

Review Article

Study of Knowledge, Attitudes and Practices of Family Planning: Case of Female Staff of the Communal Medical Center (CMC) of Flamboyants, Conakry, Guinea

Sow Alhassane II^{1,2,*} , Diallo Ibrahima Tangaly³, Bah Ibrahima Koussy^{1,2}, Keita Massa^{1,2}, Balde Abdoul Aziz¹, Diallo Boubacar Sidy¹, Balde Abdoulaye Djibril¹, Sylla Aboubacar M'mah¹, Balde Boubacar Talibe¹, Diallo Abdourahamane^{1,2}, Balde Ibrahima Sory^{1,2}, Sy Telly^{1,2}

¹Department of Gynecology and Obstetrics, Ignace Deen National Hospital, Conakry University Hospital, Conakry, Guinea

²Faculty of Health Sciences and Techniques, Gamal Abdel Nasser University of Conakry, Conakry, Guinea

³Gynecology Obstetrics Department, Les Flamboyants Communal Medical Center, Conakry, Guinea

Abstract

Introduction: The aim was to assess the knowledge, attitudes and practices of female staff on family planning at the Flamboyants Communal Medical Center. **Methods:** This was a 3-month cross-sectional, prospective, descriptive and analytical study involving women (doctors, midwives, laboratory technicians and nurses) working at the Flamboyants CMC and agreeing to participate in the study. **Results:** The contraceptive prevalence was 61.9%. All respondents were aware of FP (100%). The most commonly cited contraceptive methods were: the intrauterine device (IUD) at 85.7%, the Jadelle implant (79.4%) and the contraceptive pill (68.3%). More than 8 out of 10 respondents (81.0%) were in favor of using family planning. Most of the respondents, 74.5%, discussed family planning with their spouses and 70.2% of the spouses were in favor of FP. The most frequently used method was the pill (59.0%). The factors associated with the use of FP were: dialogue with the spouse on contraception ($p = 0.018$), marriage ($p = 0.012$) and good attitude of the spouse towards FP ($p = 0.000$). **Conclusion:** Improving this prevalence would require the involvement of spouses and midwives during counseling during antenatal and postpartum follow-up.

Keywords

CAP, Female Staff, PF, Flamboyants, Guinea

1. Introduction

World Health Organization (WHO) defines family planning as a way of thinking and living voluntarily adopted on

the basis of knowledge, attitude and responsible decisions of individuals and couples to promote health and well-being [1].

*Corresponding author: sowalhas019@gmail.com (Sow Alhassane II)

Received: 29 September 2024; **Accepted:** 18 October 2024; **Published:** 12 November 2024



Copyright: © The Author(s), 2024. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

Family planning refers to a conscious effort by a couple to limit or space the number of children they have by using contraceptive methods [2]. The world population doubled between 1950 and 1994, in less than 50 years [3]. Today it is estimated at 8 billion and is expected to reach 10 billion by the end of the century [4]. Faced with this demographic pressure, various population doctrines have emerged throughout the world. Since the Cairo Conference in 1994, governments have defined a new agenda to promote reproductive health with particular emphasis on access to contraceptive services and information [5]. In African countries, the high rate of population growth constitutes a major constraint to socioeconomic development efforts. The persistent imbalance between high population growth and insufficient economic growth contributes to the deterioration of household living conditions [6]. In 2022, the global contraceptive prevalence rate, all methods combined, was estimated at 65%, and the rate of use of modern methods at 58.7% for married or partnered women [7]. In Guinea, despite political will and efforts by the government and its technical and financial partners, contraceptive prevalence was 11% in 2018 with an unmet need of 22% [8]. Health care providers play a key role in disseminating information on contraceptive measures in the field of reproductive health [8]. It is essential to know the level of knowledge and the attitude of health care providers regarding family planning, as they directly influence the information provided to clients. This justifies this study on the knowledge, attitudes and practices of female staff of CMC of Flamboyants in terms of family planning, the objectives of which were to calculate the prevalence of the use of family planning among female staff of CMC of Flamboyants, to assess the knowledge and attitudes of female staff and to identify the factors associated with the use of family planning methods.

2. Methodology

2.1. Type and Duration of Study

This was a cross-sectional, prospective, descriptive and analytical study lasting 3 months from January 1 to March 31, 2024, carried out at the Flamboyants communal medical center in the health district of Conakry. This is a level II hospital in the country's health pyramid.

