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Assessment of intention to use modern contraceptives among women of reproductive age in Benin: evidence from a national population-based survey

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Abstract

Background Women's intentions to use any contraceptive method are critical for better understanding their future needs and making them more likely to act on that intention. This study assessed the factors associated with the intention to use modern contraceptives among women of reproductive age in Benin.

Methods This was a cross-sectional study that used the 2017–2018 Benin Demographic and Health Survey (BDHS). The study analyzed a weighted sample of 13,582 women of reproductive age who were non-users of contraceptives. The intention to use contraceptives was the outcome variable. Multivariate logistic regression analysis was conducted to determine the factors associated with the intention to use contraceptives among women of reproductive age. The results were estimated using an adjusted odds ratios (aOR) with a 95% confidence interval (CI) and statistical significance set at $p < 0.05$.

Results Approximately 35.0% of the women had the intention to use modern contraception. We found that women aged between 30 and 34 (aOR = 0.70, 95%CI: 0.57, 0.86), 35–39 (aOR = 0.52, 95%CI: 0.42, 0.66), 40–44 (aOR = 0.30, 95%CI: 0.22, 0.39) and 45–49 (aOR = 0.10, 95%CI: 0.07, 0.14), Muslim women (aOR = 0.68, 95%CI: 0.53, 0.85) and those who perceived the distance to a health facility not to be a big problem (aOR = 0.75, 95%CI: 0.67, 0.84) were less likely to have the intention to use modern contraceptives compared with their counterparts. On the other hand, women who attained primary (aOR = 1.21, 95%CI: 1.07, 1.36), secondary (aOR = 1.39, 95%CI: 1.21, 1.59), and higher education (aOR = 1.60, 95%CI: 1.13, 2.26), women who were employed (aOR = 1.39, 95%CI: 1.23, 1.57), women with no religion (aOR = 1.32, 95%CI: 1.04, 1.69), women whose partners were working (aOR = 1.69, 95%CI: 1.16, 2.44), women who heard about family planning in the media (aOR = 1.51, 95%CI: 1.16, 2.44), and women in the poorer (aOR = 1.31, 95%CI: 1.10, 1.54), middle (aOR = 1.42, 95%CI: 1.20, 1.67), richer (aOR = 1.23, 95%CI: 1.03, 1.47), and richest households (aOR = 1.42, 95%CI: 1.15, 1.75) were more likely to have the intention to use contraceptives than their counterparts.

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Conclusion The study provides valuable insights into the intention to use contraceptives among women of reproductive age in Benin. The findings indicate that the proportion of women who have intention to use contraceptives remains low. The findings of this study could inform the development of targeted interventions and policies to increase access to and uptake of contraceptives in Benin, with the ultimate aim of improving the reproductive health and well-being of women and their families.

Keywords Modern contraceptives, Prevalence, Women of reproductive age

Background

Contraception is the deliberate use of various methods, techniques, chemicals, drugs, surgical procedures, or devices to prevent pregnancy [1]. Access to a complete range of contraception is a cost-effective strategy that enables women to exercise their right to choose the timing and number of births, reduce unintended pregnancies and unsafe abortions, and reduce maternal and child mortality [2]. Evidence show that contraception prevented 308 million unintended pregnancies in 2017, and meeting women's contraception needs would avert an additional 67 million unintended pregnancies annually [3]. Contraception could also cause a reduction in maternal deaths from 308,000 to 84,000 and newborn mortality from 2.7 million to 538,000 annually [4]. This could help attain targets 3.1 and 3.2 of the Sustainable Development Goal 3 (SDG 3): to reduce the global maternal mortality ratio to less than 70 per 100,000 live births and end all preventable deaths under 5 years of age by 2030, respectively [5].

Due to the immense benefits of contraception, more women are now using contraceptive methods to avoid unintended pregnancies than in the past [6]. For instance, between 2000 and 2020, the global contraceptive prevalence rate increased from 47.7 to 49.0% [6]. Regrettably, contraceptive use is currently the lowest (27.8%) in sub-Saharan Africa (SSA), although the sub-region is characterized by high fertility rates [7]. In Benin, for example, the results of the 2017–2018 Demographic and Health Survey (DHS) indicate that only 12% of women of reproductive age were using any contraceptive method [8]. Recent DHS analysis in SSA also indicates that the rates of contraceptive use have largely been low, and reported to be 3.5% in the Central Africa Republic, 4.8% in Chad, 6.5% in the Gambia, and 9.9% in the Comoros [7].

