

## KNOWLEDGE OF OVULATORY CYCLE AND ASSOCIATED FACTORS AMONG REPRODUCTIVE AGE WOMEN IN NIGERIA

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**Relevance.** The break-up and exit of the dominant follicle into the fallopian tube from the ovary is a physiological event known as ovulation. To determine fertility chances, it is essential to understand the physiology of the ovulatory cycle.

**Objective.** This study assesses the knowledge of the ovulatory cycle (KOC) and associated factors among reproductive-age women in Nigeria.

**Materials and methods.** The research was based on 2018 NDHS data (which was the most current at the time of this study). 90,290 women of reproductive age were taken into account for this investigation. The methods of analysis used are percentage, frequency, chi-square test and Binary Logistic Regression Analysis.  $p < 0.05$  was considered to be statistically significant.

**Results.** Only 25% of the 90,290 reproductive women included in the investigation were found to be knowledgeable of the ovulatory cycle. The study revealed that age, region, place of residence (urban), religion, marital status (living with a partner), maternal education (primary and higher education), husband's educational level and women's media exposure had a significant effect on knowledge of the ovulatory cycle.

**Conclusion.** KOC, however, was low (25%), necessitating the development and implementation of reproductive health services through community media campaigns and health promotion. The authors of this study urge the Nigerian Ministry of Health to prioritize improving the reproductive health of women by prioritizing adolescents and those with less education. Additionally, media initiatives might be strengthened to improve women's KOC, which is essential for preventing unwanted pregnancy.

**Keywords:** Knowledge, Ovulatory cycle, Reproductive age, Women, Nigeria

**Relevance.** A mature woman's uterus and ovary undergo natural changes on a monthly basis that are known as the menstrual cycle. It is a fundamental phenomenon for sexual reproduction with the ovarian cycle and the uterine cycle as its two subdivisions [1]. The follicular phase, ovulation, and luteal phase make up the ovarian cycle.

The break-up and exit of the dominant follicle into the fallopian tube from the ovary is a physiological event known as ovulation [2]. The basal body temperature and cervical mucus can be used to determine the time of ovulation [3]. Ovulation knowledge helps women in conceiving a child or avoiding sexual activity during the fertile phase for the purpose of contraception [4].

The ovulatory cycle is among the fertility awareness family planning methods (FPMs) in which people utilize bodily measurements or timely changes to determine when it is fertile to have sexual relations [5-6]. It also helps to recognize certain diseases [5] and monitor fertility [7], although a lack of knowledge of the ovulatory cycle (KOC) increases the risk of unwanted pregnancy [1].

In comparison to nations like the United States [1], Spain [9], Togo, and Ghana, the KOC in Nigeria is

low [8]. To determine fertility chances, it is essential to understand the physiology of the menstrual cycle, particularly the ovulation time. A woman will be protected from unwanted and unplanned pregnancies if she understands her ovulatory cycle correctly. Similar to this, women who do not utilize contraception and are unaware of their fertile period are more likely to become pregnant unintentionally [10]. To recommend or employ FPMs, which are used by a large number of women globally [11], KOC is also essential.

Generally speaking, it is essential to analyze reproductive women's knowledge of the ovulation period in order to suggest natural family planning methods (NFPs) as a choice in an era of rising health hazards, refusals, discontinuations, and significant unmet demands for modern contraception. Identifying factors connected to knowledge of the ovulatory cycle and design of factor-oriented strategies would help reproductive women unable to use modern contraceptives to utilize NFPs more frequently. Despite this, there are only a few studies that address the issue of knowledge of the ovulation cycle among reproductive women.

**Objective.** Therefore, the current study assesses the knowledge of the ovulatory cycle and associated factors among reproductive women in Nigeria.

## MATERIALS AND METHODS

### *Source of Data*

The 2018 Nigeria Demographic and Health Survey (NDHS) was the source of the data used in this study. 90,290 women who were of reproductive age were taken into account for this investigation. At the time of this study, the 2018 survey was the most current in Nigeria's series of NDHS. It was carried out with cooperation from a number of foreign partners [12].