2.2. Study Population

She consisted of all women (doctors, midwives and nurses) working at the CMC of Flamboyants during the study period.

2.3. Inclusion Criteria

All female staff (doctors, midwives and nurses) working in the CMC les Flamboyants, present in the said structure during the data collection period and having agreed to participate in

the study.

2.4. Sampling

We carried out an exhaustive recruitment of all female staff (doctors, midwives and nurses) meeting the selection criteria defined above.

2.5. Variables

We studied sociodemographic, obstetric, knowledge, attitudes and practices variables.

2.6. Data Collection

For data collection, we gave each participant a collection sheet with open and closed questions which was filled out by the respondents after reading the content and providing clarification where necessary.

2.7. Data Entry and Analysis

Data were entered using Excel software from the Office 2010 package and then analyzed using SPSS software version 26.0. For the comparison of proportions, we used Pearson's Chi-square and Fisher's exact tests with a significance threshold of 5%, i.e. a p-value less than 0.05.

2.8. Ethics

The agreement of the Management of CMC of Flamboyants was requested and obtained before the start of data collection. Informed consent was obtained from the participants, confidentiality and anonymity were required.

3. Results

3.1. Prevalence

During the study period, we interviewed 63 women working in our study structure, 39 of whom used family planning, giving a contraceptive prevalence of 61.9%.

Table 1. Sociodemographic and obstetric characteristics of the respondents.

Sociodemographic and obstetric characteristics	Staff	Percentage
Age groups (years)		
20-29	27	42.9
30-39	20	31.7
40-49	14	22.2

Sociodemographic and obstetric characteristics	Staff	Percentage	Sociodemographic and obstetric characteristics	Staff	Percentage
≥ 50	2	3.2	ATS	1	1.6
Average age = 26.3 ± 2 years			Parity		
Marital status			Nulliparous	10	15.9
Bachelor	32	50.8	Primiparous	21	33.3
Bride	21	49.2	Pauciparous	18	28.6
Type of home	n =31		Multiparous	14	22.2
Monogamous	23	74.2			
Polygamous	8	25.8			
Professional categories					
Midwives	32	50.8			
Doctor	4	6.3			
Nurse	24	38.1			
Laboratory technician	2	3.2			

3.2. Knowledge of Family Planning

It emerges from this work that all of the respondents were aware of family planning, i.e. 100%.

The intrauterine device (IUD) at 85.7%, the Jadelle implant (79.4%), the contraceptive pill (68.3%), the male condom (61.9%) and the injectable (60.3%) were the family planning methods most known by the respondents.

3.3. Attitudes Towards Family Planning

Table 2. Attitudes of female staff at the Flamboyants communal medical center and their spouses on family planning.

Settings	Staff (n=63)	Percentage
Attitudes of respondents towards family planning		
Favorable	51	81.0
Unfavorable	12	19.0
Spouses' attitudes toward family planning	n =47	
Favorable	33	70.2
Unfavorable	14	29.8
Marital Dialogue on Family Planning	n =47	
Yes	35	74.5
No	12	25.5
Advise friends to use family planning		
Yes	59	93.7
No	4	06.3
Tips for improving knowledge and use of family planning		
Awareness campaign	32	50.8
Educational talks	17	27.0
Training seminars	8	12.7
Involvement of NGOs/State	6	09.5

3.4. Family Planning Practices

Table 3. Practices of female staff at the communal medical center of Flamboyants in matters of family planning.

Settings	Staff	Percentage
Use of family planning	n =63	
Yes	39	61.9
No	24	38.1
Methods used	n =39	
Pill	23	59.0
IUD	8	20.5
Condom	5	12.8
Jadelle implant	3	7.7
Person who advised on family planning	n =39	
Spouse	2	5.1
Personal decision	12	30.8
Doctor	4	10.2
Midwife	21	53.8
Reasons for using family planning	n =39	
Birth spacing	33	84.6
Prevents unwanted pregnancies	32	82.1
Birth control	30	76.9
Allows young girls to continue their studies	28	71.8
Opportunity to use family planning	n =39	
After abortion	1	2.6
After unprotected intercourse	9	23.1
Postpartum	21	53.8
Routine consultation	8	20.5

Table 4. Factors associated with the use of family planning.

