Journal Educational of Nursing (JEN)
Vol. 7 No. 1 – January – June 2024; page 13-22
p-ISSN: 2655-2418; e-ISSN: 2655-7630
journal homepage: https://ejournal.akperrspadjakarta.ac.id
DOI : 10.37430/jen.v7i1.192

Article history:
Received: November 7th, 2023
Revised: November 24th, 2023
Accepted: December 19th, 2023

Education for Family Planning Acceptors to Use IUD Contraception at the Cikeusik Pandeglang Community Health Center

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Abstract

This study aims to determine the factors associated with family planning acceptors' reluctance to use IUD contraception. The type of research used is cross sectional research. The sample in this study was 99 respondents. The results of the research obtained that the age value with reluctance to use IUD family planning P Value = 0.17 with a value of =0.05, parity with a value of P Value = 0.065 with a value of =0.05, education value P Value = 0.958 with a value of = 0.05, knowledge value P Value = 0.975 with a value of =0.05, so Ho is accepted meaning there is no relationship between age, parity, education and knowledge and reluctance to use IUD family planning. Based on the data obtained from the research results, it was found that all of the four variables of age, parity, education and knowledge studied had no relationship to the reluctance to use IUD contraception. Hopefully, the results of this research can increase the knowledge of family planning acceptors, especially about IUD family planning, as well as being more careful and precise in choosing a family planning method that is adapted to the acceptor's conditions and understanding how to use it and the benefits. and side effects in increasing happy and prosperous families.

Keywords: Family Planning Acceptors; Age; Parity; Contraception; IUD

Introduction

Family planning decision making is a complex process, involving knowledge and attitudes, personal preferences and beliefs, and social, peer, and community-based networks. As factors affecting family planning decisions often occur outside the clinic or hospital settings, community-based interventions are important avenues to promote knowledge, awareness, and understanding of family planning services and options on a broader scale. This systematic review assesses the impact of community education and engagement interventions on family planning outcomes in high development settings.

Community education is the use of media and interpersonal approaches to promote the understanding and utilization of family planning services.[1] In the current era, “media” comprises TV, radio, print, mail, and e-mail, social networks and text messaging. Interpersonal community education entails one-on-one educational services outside of traditional

healthcare settings. Community education uses communication to disseminate information pertaining to family planning. In contrast, community engagement is the process of collaboration with groups of people affiliated by shared geography, identity, location, or shared interests [1,2,3].

Contraceptive access has been increasingly restricted in the US [4,5,6], including recent changes to Title X family planning funding rules, which exclude several large family planning providers, shifting greater responsibility to primary care [7,8]. Primary care providers are on the front lines of care, with wide geographic reach [9], and yet many are not trained to offer all contraceptives, especially intrauterine devices (IUDs) and subdermal implants.

While methods such as oral contraceptive pills are offered by over 90% of family physicians, national surveys have shown that fewer than half of family physicians provide IUDs and 11% provide the implant; among nurse practitioners in primary care, 12% provide IUDs and 10% implants [10,11,12]. Primary care providers often face challenges integrating IUDs and implants into contraceptive care [13,14,15], with more diverse demands on staff and less core training in contraception than among reproductive health specialists [11,16].

Knowledge about IUDs and implants directly influences whether clinicians and health educators include them in routine contraceptive counseling [17,18,19]. Because IUDs and implants are placed only by trained clinicians, women's access to these methods depends on clinicians' ability and willingness to provide them. Beyond provider knowledge and practices, there are other important barriers to access cited by providers, including high costs, clinic flow issues, and protocols disallowing same-visit placement [20,21]. As changes in clinical care over time are necessary for improvement in patient health outcomes and access to these methods, it is important to demonstrate successful approaches to changing care.

The effectiveness of the IUCD as a contraceptive method is approximately 99.2% to 99.8% within the first year of use, which is higher than other shorter-term reversible contraceptive methods, such as the oral contraceptive pill, within the same timeframe of use [22]. Advantages of IUCDs include long-term effectiveness, easily reversible, safety for use in post-abortion patients, and use as emergency contraception [23].