### *Ethical Considerations*

The research was based on NDHS data that had been made available to the general public. The organizations (NDHS) that ordered, paid for or managed the surveys were in charge of the ethical procedures. All DHS surveys are approved by ICF International and an Institutional Review Board in each nation to guarantee that the protocols adhere to US Department of Health and Human Services requirements for the protection of human subjects.

### *Study Variables*

The outcome variable is Knowledge of the Ovulatory Cycle (Non-knowledgeable and Knowledgeable) while the independent variables are women's age group (15-19 years, 20-24 years, 25-29 years, 30-34 years, 35-39 years, 40-44 years and 45-49 years), Geo-Political Zones (North Central, North West, North East, South-South South East, and South-West), Place of Residence (Rural and Urban), Religion (Catholic, Other Christian, Islam, Traditionalist, Other), Maternal Education (No Education, Primary, Secondary and Tertiary), Wealth Index (Poor, Middle and Rich), Husband Educational Level (No Education, Primary, Secondary, Tertiary), and Women Media Exposure (No and Yes).

### *Method of Data Analysis*

The methods of analysis used are percentage, frequency, chi-square test to discover if there is a relationship between two or more categorical variables and Binary Logistic Regression Analysis. Statistical software used for the analysis was STATA V.17.  $p < 0.05$  was considered to be statistically significant.

### *Chi-Square Test*

When the test statistic is chi-squared distributed under the null hypothesis, a statistical hypothesis test called a chi-squared test (also known as a chi-square or  $\chi^2$  test) can be used. This includes Pearson's chi-squared test and its variations. If there is a statistically significant difference between the expected frequencies and the observed frequencies in one or more categories of a contingency table, it can be determined using Pearson's chi-squared test. Additionally, it can be used to assess how well an actual distribution fits a hypothetical distribution of frequencies.

The formula for calculating a Chi Square is:

$$\chi^2 = \sum_i \frac{(O_i - E_i)^2}{E_i}, (1)$$

Where

$O_i$  = Observed Frequency

$E_i$  = Expected Frequency

## RESULTS AND DISCUSSION

### *Socio-demographic characteristics of the respondents*

Table 1 shows the socio-demographic characteristics of the respondents of the study participants as well as knowledge of the ovulatory cycle among women of reproductive age in Nigeria. Out of a sample of 90290 women who participated in the survey, the majority of the respondents are within the age group 35-39 years with 22.3 % followed by 40-44 years with 19.6 %. A total of 17.7 % of the respondents are from North central, 19.4 % from North East, 28.3 % from North West, 12.0 % from South East, 10.3 % from South-South while 12.4 % are from South West. Based on the place of residence of the respondents, 35.5 % are from urban areas while 64.5 % of the respondents are from rural areas.

Based on the religion of the respondents, the majority of the respondents are Islam with 55.4 % followed by other Christian dominations with 33.9 %, then 9.7 % are catholic. 45.9 % of the women had no formal education, 21.1 % had primary education, 26 % had secondary education and 6.9 % had tertiary education. The majority of the respondent are poor with 44.8 %, 21.9 % are within the middle class while 33.3 % are poor. The result shows that 97.2 % of the respondents had no media exposure while 2.8 % had media exposure. Only 25.0 % were found to be knowledgeable about the ovulatory cycle while 75 % of the respondents are not knowledgeable about the ovulatory cycle. Based on the respondents' partners, 35.4 % had no formal education, 19.1 % had primary education, and 32.1 % had secondary education while 13.4 % had tertiary education.

### *Factor associated with knowledge of ovulatory cycle in Nigeria*

The result shown in Table 2 revealed that maternal age, regions, place of residence, religion, maternal education, wealth index, marital status, husband educational level, and women's media exposure are associated with the knowledge of the ovulatory cycle in Nigeria with a p-value less than the level of significance ( $p < 0.05$ ).