Settings	Use of family planning		P-value
	Yes	No	
	n (%)	n (%)	
Marital Dialogue on Family Planning			0.018
Yes	11 (50.0%)	24 (83.8%)	
No	1 (50.0%)	11 (16.2%)	
Spouse's level of education			0.281
Not in school	2 (5.6%)	0 (0.0%)	

Settings	Use of family planning		P-value
	Yes n (%)	No n (%)	
Primary	0 (0.0%)	1 (8.3%)	0.203
Secondary	5 (13.9%)	2 (16.7%)	
Superior	29 (80.6%)	9 (75.0%)	
Qualification of the respondent			0.012
ATS	1 (2.6%)	0 (0.0%)	
Nurse	11 (28.2%)	13 (54.2%)	
Midwife	24 (61.5%)	8 (33.3%)	
Laboratory technician	1 (2.6%)	1 (4.2%)	
Doctor	2 (5.1%)	2 (8.3%)	
Marital status			0.641
Bachelor	15 (38.5%)	17 (70.8%)	
Bride	24 (61.5%)	7 (29.2%)	
Type of home			0.000
Monogamous	17 (70.8%)	6 (85.7%)	
Polygamous	7 (29.2%)	1 (14.3%)	
Favorable attitude of the spouse			0.000
Yes	30 (83.3%)	3 (27.3%)	
No	6 (16.7%)	8 (72.7%)	

4. Discussion

In our series, we identified 39 cases of family planning use out of a total of 63 respondents, i.e. a contraceptive prevalence of 61.9%. This result is significantly higher than the 36.1% of contraceptive use among health professionals in a level II hospital in Conakry reported by Baldé O et al. [10] but also the 39.2% found by Chebaro R et al. [11] in Beirut, Lebanon but also 24.4% found in Guinea in 2023 [12]. Contraceptive prevalences of 71% [9] in India and 75.3% in Ethiopia in 2018 [13] have been reported in the literature.

The age of women is also an important factor in modern contraceptive practice. Its effect often reflects a generation effect. This effect strongly influences the use of modern contraceptive methods, because generally, younger generations adhere to them more quickly, while generations of older women tend to use traditional methods advocated by the traditional pro-natalist society [14].

Women in the 20-29 age group were the most represented, a proportion of 42.9% with a mean age of 26.3 ± 2 years. This

finding is superimposable with those of Gothwal M et al. [9] 41%, of Baldé O et al. [10] (45.8%) and of Hemani S et al. [15] 64% predominance of the 21-30 age group. This is an age group corresponding to that of intense sexual activity, therefore conducive to the use of contraceptive methods.

Single women were the most numerous in our sample (50.8%). Observations different from ours have been mentioned in some series, reporting a predominance of married women with proportions of 64.09% [16] and 65.4% [13]. On the other hand, we agree with Adohinzin CCY et al. who reported in 2016 in Burkina Faso a predominance of single women with a higher proportion than that found in our work, i.e. 91.0% [17].

Regarding the professional category of the respondents, it emerges from this work that more than half of the sample consisted of midwives (50.8%). This result is opposite to that of Baldé O et al. [10] who found a predominance of nurses (48.2%). Nearly three-quarters of married women (74.2%) lived in a monogamous household. Identical observations were noted in Guinea, Mali [10, 18] and Niger [19], which could be explained by the fact that all our respondents are

health workers (intellectuals), generally married to intellectual men who rarely engage in polygamy.

All respondents were aware of family planning, i.e. 100%. An identical observation was made by Baldé O et al. [10] in 2022 and Wani RT et al. [20] in 2019 in populations identical to ours. Contraceptive method knowledge rates of 88.3% [21], 91.2% [22] and 98.63% [19] have been reported by different authors. These proportions are lower than those found in our study. This high proportion in our series would be linked to our sample which is made up solely of health personnel who have benefited from extensive information on family planning during their various training courses (professional and university), training seminars, refresher courses and during professional practice. While in the other studies, the authors were interested in samples of women interviewed at random, therefore of disparate levels of education and profession.

In our series, the IUD (85.7%), the Jadelle implant (79.4%), the condom (61.9%) and the injectable (60.3%) were the contraceptive methods most frequently cited by the respondents. For Singh YR et al. [21] condoms (82%), followed by contraceptive pills (79.3%) and the IUD (68.7%) were the most cited methods. In the study of Chebaro R [11], the contraceptive pill (37%) and the IUD (35.6%) represented the methods most known by the respondents.