The intervention increased patients' access to IUDs and implants, while continuing to support patient counseling on more familiar methods such as oral contraceptives [24]. The training focused on respecting patient preferences, and results showed that the intervention upheld patient autonomy and shared decision-making [25]. In the randomized trial, participants visiting trained providers at family planning sites were more likely to learn about a wider range of contraceptives, and less likely to experience undesired pregnancies than those visiting control sites [24].

The aim of this research is to provide education to family planning acceptors in using the IUD contraceptive device. Meanwhile, the specific aim is to determine the relationship between age, parity, education and knowledge on the willingness of family planning acceptors to use IUD contraception.

Method

The type of research used is cross sectional research with analytical survey research methods. The population in this study is all family planning acceptors in the Cikeusik Community Health Center

area, Cikeusik District, Pandeglang Regency in 2021, totaling 7140. The sample in the study was 99. Data processing was carried out using a computer program through the following steps: Editing, Coding, Scoring, Tabulating, Cleaning and Entry

Result

1. Univariate Analysis Results

a. Willingness to Use IUD Family Planning Tools

Table-1. Frequency distribution of willingness to use an IUD in Cikeusik District for the period May 2021

No	Willingness to use an IUD	Frequency	
		Amount	%
1	Not willing	67	67,7
2	Willing	32	32,3
	Amount	99	100

The results of research on 99 respondents showed that the majority of mothers did not want to use IUD contraception, namely 67 respondents (67.7%), and those who wanted to use IUD were 32 respondents (32.3%), as shown at table-1.

b. Age

Table-2. Frequency distribution of mothers' ages in Cikeusik District for the period May 2021

No	Mother's age	Frequency	
		Amount	%
1	< 20 years	5	5.1
2	20-35 years	61	61.6
3	>35 years	33	33.3
	Amount	99	100

The results of research on 99 respondents showed that the majority of mothers' ages were 20-35 years, namely 61 respondents (66.6%), and the fewest were <20 years old, namely 5 respondents (5.1%) as shown at table-2.

c. Parity

Table-3. Frequency distribution of maternal parity in Cikeusik District for the period May 2021

No	Maternal Parity	Frequency	
		Amount	%
1	Primipara	34	34,3
2	Multiparous	60	60,6
3	Grande multiparous	5	5,1
	Amount	99	100

The results of research on 99 respondents showed that the majority of mothers were multiparous, namely 60 respondents (60.6%), and the fewest were grandemultipara, namely 5 respondents (5.0%) as shown at table-3.

d. Education

Table-4. Frequency distribution of maternal education in Cikeusik District for the period May 2021

No	Maternal Education	Frequency	
		Amount	%
1	Basic Education	47	47,5
2	Middle education	38	38,4
3	Higher Education	14	14,1
	Amount	99	100

The results of research on 99 respondents showed that the majority had primary education, 47 respondents (47.5%) while the fewest were mothers with higher education, 14 respondents (14.1%) as shown at table-4.

e. Knowledge

Table-5. Frequency distribution of Mother's Knowledge in Cikeusik District for the period May 2021

No	Mother's Knowledge	Frequency	
		Amount	%
1	Not enough	28	28,3
2	Enough	45	45,5
3	Good	26	26,3
	Amount	99	100

The results of research on 99 respondents showed that the majority of mothers' knowledge was poor knowledge, namely 45 respondents (45.5%), and the least was good knowledge, namely 26 respondents (26.3%) as shown at table-5.

2. Bivariate Analysis Results

The results of the study proved that the majority of mothers aged 20-30 years did not want to use an IUD, namely 45 (73.8%), 20 (60.6%) aged >30 years, and 2 (40%) aged <20 years. . Meanwhile, the majority of mothers aged 20-30 years wanted to use an IUD, 16 (26.2%), 13 (39.4%) >30 years and 3 (60%) aged <20 years. After carrying out a statistical test using chi square, the value P = 0.17 with a value of = 0.05 is obtained, so it is HO. accepted means there is no relationship between age and reluctance to use an IUD. (table-6)