Table 1  
**Socio-Demographic Characteristics of the Respondents (n=90290)**

| Factors                                   | Frequency | Percentage (%) |
|---|-----------|----------------|
| <b>Maternal Age</b>                       |           |                |
| 15-19 years                               | 591       | 0.7            |
| 20-24 years                               | 4648      | 5.1            |
| 25-29 years                               | 12670     | 14.0           |
| 30-34 years                               | 16928     | 18.7           |
| 35-39 years                               | 20127     | 22.3           |
| 40-44 years                               | 17725     | 19.6           |
| 45-49 years                               | 17601     | 19.5           |
| <b>Regions</b>                            |           |                |
| North Central                             | 15966     | 17.7           |
| North East                                | 17474     | 19.4           |
| North West                                | 25534     | 28.3           |
| South East                                | 10832     | 12.0           |
| South South                               | 9313      | 10.3           |
| South West                                | 11171     | 12.4           |
| <b>Residence</b>                          |           |                |
| Urban                                     | 32033     | 35.5           |
| Rural                                     | 58257     | 64.5           |
| <b>Religion</b>                           |           |                |
| Catholic                                  | 8771      | 9.7            |
| Other Christian                           | 30633     | 33.9           |
| Islam                                     | 50032     | 55.4           |
| Traditionalist                            | 518       | 0.6            |
| Other                                     | 336       | 0.4            |
| <b>Maternal Education</b>                 |           |                |
| No Education                              | 41484     | 45.9           |
| Primary                                   | 19091     | 21.1           |
| Secondary                                 | 23450     | 26.0           |
| Tertiary                                  | 6265      | 6.9            |
| <b>Wealth Index</b>                       |           |                |
| Poor                                      | 40434     | 44.8           |
| Middle                                    | 19761     | 21.9           |
| Rich                                      | 30095     | 33.3           |
| <b>Husband Educational Level</b>          |           |                |
| No Education                              | 31954     | 35.4           |
| Primary                                   | 17259     | 19.1           |
| Secondary                                 | 28970     | 32.1           |
| Tertiary                                  | 12107     | 13.4           |
| <b>Women Media Exposure</b>               |           |                |
| No  | 87771     | 97.2           |
| Yes                                       | 2519      | 2.8            |
| <b>Knowledge of Ovulatory Cycle (KOC)</b> |           |                |
| Non-Knowledgeable                         | 67688     | 75.0           |
| Knowledgeable                             | 22602     | 25.0           |

The result obtained in Table 3 using logistic regression analysis indicated that age groups, 25-29 years and 30-34 years, 35-39 years, 40-44 years and 45-49 years had a significant effect on the knowledge of ovulatory cycle in Nigeria with a p-value less than the level of significance ( $p < 0.05$ ).

Also, regions (Northeast, Southeast, Southeast and South-South), place of residence (rural), religion (other Christian, Islam, Traditionalist and other religions), marital status (living with a partner), maternal education (primary and higher education), husband educational level (primary, secondary and higher education) and women media exposure (yes) had a significant effect on knowledge of ovulatory cycle with p-values less than the level of significance ( $p < 0.05$ ).

Women aged 35-39 years and 40-44 years were found 1.5346 times and 1.5257 times more likely to be knowledgeable about the ovulatory cycle than women whose ages were less than 35 years respectively. Respondents that live in the Southeast region are found 3.2512 times more likely to be knowledgeable about the ovulatory cycle than those who live in North Central, Northeast, Northwest, South-South and Southwest. Rural residents were found to be 0.8449 times less likely to be knowledgeable about the ovulatory cycle compared to urban residents. Based on maternal education, those who had tertiary education certificates are found to be 1.4717 times more likely to be knowledgeable than those with no formal education and primary education.

Similarly, the husband's educational level indicated that those who had tertiary education certificates are about 1.4263 times more likely to be knowledgeable those partners with no formal education. The wealth index of the respondent was not significantly associated with knowledge of the ovulation period. And women who got media exposure were found to be 91 % more likely to be knowledgeable about the ovulatory cycle than women who did not get media exposure.