It emerges from this work that, spacing and limitation of births with respective proportions of 85.7% and 84.1% were the main reasons for using family planning. These findings are opposed to those of Baldé O et al. [10] who reported in their work 41% of participants who declared that they use family planning because it improves the well-being of the mother/child couple. Which would improve in the long term their lifestyle as an individual, but also that of their family and their community.

The contraceptive method most used by our respondents was the pill, i.e. 59.0%. Similar findings were reported in the literature with proportions varying between 33.7% and 58.38% [10, 11, 19]. This same observation was made in the DRC by Mulongo Mbarambara. P et al. [23] mentioning that this may be linked to the fact that the majority of these patients encountered are young adults and the ease of taking these methods and their wide use gives them this preference.

Regarding the respondents' attitude towards contraception, this study shows that 81.4% were in favor of family planning. The same observations were made in Niger in 2023 [19], in the DRC in 2020 [24] and in India in 2020 [9]. The predominance of midwives in our study population could explain this observation, because this professional category has benefited from several training courses in the provision of family planning as well as its benefits in terms of reproductive health, but also the fact that most of them participate in the activities of providing contraception carried out by the family planning unit of the CMC les Flamboyants.

Studies in Ethiopia and Turkey have shown that a woman who has a good impression of family planning services would be willing to use a contraceptive method [25, 26].

Participants reported a favorable attitude of the spouse towards contraception in 70.2% of cases. A similar observation was noted in the study carried out in Conakry in 2022 among female health personnel with a lower proportion than that found in our work. A favorable attitude of men towards family planning (84.2%) was noted in Mali in 2019 [27], mentioning the improvement of the family's well-being and the reduction of family expenses as sources of motivation.

The postpartum period was the ideal period for the use of contraceptive methods (52.5%). We agree with Baldé O et al. [10] who made a similar observation in 2022 in Conakry. Indeed, following the discomforts of pregnancy and the pains of childbirth, the postpartum period when women feel the desire to rest can explain this need. This is corroborated by studies concerning low-income countries, the results of which highlight that 72% to 95% of postpartum women did not wish to have a child before the two years preceding childbirth [28, 29]. It is on these women that family planning programs should focus because more than 50% of them could have short interpregnancy spaces and 67,92% of unmet needs for contraception [30, 31].

Regarding dialogue with spouse on family planning, we find that more than three-quarters ($\frac{3}{4}$) of the respondents or 75.5% discussed family planning with their spouses. This corroborates the data of Wani RT et al. [20] who in 2019 in India mentioned that about 80% of the respondents had discussed the adoption of a family planning method and among them, 45.7% had discussed it with their husband.

In our series, more than nine out of ten respondents said they would advise their peers on family planning (93.7%). Similar findings have been reported in the literature, indicating that about 76.6% of respondents encourage other married women to use family planning methods [20]. The high level of knowledge about family planning and the favorable attitude of our respondents could explain this finding.

In relation to the factors associated with the use of family planning, we found that dialogue with the spouse on contraception ($p = 0.018$), being married ($p = 0.012$) and the spouse's good attitude towards family planning ($p = 0.000$) were factors promoting the use of contraceptive methods. We thus agree with the conclusions of Baldé O et al. [10] who reported that the spouse's good attitude was significantly associated with the use of contraception. This finding sufficiently proves the importance of the spouse's involvement in the use of contraceptive methods in our African societies. For some authors, celibacy was significantly associated with the use of modern contraceptive methods [10] which is contrary to the observation made in our series.

5. Conclusion

Contraceptive prevalence among female staff of CMC les Flamboyants is high as well as the level of knowledge and attitude towards family planning. Dialogue with the spouse on contraception, marriage and the good attitude of the

spouse were factors associated with the use of family planning.

Involving spouses and midwives in counseling during prenatal and postpartum follow-up could improve contraceptive prevalence in our society.