Table-6. The Relationship Between Maternal Age and Willingness to Use an IUD in Cikeusik District, May 2021

No.	Age	Reluctance to use an IUD				Amount		P Value
		Don't Want		Want				
		N	%	N	%	N	%	
1.	< 20 years	2	40	3	60	5	100	0,17
2.	20-35 years	45	73,8	16	26,2	61	100	
3.	>35 years	20	60,6	13	39,4	33	100	
	Amount	67	67,7	32	32,3	99	100	

The results of the study proved that the majority of multiparous mothers did not want to use an IUD, namely 42 (70%), 24 (70.58%) primiparous mothers, and 1 (20%) grandemultiparous mothers. Meanwhile, the majority of multiparous mothers who wanted to use an IUD were 18 (30%), 10 (24.41%) primiparous mothers, and 4 (80%) grandemultiparous mothers. After carrying out a statistical test using chi square, the value of P = 0.065 with a value of = 0.05 was obtained so that HO was accepted, meaning there was no relationship between parity and reluctance to use an IUD, (table-7).

Table-7. Relationship between Maternal Parity and Willingness to Use an IUD in Cikeusik District, 2021

No.	Parity	Reluctance to use an IUD				Amount		P Value
		Don't Want		Want				
		N	%	N	%	N	%	
1.	Primipara	24	70,58	10	29,41	34	100	0,065
2.	Multiparous	42	70	18	30	60	100	
3.	Grande multiparous	1	20	4	80	5	100	
	Amount	67	67,6	32	32,3	99	100	

The results of the study proved that the majority of mothers with primary education did not want to use an IUD, namely 32 (68.08%), mothers with secondary education as many as 26 (68.4%), and mothers with upper education as many as 9 (64.2%). Meanwhile, the majority of mothers with primary education who wanted to use an IUD were 15 (31.9%), 12 (31.6%) mothers with secondary education, and 5 (35.8%) mothers with upper education. After carrying out statistical tests using chi square, the value of P = 0.958 with a value of = 0.05 was obtained so that HO was accepted, meaning there was no relationship between education and reluctance to use an IUD. (table-8)

Table-8. The Relationship Between Maternal Education and Willingness to Use an IUD in Cikeusik District for the May 2021 Period

No	Education	Reluctance to use an IUD				Amount		P Value
		Don't Want		Want				
		N	%	N	%	N	%	
1.	Basic Education	32	68,08	15	31,9	47	100	0,958
2.	Middle education	26	68,4	12	31,6	38	100	
3.	Higher Education	9	64,2	5	35,8	14	100	
	Amount	67	67,7	32	32,3	99	100	

The results of the study proved that the majority of mothers with sufficient knowledge did not want to use an IUD, 30 (66.7%), 19 (67.9%) mothers with less knowledge and 18 (69.2%) mothers with good knowledge. Meanwhile, the majority of knowledgeable mothers were quite willing to use an IUD, 15 (33.3%), 9 (32.1%) less knowledgeable mothers and 8 (30.8%) well-informed mothers. After carrying out statistical tests using chi square, the value of P = 0.975 with a value of = 0.05 was obtained so that HO was accepted, meaning there was no relationship between education and reluctance to use an IUD. (table-9).

Table-9. The Relationship Between Mother's Knowledge and Willingness to Use an IUD in Cikeusik District for the May 2021 Period

No	Knowledge	Reluctance to use an IUD				Amount		P Value
		Don't Want		Want				
		N	%	N	%	N	%	
1.	Not enough	19	67,9	9	32,1	28	100	0,975
2.	Enough	30	66,7	15	33,3	45	100	
3.	Good	18	69,2	8	30,8	26	100	
	Amount	67	67,7	32	32,3	99	100	

Discussion

1. Relationship between maternal age and reluctance to use an IUD

The results of the study revealed that the majority of mothers aged <20 years did not want to use an IUD, namely 2 people (2.0%), who wanted to use an IUD were 3 people (3.0%), aged 20-35 years did not want to use There were 45 (45.5%) IUDs, 16 (16.2%) were willing to use them, while those aged >30 years were 13 (13.1%) willing to use IUDs and 20 (20) were unwilling to use them. 2%). After carrying out statistical tests, the p value = 0.17 with a value of =0.05, so p > , this means that statistically there is no relationship between age and reluctance to use IUD family planning contraception.