Globally, the number of women of reproductive age (15–49 years) with a demand for contraception has increased markedly over the past two decades, from 900 million in 2000 to nearly 1.1 billion in 2020 [6]. Of these women, 842 million are users of modern methods of contraception, and 80 million are users of traditional methods of contraception [9]. An additional 170 million women do not use any method at all, despite their desire to avoid pregnancy, and thus are considered to have an unmet need for contraception [10]. Population growth is projected to add five million women with unmet needs

for contraception between 2020 and 2030 [6]. Similarly, over the next decade, SSA is projected to have an increase in the absolute number of women with an unmet need for contraception as a result of the continued population growth of women of reproductive age [6].

The intention to use contraceptives refer to women of reproductive age who currently are not using any contraceptive method but intend to use it in the near future [11, 12]. The intention of women to utilize any contraceptive method is vital for better understanding their future needs and making them more likely to turn that intention into action [13]. In SSA, studies report that spousal fertility preference, number of children alive, parity, contraceptive misconceptions, and socioeconomic factors, among others, influence the intention to use contraceptives [12, 14, 15]. A study in Nigeria using DHS data revealed that only 29% of women had the intention to use contraceptives [12]. Another study conducted among some countries in SSA reported the overall intention to use contraceptives to be 37.66% [11]. Country-specific rates were also low in Burundi (3.30%), Niger (42.32%), Mali (37.88%), DR. Congo (37.63%), Nigeria (35.25%), Angola (31.32%), Gambia (20.64%), and Chad (20.30%) [11]. These low contraception intention rates among women of reproductive age raise concerns over maternal and child morbidity and mortality.

Studies in SSA have reported that women's intention to use contraception is determined by contraception awareness and family support [16], fears of harming a woman's womb [17, 18], women's occupation [19], myths and rumours related to contraceptives [20], husband approval [21, 22], communication with friends [23], and socio-demographic factors like marital status, residence, the number of children, age, religion [14, 24, 25], and community factors such media exposure and distance to the nearest health facility [11, 26]. A recent survey in Benin reported that the unmet need for contraception has increased from 21% among women of reproductive age in 1996 to 32% in 2017/2018 [8]. Despite being reported to be a high-fertility country [27] and one out of five pregnancies are unplanned [28], not much is known about the intention to use contraceptives among women of reproductive age in Benin.

To fill this knowledge gap in Benin, the current study sought to use nationally representative data to assess the factors associated with the intention to use

contraceptives among Beninese women of reproductive age. Thus, by using multivariate logistic regression analysis, we can better appreciate the factors associated with the intention to use contraception. This will in turn be useful to programme and policy planners to create and implement contraceptive uptake strategies and policies in Benin.

Methods

Data source

This descriptive cross-sectional study used the 2017–2018 Benin Demographic and Health Survey (BDHS) data for analysis. The BDHS is a nationally representative population-based survey that is conducted periodically to collect health indices. In collaboration with the Ministry of Health, the National Institute of Statistics and Economic Analysis (INSAE) conducted the survey [29]. The United States Agency for International Development (USAID) and the government of the Republic of Benin funded the 2017–2018 BDHS with assistance from the Inner-City Fund (ICF) through the Demographic and Health Survey Program. The survey was conducted between November 6, 2017, to February 28, 2018. The main health indices included in the survey were contraceptive use, fertility, infant and child mortality, maternal and children's health, vaccination, and other key health issues.

The BDHS used a two-stage stratified sampling technique involving twelve departments that were stratified into urban and rural areas, except for Littoral, an entirely urban stratum. Twenty-three strata were involved in the survey and in each stratum, the Primary Sample Units (PSUs) were systematically selected (in the first stage) with probability proportional to the size. The 2013 General Population and Housing Census served as the sampling frame for the selection of the list of Enumeration Areas (EAs). After the list of households within the selected EAs, a systematic random sample of 26 households was selected from each PSU (in the second stage). Further details on the sampling and data collection methods are described elsewhere [29]. Approximately 14,156 households were selected, and women aged 15–49 in the selected households were eligible to participate in the survey. Out of 16,233 eligible women, 15,928 completed the survey representing a 98.1% response rate [29]. The current study sampled women who were non users of modern contraceptives. After data cleaning, 13,582 women of reproductive age were included for analysis. The dataset is publicly available at the Measure DHS repository (https://dhsprogram.com/data/dataset/Benin_Standard-DHS_2017.cfm_flag=1).