Abbreviations

CMC	Communal Medical Center
IUD	Intrauterine Device
WHO	World Health Organization.
PF	Planning Family

Author Contributions

Sow Alhassane II: Funding acquisition, Project administration, Resources, Software, Supervision, Validation, Visualization

Diallo Ibrahima Tangaly: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

Bah Ibrahima Koussy: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

Keita Massa: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

Balde Abdoul Aziz: Conceptualization, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

Diallo Boubacar Sidy: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Validation, Visualization, Writing – original draft, Writing – review & editing

Balde Abdoulaye Djibril: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Validation, Visualization, Writing – original draft, Writing – review & editing

Sylla Aboubacar M'mah: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Writing – original draft, Writing – review & editing

Balde Boubacar Talibe: Conceptualization, Data curation,

Formal Analysis, Funding acquisition, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

Diallo Abdourahamane: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft

Balde Ibrahima Sory: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft

Sy Telly: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] World Health Organization. Standards for maternal and neonatal care. Geneva: World Health Organization; 2006.
- [2] Central Statistical Agency. Ethiopian Demographic and Health Survey 2016 key indicators report. Addis Ababa and Maryland, Ethiopia; 2016.
- [3] LE BARBU. E. la population mondiale: répartition et dynamisme, Lycée Pierre Poivre à saint Joseph (île de la réunion) aout 2014.
- [4] Institut nationale d'études démographiques (Ined). Les Nations unies publient de nouvelles projections de population mondiale. World Population Prospects. The 2024 Revision.
- [5] Nations unies. Rapport de la Conférence internationale sur la population et le développement Le Caire, 5-13 septembre 1994: 1-200.
- [6] Tabutin D, Schoumaker B. La démographie de l'Afrique subsaharienne au XXI^{ème} siècle. Bilan des changements de 2000 à 2020, perspectives et défis d'ici 2050. Cairn. Sciences humaines et sociales. 2020; 77(2-3): 169-295.
- [7] World Health Organization. Family planning/contraceptive methods. September 5, 2023.
- [8] Direction Nationale de la Statistique (Guinée). Enquête démographique et de santé à indicateurs multiples (EDS-MICS, 2018). Institut national de la statistique Conakry, Measure, DHS, ICF International Claverton, Maryland, USA. 2018: 113-140.
- [9] Gothwal M, Tak A, Aggarwal L, Rathore A, Singh P, Yadav G, et al. A study of knowledge, attitude, and practice of contraception among nursing staff in All India Institute of Medical Sciences, Jodhpur, Rajasthan. J Fam Med Prim Care. 2020; 9(2): 706. https://doi.org/10.4103/jfmpc.jfmpc_1012_19