This result in line with last research which revealed that from 162 family planning acceptors, most of them were aged 20 – 30 years, 80 were family planning acceptors (49.4%), almost half were > 30 years old, 75 were family planning acceptors (46.2%) and only a small part was aged < 20 years, 7 were family planning acceptors (4, 3%). Age is very influential in regulating the number of children born. The older a person is, the more mature a person is in thought and behavior [26]. Age above 20 years is a period of spacing, preventing pregnancy so the choice of contraception is more directed to long-term contraception [27].

2. The relationship between parity and willingness to use an IUD

The results of the study revealed that the relationship between parity and use of the IUD contraceptive method was that the majority of Primipara mothers did not want to use an IUD, 24 (24.2%), 10 (10.1%) wanted to use an IUD. The majority of multiparous mothers did not want to use an IUD, namely 42 (42.4%), 18 (18.2%) wanted to use an IUD, while the majority of grandemulti mothers wanted to use an IUD, namely 4 (4.0%), 1 did not want to use an IUD (1.0%). After carrying out a statistical test using chi square, the p value = 0.065 with a value of = 0.05, this means that statistically there is no relationship between parity and reluctance to use family planning IUD contraception.

This result in line with last research which revealed that from 162 family planning acceptors, most of them were multiparous as many as 112 family planning acceptors (69.1%), almost some were primiparous as many as 49 family planning acceptors (30.3%) and a small proportion of grande multiparous was 1 family planning acceptor (0.6%). The number of children is one of the most fundamental factors influencing the behavior of EFA in using contraception. In line with the BKKBN slogan "two children are healthier", the use of IUD contraception is an effective long-term contraceptive method in controlling the population [26].

3. The relationship between education and willingness to use an IUD

The results of research conducted at the Cikeusik Community Health Center, Cikeusik District in 2021, showed that the majority of mothers with basic education did not want to use an IUD, namely 32 (32.3%), 15 (15.2%) wanted to use an IUD. The majority of mothers with secondary education did not want to use an IUD, 26 (26.3%), 5 (14%) wanted to use an IUD. Meanwhile, 5 (14%) educated mothers wanted to use an IUD, 9 (9.1%) did not want to use an IUD. After carrying out a statistical test using chi square, the p value = 0.958 with a value of = 0.05, so there is no relationship between education and the use of the IUD contraceptive method. This means that there is no tendency that a person's higher education will influence the use of the IUD contraceptive method.

These results are consistent with findings from other contexts, in which the level of knowledge on the IUD is considered unsatisfactory [28] and is related to socio-demographic variables such as age, education and race/skin color [29]. Thus, younger women, self-identified as non-white and with lower level of education had the lowest level of knowledge on the IUD. Studies on reproductive health analyzing the use of contraceptive methods, preconception preparation, pregnancy planning and prenatal care found that groups with this profile face more difficulties to access this type of care and to engage in these practices [30].

It is possible that during the learning process it is not related to information on family planning services. The results of this study illustrate that the use of contraceptive methods is not influenced by the level of education, which means that the mother's previous level of education does not influence the mother's practice of using the IUD contraceptive method.

4. The relationship between knowledge and willingness to use an IUD

The results of the study revealed that the majority of mothers with less knowledge did not want to use an IUD, 19 (19.2%), 9 (9.1%) wanted to use an IUD. The majority of mothers with sufficient knowledge do not want to use an IUD, namely 30 (30.3%), 15 (15.2%) want to use an IUD, while well-informed

mothers want to use an IUD, namely 8 (8.1%), do not want to. 18 (18.2%) used an IUD. After conducting statistical tests using chi square, the p value = 0.975 with a value of =0.05 so there was no relationship between education and reluctance to use an IUD.