Outcome variable

The outcome measure in this study was the intention to use contraceptives. This indicator captures how much non-users of contraceptives intend to use any current technique in the future. The answer to the query “Do you intend to use contraceptives at any time in the future?” provided the variable. Non-user intends to use later and does not intend to use were the two possible answers to this question. The responses were re-coded in this study as “0” (does not intend to use) and “1” (non-user intends to use later).

Explanatory variable

In this study, thirteen explanatory variables were used based on related studies [25, 26, 30] and their accessibility within the dataset. The selected study variables included: women's age (15–19, 20–24, 25–29, 30–34, 35–39, 40–44 and 45–49), marital status (never married, married, widowed/divorced/separated), level of education (no education, primary, secondary, higher), occupation (working, not working), religion (Traditionalist, Islam, Christianity, other religion, no religion), ever-terminated pregnancy (yes, no), partner's occupation (working, not working), media exposure (yes, no), parity (no birth, one birth, two births, three births, four or more births) wealth index (poorest, poorer, middle, richer, richest), type of place of residence (urban, rural), and distance to health facility (big problem, not a big problem).

Statistical analysis

Stata version 14 was used for the data analysis in this study. The researchers conducted a descriptive, bivariate, and multivariate logistic regression analyses. To describe the study sample, a descriptive analysis was conducted. The chi-square test was used to examine the relationships between intentions to use contraceptives and each explanatory variable. The bivariate significant factors were then transferred to the multivariate logistic regression model. Adjusted odds ratios (aOR) with 95% confidence intervals (CIs) were used, respectively, to present the outcomes of the multivariate logistic regression analysis. Each explanatory variable was subjected to a multicollinearity diagnostic test, and none of them showed variance inflation beyond the rule of thumb (Min: 1.02; Max: 2.17; mean VIF: 1.40). The analyses considered the survey's complexity and the generalizability of the results by weighting the study sample (v005/1,000,000) and using Stata's survey set (svy) command.

Results

Sociodemographic characteristics

A total weighted sample of 13,582 women of reproductive age (15–49) were included in the survey. We found that approximately 35.0% of the women had intention to

use contraception. The majority of the women were married (69.2%) while most had no formal education (56.4%). The majority of the women were working (76.6%) likewise their partners (67.6%). Most of the women resided in the rural areas (58.8%) (Table 1).

Factors associated with the intention to use modern contraceptives among women of reproductive-age

From Table 2: women aged between 30 and 34 (aOR=0.70, 95%CI: 0.57, 0.86), 35–39 (aOR=0.52, 95%CI: 0.42, 0.66), 40–44 (aOR=0.30, 95%CI: 0.22, 0.39) and 45–49 (aOR=0.10, 95%CI: 0.07, 0.14) were less likely to have the intention to use contraceptives than those aged 15–19 years. Women who attained primary (aOR=1.21, 95%CI: 1.07, 1.36), secondary (aOR=1.39, 95%CI: 1.21, 1.59), and higher (aOR=1.60, 95%CI: 1.13, 2.26) education were more likely to have the intention to use contraceptives than those without formal education. Women who were employed (aOR=1.39, 95%CI: 1.23, 1.57) were more likely to have the intention to use contraceptives than those who were not employed. Moslem women (aOR=0.68, 95%CI: 0.53, 0.85) were less likely to have the intention to use contraceptives while those with no religion (aOR=1.32, 95%CI: 1.04, 1.69) were more likely to have the intention to use contraceptives than those who were traditionalist. Women whose partners were working (aOR=1.69, 95%CI: 1.16, 2.44) were more likely to have the intention to use contraceptives than those whose partners were not working. Women who heard about family planning in the media (aOR=1.51, 95%CI: 1.16, 2.44) were more likely to have the intention to use contraceptives than those who were not exposed to media. Women in the poorer (aOR=1.31, 95%CI: 1.10, 1.54), middle (aOR=1.42, 95%CI: 1.20, 1.67), richer (aOR=1.23, 95%CI: 1.03, 1.47), richest (aOR=1.42, 95%CI: 1.15, 1.75) were more likely to have the intention to use contraceptives than those in the poorest wealth category. Women who perceived the distance to a health facility not to be a big problem (aOR=0.75, 95%CI: 0.67, 0.84) were less likely to have the intention to use contraceptives than their counterparts.