The ability to plan for pregnancy or prevent it depends on the women of childbearing age having knowledge of the ovulatory cycle. Only 25 % of the 90,290 reproductive women included in the investigation were found to be knowledgeable of the ovulatory cycle. This is greater than the 15 % reported in India [13] but comparable to studies done in the Gambia (23.1 %), Kenya (23.4 %), and Guinea (23.3 %). The prevalence discovered in this study, however, is lower than that discovered in other studies in African nations including Ghana (34 %), Togo (42.8 %), and Comoros (49 %) [8]. These inequalities may be caused by socio-economic level differences and socio-cultural differences among women of reproductive age in these nations.

Age was shown to be significantly associated with knowledge of the ovulatory cycle in this NDHS analysis. Women who are older were discovered to

Table 2

**Socio-Demographic Characteristics of Respondents and Knowledge of the Ovulatory Cycle (n=90290)**

| Groups                                    | Knowledge of the Ovulatory Cycle |               | Chi-square Value | Degree of Freedom | P-value |
|---|----------------------------------|---------------|------------------|-------------------|---------|
|   | Non-Knowledgeable                | Knowledgeable |                  |                   |         |
| <b>Factor – Maternal Age</b>              |                                  |               |                  |                   |         |
| 15-19 years                               | 491 (0.7%)                       | 100 (0.1%)    | 129.204          | 6                 | 0.000*  |
| 20-24 years                               | 3710 (5.5%)                      | 938 (4.2%)    |                  |                   |         |
| 25-29 years                               | 9738 (14.4%)                     | 2932 (13%)    |                  |                   |         |
| 30-34 years                               | 12651 (18.7%)                    | 4277 (18.9%)  |                  |                   |         |
| 35-39 years                               | 14819 (21.9%)                    | 5308 (23.5%)  |                  |                   |         |
| 40-44 years                               | 13187 (19.5%)                    | 4538 (20.1%)  |                  |                   |         |
| 45-49 years                               | 13092 (19.3%)                    | 4509 (19.9%)  |                  |                   |         |
| Total                                     | 67688                            | 22602         |                  |                   |         |
| <b>Factor – Regions</b>                   |                                  |               |                  |                   |         |
| North Central                             | 12542 (18.5%)                    | 3424 (15.1%)  | 4115.96          | 5                 | 0.000*  |
| North East                                | 14261 (21.1%)                    | 3213 (14.2%)  |                  |                   |         |
| North West                                | 20059 (29.6%)                    | 5475 (24.2%)  |                  |                   |         |
| South East                                | 5492 (8.1%)                      | 5340 (23.6%)  |                  |                   |         |
| South South                               | 6830 (10.1%)                     | 2483 (11%)    |                  |                   |         |
| South West                                | 8504 (12.6%)                     | 2667 (11.8%)  |                  |                   |         |
| Total                                     | 67688                            | 22602         |                  |                   |         |
| <b>Factor – Residence</b>                 |                                  |               |                  |                   |         |
| Urban                                     | 22159 (32.7%)                    | 9874 (43.7%)  | 887.433          | 1                 | 0.000*  |
| Rural                                     | 45529 (67.3%)                    | 12728 (56.3%) |                  |                   |         |
| Total                                     | 67688                            | 22602         |                  |                   |         |