- [10] Balde O, Diallo MH, Bah IK, Bah OH, Diallo FB, Sow AI, et al. Etude sur les connaissances, attitudes et pratiques de la contraception: cas du personnel féminin du centre médical communal (CMC) de Ratoma (Guinée). *Journal de la SAGO*. 2021; 22(2): 44-49.
- [11] Chebaro R, Tayyara LE, Ghazzawi F et Abi Saleh B. Connaissances, attitudes et pratiques concernant la contraception dans une population urbaine. *pmd. East Mediterr Health J*. 2005; 11(4): 573-585.
- [12] Dramé L, Kolié D, Sidibé S, Yombouno JF, Delamou A. Facteurs associés à l'utilisation des méthodes contraceptives chez les jeunes filles d'âge en milieu rural guinéen The factors associated with contraceptive use among young female students in rural Guinea. *Santé Publique*. 2023; 35(6). <https://doi.org/10.3917/spub.236.0129>
- [13] Semachew Kasa A, Tarekegn M, Embiale N. Knowledge, attitude and practice towards family planning among reproductive age women in a resource limited setting of Northwest Ethiopia. *BMC Res Notes*. 2018; 11(1): 577. <https://doi.org/10.1186/s13104-018-3689-7>
- [14] FASSASSI, R. Les facteurs de la contraception en Afrique de l'Ouest et en Afrique Centrale au tournant du siècle, Rapport de synthèse, Paris, CEPED, Regards sur les collections du CEPED. 2007: 67.
- [15] Hemani S, Mital P. Attitude and Practice of Contraception among Gynecologists at a Tertiary Care Hospital. *J South Asian Fed Obstet Gynaecol*. 2013; 5(3): 129-31. <https://doi.org/10.5005/jp-journals-10006-1244>
- [16] Sheng B, Yao D, Zhang H, Tang J, Du X. Knowledge, attitude and practice of contraceptive methods among women with an unplanned pregnancy. *BMJ Open*. 2024; 14(3): e078364. <https://doi.org/10.1136/bmjopen-2023-078364>
- [17] Yadian ACC, Berthe A, Meda N, Belem AMG, Ouedraogo GA, Nacro B, et al. Connaissances et pratiques contraceptives chez les jeunes burkinabè de 15 à 24 ans. *Annales des sciences de la santé* 2016; 1: 35-59.
- [18] F. S. Diabaté Diallo, S. Y. Simaga, M. Traoré A. Dolo. Connaissance- attitude- pratique de la planification familiale en zone rurale au Mali. *Médecine d'Afrique Noire* 1997, 44, 6: 317-319.
- [19] Zeidou A, Alkassoum SI, Maina O, Goni A, Guédé S, Bintou MK. Perceptions et pratiques de la planification familiale chez les femmes vues en consultation prénatale au district sanitaire I de Niamey, Niger. *Dakar Méd*. 15 déc 2023; 67(2): 138-43. <https://doi.org/10.61585/pud-dkm-v67210>
- [20] Wani R, Rashid I, Nabi S, Dar H. Knowledge, attitude, and practice of family planning services among healthcare workers in Kashmir – A cross-sectional study. *J Fam Med Prim Care*. 2019; 8(4): 1319. https://doi.org/10.4103/jfmprc.jfmprc_96_19
- [21] Singh YR, Gupta A, Sidhu J, Grover S, Sakrawal K. Knowledge, attitude, and practices of family planning methods among married women from a rural area of Jaipur, Rajasthan: An observational study. *J Fam Med Prim Care*. oct 2023; 12(10): 2476-81. https://doi.org/10.4103/jfmprc.jfmprc_986_23
- [22] Polepole B, Raphael MY, Leon MA, Dembré AN, Victor KM. Connaissances, attitudes et pratiques des couples dans les méthodes de la planification familiale à Muhungu zone de santé d'Ibunda. *Am. J. innov. res. appl. sci*. 2022; 14(1): 350-354.
- [23] Mulongo Mbarambara. P, Ziada Kigombé C, Muhumu Mututa. P, and Kyambiawa Bisangamo. C. Déterminants de l'utilisation des contraceptifs par les femmes à l'hôpital Général de Référence de Bagira, en RDC. *International Journal of Innovation and Applied Studies*. 2016; 16 (1): 63-71.
- [24] Eryx MED, Grâce K, Clauvel NA, Hermann N, Jean-Rosaire I. Contraception Moderne: Connaissances et Attitudes des Accouchés du District Sanitaire de Talangaï Health Sci. Dis. 2020; 21(5): 100-105.
- [25] Gigaw A, Regassa N. Family Planning service utilization in Mojo town, Ethiopia: A population-based study. *J. Geogr. Reg plan*. 2011, 4, 6, 355-63.
- [26] Alpu O, Fidan H. On the use of contraceptive methods among married women in Turkey. *European J. of Contraception and Reproductive Health care* 2006; 11, 3: 228-236. <https://doi.org/10.1080/13625180600766032>
- [27] Koita H, Dao SZ, Sidibe K, Traore BA, Haidara M, Coulibaly A, et al. Connaissances, attitudes et pratiques des hommes sur la planification familiale en commune ii du district de Bamako, Mali. *Revue Malienne de Science et de Technologie*. 2019; 0(22): 126-133.
- [28] Ross JA, Winfrey WL. Unmet Need for Contraception in the Developing World and the Former Soviet Union: An Updated Estimate. *Int Fam Plan Perspect*. sept 2002; 28(3): 138. <https://doi.org/10.2307/3088256>
- [29] Elweshahi HMT, Gewaifel GI, Sadek SSE-D, El-Sharkawy OG. Unmet need for postpartum family planning in Alexandria, Egypt. *Alex J Med*. 1 janv 2018; 54(2): 143-147. <https://doi.org/10.1016/j.ajme.2017.03.003>
- [30] Moore Z, Pfitzer A, Gubin R, Charurat E, Elliott L, Croft T. Missed opportunities for family planning: an analysis of pregnancy risk and contraceptive method use among postpartum women in 21 low- and middle-income countries. *Contraception*. juill 2015; 92(1): 31-9. <https://doi.org/10.1016/j.contraception.2015.03.007>
- [31] Saizonou I, Makoutodé P, Mongbo V, Affo A, Zannou Fr, Atade W. Déterminants de l'utilisation des services de planification familiale en post-partum dans la zone sanitaire d'Apahoué-Dogbo-Djakotomey au Bénin. *Rasp*. 2021; 3(1): 125-136.