Discussion

The study assessed the factors associated with the intention to use contraceptives in the near future among women of reproductive age in Benin. The multivariate analysis revealed that women aged 15–19 years, women who attained primary, secondary, and higher education, women who were employed, women whose partners were working, and women who heard about family planning in the media were more likely to have the intention to use contraceptives. Also, Muslim women and women in the poorest wealth category were less likely to have the intention to use contraceptives.

Our study found a positive association between age and the intention to use contraceptives. Women aged 15–19 were more likely to have the intention to use contraceptives than their older counterparts. This finding is consistent with prior studies conducted in Nigeria [11, 25, 31]. One plausible explanation might be that women in the 15–19 age group are at a time where they engage in academic activities. As a result, they might have more intentions to use contraceptives to postpone childbirth. Moreover, there is a low risk of conception as a woman's age increases. This is because older women would have finished childbearing, adopted a contraceptive method prior to the survey or were already having menopausal symptoms with less desire for sex and reduced intention to use a contraceptive method [32].

The positive correlation between education and intention to use contraceptives is worth noting. Our findings revealed that women who attained primary, secondary, and higher education were more likely to have the intention to use contraceptives than those without formal education. Our finding agrees. The finding of our study is in agreement with earlier studies conducted in Nigeria [33], Ethiopia [34–36], and other countries in SSA [11, 31]. A plausible explanation might be that women with a formal education have better exposure to contraceptives through school health services which improves their awareness of contraceptive methods [37]. Also, through education, women become aware of the health and economic dangers posed by unplanned pregnancies and the benefits conferred by the use of contraceptives to plan childbearing [33]. Uneducated women mostly rely on their spouses to make important decisions such as whether or not to use contraception [38], educated women on the other hand have the autonomy to decide on future contraceptive use [39]. This implies that educating more women in Benin can improve their intention to use contraceptives in the near future.

This study also revealed that women who were employed were more likely to have the intention to use contraceptives. This finding is congruent with a prior study in Ghana [40] and other countries in SSA [25]. Likewise, we found that women whose partners were working were more likely to have the intention to use contraceptives than those whose partners were not working. This finding also concurs with a previous study [25]. These positive relationships between employment and intention to use contraceptives may be due to the ability of the women and their working partners to afford contraceptives [41]. This is because the uptake of contraceptives in Benin is associated with a significant financial cost [42]. Therefore, women who were employed and women whose partners were working can afford the cost of contraceptives and hence, are more likely to have the intention to use contraceptives.

Table 1 Sociodemographic characteristics of respondents (N= 13,582)