| <b>Factor – Religion</b>                  |                                  |               |                  |                   |         |
| Catholic                                  | 5740 (8.5%)                      | 3031 (13.4%)  | 1269.71          | 4                 | 0.000*  |
| Other Christian                           | 21688 (32%)                      | 8945 (39.6%)  |                  |                   |         |
| Islam                                     | 39601 (58.5%)                    | 10431 (46.2%) |                  |                   |         |
| Traditionalist                            | 340 (0.5%)                       | 178 (0.8%)    |                  |                   |         |
| Other                                     | 319 (0.5%)                       | 17 (0.1%)     |                  |                   |         |
| <b>Factor – Maternal Education</b>        |                                  |               |                  |                   |         |
| No Education                              | 33069 (48.9%)                    | 8415 (37.2%)  | 1463.34          | 3                 | 0.000*  |
| Primary                                   | 14322 (21.2%)                    | 4769 (21.1%)  |                  |                   |         |
| Secondary                                 | 16511 (24.4%)                    | 6939 (30.7%)  |                  |                   |         |
| Tertiary                                  | 3786 (5.6%)                      | 2479 (11%)    |                  |                   |         |
| Total                                     | 67688                            | 22602         |                  |                   |         |
| <b>Factor – Wealth Index</b>              |                                  |               |                  |                   |         |
| Poor                                      | 32057 (47.4%)                    | 8377 (37.1%)  | 900.03           | 2                 | 0.000*  |
| Middle                                    | 14746 (21.8%)                    | 5015 (22.2%)  |                  |                   |         |
| Rich                                      | 20885 (30.9%)                    | 9210 (40.7%)  |                  |                   |         |
| Total                                     | 67688                            | 22602         |                  |                   |         |
| <b>Factor – Marital Status</b>            |                                  |               |                  |                   |         |
| Married                                   | 65688 (97.0%)                    | 21814 (96.5%) | 16.006           | 1                 | 0.000*  |
| Living with Partner                       | 2000 (3.0%)                      | 788 (3.5%)    |                  |                   |         |
| Total                                     | 67688                            | 22602         |                  |                   |         |
| <b>Factor – Husband Educational Level</b> |                                  |               |                  |                   |         |
| No Education                              | 26018 (38.4%)                    | 5936 (26.3%)  | 1163.28          | 3                 | 0.000*  |
| Primary                                   | 12146 (17.9%)                    | 5113 (22.6%)  |                  |                   |         |
| Secondary                                 | 21106 (31.2%)                    | 7864 (34.8%)  |                  |                   |         |
| Tertiary                                  | 8414 (12.4%)                     | 3689 (16.3%)  |                  |                   |         |
| Total                                     | 67688                            | 22602         |                  |                   |         |
| <b>Factor – Women Media Exposure</b>      |                                  |               |                  |                   |         |
| No  | 66477 (98.2%)                    | 21294 (94.2%) | 998.63           | 1                 | 0.000*  |
| Yes                                       | 1211 (1.8%)                      | 1308 (5.8%)   |                  |                   |         |
| Total                                     | 67688                            | 22602         |                  |                   |         |

