepancy in contraceptive use. Besides, the keys leading risk factor to contraceptive use were highlighted both nationwide and within each sub-region.

Among worthwhile findings to recall, the possible side effects of the methods have been revealed to the most important leading risk factors, even if this were not clearly tested by this study. Indeed, prior discussion about family planning were estimate to play the key leading role in contraceptive use. Women who haven't had any prior discussion about family planning within the previous month of the survey were about three times more (2.8 times) to use contraceptive relatively to her homologous who had had a discussion about FP. This underlines possible side effects of the methods or misunderstandings that would have been outlined at these discussions. Besides, the role of both sociocultural and socioeconomic factors have also been underlined by this study.

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