| Variables | Weighted N | Weighted % | Intention to use contraceptives | |
|--|------------|------------|---------------------------------|------|
| | | | NO | YES |
| Age (years) | | | | |
| 15–19 | 3,116 | 22.9 | 65.5 | 34.5 |
| 20–24 | 2,465 | 18.2 | 59.2 | 40.8 |
| 25–29 | 2,481 | 18.3 | 58.5 | 41.5 |
| 30–34 | 1,769 | 13.0 | 61.9 | 38.1 |
| 35–39 | 1,548 | 11.4 | 66.8 | 33.2 |
| 40–44 | 1,077 | 7.9 | 77.1 | 22.9 |
| 45–49 | 1,126 | 8.3 | 90.1 | 9.9 |
| Marital status | | | | |
| Never married | 3,440 | 25.3 | 65.4 | 34.6 |
| Married | 9,393 | 69.2 | 65.0 | 35.0 |
| Widowed/Divorced/Separated | 749 | 5.5 | 76.4 | 23.6 |
| Educational status | | | | |
| No education | 7,667 | 56.4 | 67.9 | 32.1 |
| Primary | 2,681 | 19.7 | 64.2 | 35.8 |
| Secondary | 3,010 | 22.2 | 62.3 | 37.7 |
| Higher | 224 | 1.7 | 59.0 | 41.0 |
| Occupation | | | | |
| Not working | 3,181 | 23.4 | 69.6 | 30.4 |
| Working | 10,401 | 76.6 | 64.6 | 35.4 |
| Religion | | | | |
| Traditionalist | 1,296 | 9.6 | 65.7 | 34.3 |
| Islam | 4,103 | 30.2 | 70.4 | 29.7 |
| Christianity | 7,353 | 54.1 | 64.1 | 35.9 |
| Other religion | 149 | 1.1 | 72.9 | 27.1 |
| No religion | 681 | 5.0 | 54.3 | 45.7 |
| Ever terminated pregnancy | | | | |
| No | 12,084 | 78.6 | 65.9 | 34.1 |
| Yes | 1,498 | 21.4 | 64.8 | 35.2 |
| Partner's occupation | | | | |
| Not working | 4,397 | 32.4 | 67.8 | 32.2 |
| Working | 9,185 | 67.6 | 64.7 | 35.3 |
| Heard of family planning in the media | | | | |
| No | 13,147 | 96.8 | 66.0 | 34.0 |
| Yes | 435 | 3.2 | 58.0 | 42.0 |
| Parity | | | | |
| No birth | 3,767 | 27.7 | 66.0 | 34.0 |
| One birth | 1,763 | 13.0 | 60.9 | 39.1 |
| Two births | 1,672 | 12.3 | 64.0 | 36.0 |
| Three births | 1,541 | 11.4 | 63.2 | 36.8 |
| Four or more births | 4,839 | 35.6 | 68.7 | 31.3 |
| Wealth index | | | | |
| Poorest | 2,444 | 18.0 | 87.7 | 13.3 |
| Poorer | 2,692 | 19.8 | 80.9 | 19.1 |
| Middle | 2,682 | 19.7 | 74.3 | 25.7 |
| Richer | 2,858 | 21.1 | 69.9 | 30.1 |
| Richest | 2,906 | 21.4 | 51.2 | 48.8 |
| Type of place of residence | | | | |
| Urban | 5,598 | 41.2 | 67.8 | 32.2 |
| Rural | 7,984 | 58.8 | 64.2 | 35.8 |
| Distance to a health facility | | | | |

Table 1 (continued)

| Variables | Weighted N | Weighted % | Intention to use contraceptives | |
|-------------------|------------|------------|---------------------------------|------|
| | | | NO | YES |
| Big problem | 4,337 | 31.9 | 62.2 | 37.8 |
| Not a big problem | 9,245 | 68.1 | 67.4 | 32.6 |
| Region | | | | |
| Alibori | 1,590 | 11.7 | 60.9 | 39.1 |
| Atacora | 1,130 | 8.3 | 55.7 | 44.3 |
| Atlantic | 1,655 | 12.2 | 58.6 | 41.4 |
| Borgou | 1,595 | 11.8 | 69.6 | 30.4 |
| Collines | 950 | 7.0 | 67.6 | 32.4 |
| Couffo | 984 | 7.2 | 68.7 | 31.3 |
| Donga | 828 | 6.1 | 79.8 | 20.2 |
| Littoral | 730 | 5.4 | 67.3 | 32.7 |
| Mono | 589 | 4.3 | 65.2 | 34.8 |
| Oueme | 1239 | 9.1 | 77.9 | 22.1 |
| Plateau | 913 | 6.7 | 59.1 | 40.9 |
| Zou | 1379 | 10.2 | 63.8 | 36.2 |

Also, the study found that Muslim women were less likely to have the intention to use contraceptives as compared to Christian women while those with no religion were more likely to have the intention to use contraceptives than those who were traditionalist. This aligns with previous studies conducted in Ethiopia [26, 40, 43] and Ghana [40]. This finding may be related to the understanding of the norms and principles of the Muslim religion. Some Muslim women usually depend on what is written in Quran for guidance in their lives and believe it is against their religion to decide how many children to have [44]. Others believe that contraception is against the teachings of Islam [45]. Given that religion is an important part of life in Benin and Muslims depend on guidance from religious leaders on many aspects of their lives, informing religious leaders about the advantages of contraception and soliciting their support can be an important strategy to improve the intention to use contraceptives among Beninese women in the near future [42].