Note: \* – p<0.001.

Table 3

**Binary Logistic Regression for Assessing Factors Associated with Knowledge of Ovulatory Cycle in Nigeria (n=90290)**

| Groups                             | Coefficient | Standard Error of Coefficient | Z- Value | P-Value | Odd ratio Exp( $\beta$ ) |
|------------------------------------|-------------|-------------------------------|----------|---------|--------------------------|
| Factor – Maternal age              |             |                               |          |         |                          |
| 15-19 years (Ref)                  |             |                               |          |         | 1.0000                   |
| 20-24 years                        | 0.2044      | 0.1179                        | 1.73     | 0.083   | 1.2268                   |
| 25-29 years                        | 0.2817      | 0.1140                        | 2.47     | 0.013** | 1.3253                   |
| 30-34 years                        | 0.3561      | 0.1135                        | 3.14     | 0.002** | 1.4277                   |
| 35-39 years                        | 0.4283      | 0.1132                        | 3.78     | 0.000*  | 1.5346                   |
| 40-44 years                        | 0.4224      | 0.1135                        | 3.72     | 0.000*  | 1.5257                   |
| 45-49 years                        | 0.4033      | 0.1135                        | 3.55     | 0.000*  | 1.4968                   |
| Factor – Regions                   |             |                               |          |         |                          |
| North Central (Ref)                |             |                               |          |         | 1.0000                   |
| North East                         | -0.1301     | 0.0294                        | -4.42    | 0.000*  | 0.8780                   |
| North West                         | 0.0473      | 0.0279                        | 1.69     | 0.090   | 1.0484                   |
| South East                         | 1.1790      | 0.0319                        | 36.85    | 0.000*  | 3.2512                   |
| South South                        | 0.2611      | 0.0332                        | 7.85     | 0.000*  | 1.2983                   |
| South West                         | -0.0517     | 0.0315                        | -1.64    | 0.101   | 0.9496                   |
| Factor – Residence                 |             |                               |          |         |                          |
| Urban (Ref)                        |             |                               |          |         | 1.0000                   |
| Rural                              | -0.1685     | 0.0190                        | -8.84    | 0.000*  | 0.8449                   |
| Factor – Religion                  |             |                               |          |         |                          |
| Catholic (Ref)                     |             |                               |          |         | 1.0000                   |
| Other Christian                    | 0.1019      | 0.0286                        | 3.56     | 0.000*  | 1.1073                   |
| Islam                              | 0.2012      | 0.0347                        | 5.79     | 0.000*  | 1.2229                   |
| Traditionalist                     | 0.6684      | 0.1004                        | 6.65     | 0.000*  | 1.9511                   |
| Other                              | -1.9191     | 0.2518                        | 7.62     | 0.000*  | 0.1467                   |
| Factor – Maternal education        |             |                               |          |         |                          |
| No Education (Ref)                 |             |                               |          |         | 1.0000                   |
| Primary                            | -0.1019     | 0.0254                        | -4.00    | 0.000*  | 0.9031                   |
| Secondary                          | 0.0163      | 0.0282                        | 0.58     | 0.563   | 1.0164                   |
| Tertiary                           | 0.3864      | 0.0401                        | 9.63     | 0.000*  | 1.4717                   |
| Factor – Wealth index              |             |                               |          |         |                          |
| Poor (Ref)                         |             |                               |          |         | 1.0000                   |
| Middle                             | -0.0293     | 0.0228                        | -1.28    | 0.200   | 0.9711                   |
| Rich                               | -0.0145     | 0.0251                        | -0.58    | 0.563   | 0.9856                   |
| Factor – Marital status            |             |                               |          |         |                          |
| Married (Ref)                      |             |                               |          |         | 1.0000                   |
| Living with Partner                | 0.2359      | 0.0452                        | 5.21     | 0.000*  | 1.2660                   |
| Factor – Husband educational level |             |                               |          |         |                          |
| No Education (Ref)                 |             |                               |          |         | 1.0000                   |
| Primary                            | 0.2853      | 0.0261                        | 10.90    | 0.000*  | 1.3302                   |
| Secondary                          | 0.2617      | 0.0255                        | 10.25    | 0.000*  | 1.2991                   |
| Tertiary                           | 0.3551      | 0.0320                        | 11.09    | 0.000*  | 1.4263                   |
| Factor – Women media exposure      |             |                               |          |         |                          |
| No (Ref)                           |             |                               |          |         | 1.0000                   |
| Yes                                | 0.6484      | 0.0438                        | 14.78    | 0.000*  | 1.9125                   |
| Constant                           | -1.9223     | 0.1195                        | -16.08   | 0.000*  | 0.1463                   |

Note: \* – p<0.05; \*\* – p<0.05.

have greater knowledge than younger women. This finding is consistent with research from Ethiopia [14], Uganda [15], the United States [16], and Spain [17], which found that women who are at a later age in their reproductive lives had more precise awareness of their ovulation period than those who are just starting out. Given that age is a major educator in human life, the link between these two factors may be explained by repeated exposure and older women having greater experience with reproduction.

Another factor strongly related to knowledge of the ovulatory cycle was the place of residence. According to a study by Bunting et al. [18] and a study from Bangladesh [19], urban inhabitants were more informed than rural ones. Access to the internet, media, and healthcare is improved by urbanization. As a result, the relationship between place of residence and knowledge of the ovulatory cycle may be explained by urban inhabitants' greater access to reproductive information through the media, the internet, or counselling than rural residents.