Furthermore, our study findings showed that women who heard about contraception in the media were more likely to have the intention to use contraceptives than those who were not exposed to the media. This finding concurs with previous studies [46, 47]. A possible explanation for this finding might be that women who heard about contraception in the media might have a better understanding of contraceptives, which can bring a positive change in their attitude toward contraceptives and have a substantial positive effect on their intended future use of contraceptives [31]. The media can be effective in reaching a large proportion of the population in Benin [42]. Therefore, intensifying educational campaigns on

contraceptives through the media can be effective in reaching many Beninese women and improving their intention to use contraceptives in the near future.

Lastly, as observed in our study, women in the poorer, middle, richer, and richest wealth categories were more likely to have the intention to use contraceptives than those in the poorest wealth category. This finding resonates with earlier studies conducted in Burkina Faso [48] and other countries in SSA [11, 31]. The intention and use of contraception entails a significant financial cost in SSA [25, 48] and especially in Benin [42]. Therefore, a possible reason for this finding might be that women in the poorest wealth category in Benin might not be able to deal with the cost barrier associated with access to contraceptive use. Whereas women in the middle and richest wealth category may be able to afford it, their counterparts in the poorest wealth category cannot overcome the direct and indirect financial costs associated with the various contraceptive methods [30]. Evidence suggests that free access to contraceptives predisposes impoverished women to use or intend to use contraceptives [44]. Therefore, our finding implies that making contraceptives freely accessible to all Benin women can improve their intention to use contraceptives in the near future.

The main strength of the study was the use of nationally representative survey data which makes the findings generalizable. However, the DHS data do not include a qualitative component that assesses women's sociocultural factors and other relevant factors that could influence women's intention to use contraceptives. Another important limitation is that all the variables were self-reported and recall bias may have been introduced.

Table 2 Factors associated with the intention to use contraceptives

| Variables | Unadjusted Odds ratio (cOR) [95% CI] | Adjusted Odds ratio (aOR) [95% CI] |
|--|--------------------------------------|------------------------------------|
| Age (years) | | |
| 15–19 | Ref | Ref |
| 20–24 | 1.31 *** [1.17,1.46] | 1.01 [0.88,1.16] |
| 25–29 | 1.35 *** [1.21,1.50] | 0.90 [0.75,1.07] |
| 30–34 | 1.17*[1.04,1.32] | 0.70 ** [0.57,0.86] |
| 35–39 | 0.95 [0.83,1.07] | 0.52 *** [0.42, 0.66] |
| 40–44 | 0.56 *** [0.48,0.66] | 0.30*** [0.22,0.39] |
| 45–49 | 0.21*** [0.17,0.26] | 0.10*** [0.07,0.14] |
| Marital status | | |
| Never married | Ref | Ref |
| Married | 1.02 [0.94,1.10] | 0.67 [0.45,1.00] |
| Widowed/Divorced/Separated | 0.53*** [0.49,0.70] | 0.94 [0.70,1.26] |
| Educational status | | |
| No education | Ref | Ref |
| Primary | 1.18*** [1.08,1.29] | 1.21** [1.07,1.36] |
| Secondary | 1.28*** [1.17,1.39] | 1.39 ***[1.21,1.59] |
| Higher | 1.46** [1.13,1.89] | 1.60**[1.13,2.26] |
| Occupation | | |
| Not working | Ref | Ref |
| Working | 0.44*** [1.15,1.37] | 1.39*** [1.23,1.57] |
| Religion | | |
| Traditionalist | Ref | Ref |
| Islam | 0.81** [0.71,0.92] | 0.68**[0.53,0.85] |
| Christianity | 1.06 [0.95,1.21] | 0.99 [0.83,1.18] |
| Other religion | 0.71 [0.48,1.05] | 0.77 [0.47,1.24] |
| No religion | 1.61*** [1.34,1.94] | 1.32* [1.04,1.69] |
| Partner's occupation | | |
| Not- working | Ref | Ref |
| Working | 1.15***[1.06,1.23] | 1.69 **[1.16,2.44] |
| Parity | | |
| No birth | Ref | Ref |
| One birth | 1.25***[1.11,1.40] | 1.30 [1.09,1.57] |
| Two births | 1.09 [0.97,1.23] | 1.27[1.04,1.54] |
| Three births | 1.12 [1.00,1.28] | 1.46[1.16,2.44] |
| Four or more births | 0.88* [0.81,0.97] | 1.91 [1.55,2.37] |
| Heard of family planning in the media | | |
| No | Ref | Ref |
| Yes | 1.41*** [1.16, 1.69] | 1.51*** [1.16,2.44] |
| Type of place of residence | | |
| Urban | Ref | Ref |
| Rural | 1.17*** [1.10,1.26] | 1.16* [1.00,1.36] |
| Wealth index | | |
| Poorest | Ref | Ref |
| Poorer | 1.22**[1.08,1.36] | 1.31 **[1.10,1.54] |
| Middle | 1.21**[1.07,1.35] | 1.42*** [1.20,1.67] |
| Richer | 1.02 [0.91,1.14] | 1.23 *[1.03,1.47] |
| Richest | 1.10 [0.98,1.22] | 1.42** [1.15,1.75] |
| Distance to a health facility | | |
| Big problem | Ref | Ref |
| Not a big problem | 0.80*** [0.74,0.86] | 0.75***[0.67, 0.84] |
| Region | | |
| Alibori | Ref | Ref |
| Atacora | 1.24** [1.07,1.45] | 0.88 [0.60,1.25] |