It was discovered that women with higher education knew more about the ovulation cycle than women with no education. This outcome was comparable to research carried out in Uganda [15]. Higher education provides the opportunity to comprehend the physiology of reproduction, which may be the cause of this association. This explains how education affects people's behaviour and knowledge about health in a beneficial way. The husbands' educational background was also found to have a favourable impact on their understanding of the ovulatory cycle. This conclusion is corroborated by research conducted in Ghana [20] and Ethiopia [21], where it was shown that men with higher levels of education had better awareness of the ovulatory cycle.

Additionally, in this study, media exposure was a factor in determining KOC. Exposure to the media has a good effect on thorough knowledge [22]. Additionally, community-level media exposure enhances the use of maternal health services, which is the primary method of disseminating health information, including family planning knowledge such as ovulation [23]. The results of this study imply that in order to reach the aim of excellent health, the Nigerian government, especially the Ministry of Health should develop initiatives to improve KOC and other reproductive elements of women's health.

## CONCLUSION

The study assessed the knowledge of the ovulatory cycle and associated factors among reproductive age women in Nigeria. The study revealed that

Age, Region, Place of residence (urban), Religion, Marital status (living with a partner), maternal education (primary and higher education), Husband's educational level and women's media exposure had a significant effect on knowledge of the ovulatory cycle. KOC, however, was low (25 %), necessitating the development and implementation of reproductive health services through community media campaigns and health promotion. The authors of this study urge the Nigerian Ministry of Health to prioritize improving the reproductive health of women by prioritizing adolescents and those with less education. Additionally, media initiatives might be strengthened to improve women's KOC, which is essential for preventing unwanted pregnancy.

**Conflict of Interest.** The authors declare that no conflicts exist.

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**ЗВ'ЯЗОК МІЖ ОБІЗНАНІСТЮ ПРО ОВУЛЯТОРНИЙ ЦИКЛ У ЖІНОК РЕПРОДУКТИВНОГО ВІКУ В НІГЕРІЇ  
ТА ФАКТОРАМИ ЇХ ЖИТТЯ**

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**Актуальність.** Розпад і вихід домінантного фолікулу в маткову трубу з яєчника є фізіологічною подією, відомою як овуляція. Щоб визначити шанси на фертильність, важливо розуміти фізіологію овуляторного циклу.

**Ціль:** оцінити обізнаність про овуляторний цикл (ООЦ) у жінок репродуктивного віку в Нігерії в залежності від факторів їх життя.

**Матеріали та методи.** Дослідження базувалося на даних NDHS за 2018 рік (які були найактуальнішими на момент цього дослідження). Для цього дослідження було опитано 90 290 жінок репродуктивного віку. Використали методи аналізу: відсотковий, частотний, тест хі-квадрат і бінарний логістичний регресійний аналіз. Результати вважали статистично значущим при  $p < 0,05$ .

**Результати.** Лише 25 % із 90 290 репродуктивних жінок, які були включені в дослідження, виявились обізнаними про овуляторний цикл. Дослідження показало, що вік, регіон, місце проживання (місто), віросповідання, сімейний стан (проживання з партнером), освіта матері (початкова та вища освіта), рівень освіти чоловіка та медіа-присутність жінки мали значний вплив на знання про овуляторний цикл.

**Висновок.** ООЦ є низькою, що зумовлює необхідність розробки та впровадження послуг з репродуктивного здоров'я через кампанії в засобах масової інформації та пропаганду здоров'я. Автори цього дослідження закликають Міністерство охорони здоров'я Нігерії надати пріоритет покращенню репродуктивного здоров'я жінок, віддаючи перевагу підліткам і малоосвіченим. Крім того, можна посилити ініціативи засобів масової інформації для покращення ООЦ у жінок, що має важливе значення для запобігання небажаній вагітності.

**Ключові слова:** знання, овуляторний цикл, репродуктивний вік, жінки, Нігерія.