Table 2 (continued)

| Variables | Unadjusted Odds ratio (cOR) [95% CI] | Adjusted Odds ratio (aOR) [95% CI] |
|-----------|--------------------------------------|------------------------------------|
| Atlantic | 1.10 [0.95,1.28] | 0.79 [0.60,1.19] |
| Borgou | 0.68***[0.58,0.79] | 0.53 ***[0.39,0.73] |
| Collines | 0.75*** [0.64,0.88] | 0.47*** [0.36,0.69] |
| Couffo | 0.71***[0.60,0.84] | 0.45***[0.34,0.67] |
| Donga | 0.40***[0.32,0.48] | 0.35*** [0.26,0.51] |
| Littoral | 0.75**[0.64,0.89] | 0.55**[0.43,0.87] |
| Mono | 0.83 [0.69,1.01] | 0.55** [0.40,0.82] |
| Oueme | 0.44***[0.37,0.53] | 0.29 ***[0.22,0.43] |
| Plateau | 1.08 [0.91,1.27] | 0.73 [0.54,1.06] |
| Zou | 0.88 [0.75,1.03] | 0.58** [0.45,0.86] |

Legend: CI=Confidence Interval; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Ref=Reference category

Conclusion

The study provides valuable insights into the intention to use contraceptives among women of reproductive age in Benin. The findings indicate that the proportion of women who have intention to use contraceptives remains very low. The study revealed that women who were aged 15–19 years, attained primary, secondary, and higher education, were employed, whose partners were working, and who heard about family planning in the media were more likely to have the intention to use contraceptives. Also, Muslim women and women in the poorest wealth category were less likely to have the intention to use contraceptives in the near future. Therefore, efforts to increase the uptake of contraceptives should focus on improving education and economic opportunities for women, particularly those in rural areas. Policymakers and other key stakeholders should solicit the support of religious leaders in designing contraceptive education programmes, expand contraceptive education programmes through the media, and make contraceptives freely accessible to all Beninese women especially those in the poorest wealth households.

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Author contributions

A.K.K., S.S.D., and A.A., conceived the study and analyzed and wrote the manuscript. T.T.L., G.A.A., M.T.K., D.B.D., R.A.A., V.N.Y., J.A.A., E.A.A., and S.M.S., conducted the literature search and wrote the Manuscript. All the authors reviewed and provided intellectual content and modification and approved the final draft of the manuscript.

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Data availability

The dataset is publicly available at the Measure DHS repository (https://dhsprogram.com/data/dataset/Benin_Standard-DHS_2017.cfm_flag=1).

Declarations

Ethics approval and consent to participate

This study did not require ethical approval because we used secondary data from the DHS.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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