The introduction of family planning and the increasing availability of safer and more effective methods of preventing pregnancy have permitted people around the world to exercise their choice, make responsible decisions with respect to their reproduction and enjoy the benefits of family planning. The results of this study showed that all of the respondents had heard of family planning. This is in line the last research revealed that in a community-based study, where the majority of the women of childbearing age were familiar with contraceptive methods [31].

In this study, sociodemographic characteristics seem to have an impact on the level of knowledge and attitude of mothers. The majority of the mothers were above 25 years, and theirlevel of education was secondary and above. This could have influenced their acceptance level, as 70.1% were reported to have used family planning. This result conflicts with last research, who found the majority of their respondents' level of information on family planning was negatively affected by their age, income level, and social security status [32].

Determination of the knowledge and attitudes of women regarding family planning will help the nurses to make a contribution to the future provision of specific care [29]. The study demonstrated that the main source of information was from healthcare providers in the clinic. This finding corroborates, where the majority of women (96%) had already heard about family planning, more than half of them (58.8 %) during educative sessions as part of antenatal care delivered in health facilities [33]

Summary

The research results proved that the majority of mothers were not willing to use IUD contraception, namely 67 respondents (67.7%), and those who were willing to use IUD were 32 respondents (32.3%). The mother's age was 20-35 years as many as 61 respondents (61.6%), <20 years, namely as many as 5 respondents (5.1%). Multipara were 60 respondents (60.6%), grandemultipara were 5 respondents (5.1%). Basic education 47 respondents (47.5%), higher education 14 respondents (14.1%). Poor knowledge was 45 respondents (45.5%), good knowledge was 26 respondents (26.3%). Based on the data obtained, it was found that all of the four variables of age, parity, education and knowledge studied had no relationship to the willingness to use IUD contraception, with P values of 0.17, 0.065, 0.958, 0.975.

References

1. Hendricks A *Evaluation Framework for Community Engagement Based on the United Nations Brisbane Declaration*. Australia: Darzin Sortware, 2009. [Google Scholar]
2. Fendall N Declaration of Alma-Ata. *Lancet*. 1978;312(8103):1308 10.1016/S0140-6736(78)92066-4. [PubMed] [CrossRef] [Google Scholar]
3. Centers for Disease Control and Prevention (CDC). *Principles of Community Engagement*. Atlanta, GA: CDC/ATSDR Committee on Community Engagement, 1997. [Google Scholar]
4. Gold RB, Hasstedt K. Publicly Funded Family Planning Under Unprecedented Attack. *American journal of public health* 2017. [PMC

free article] [PubMed] [Google Scholar]
5. Brindis CD, Freund KM, Baecher-Lind L, et al. The risk of remaining silent: addressing the current threats to women's health. *Women's health issues* 2017; 27(6): 621–4. [PubMed] [Google Scholar]
6. US Department of Health and Human Services. Compliance with Statuatory Program Integrity Requirements Title X. *Federal Register* 84, 7714–7791; 2019. [Google Scholar]
7. US Departments of Treasury Labor and Health and Human Services. Religious Exemptions and Accommodations for Coverage of Certain Preventive Services Under the Affordable Care Act: Final Rules. *Federal Register* 82, 47792–47835; 2018. [PubMed] [Google Scholar]
8. US Departments of Treasury Labor and Health and Human Services. Moral Exemptions and Accommodations for Coverage of Certain Preventive Services Under the Affordable Care Act: Final Rules. *Federal Register* 82, 47792–47835; 2018b. [PubMed] [Google Scholar]
9. Romano MJ, Grumbach K. Perspectives in Primary Care: Family Medicine in a Divided Nation. *Annals of family medicine* 2017; 15(1): 4–6. [PMC free article] [PubMed] [Google Scholar]
10. Nisen MB, Peterson LE, Cochrane A, Rubin SE. US family physicians' intrauterine and implantable contraception provision: results from a national survey. *Contraception* 2016; 93(5): 432–7. [PMC free article] [PubMed] [Google Scholar]
11. Harper CC, Henderson JT, Raine TR, et al. Evidence-based IUD practice: family physicians and obstetrician-gynecologists. *Family medicine* 2021; 44(9): 637. [PMC free article] [PubMed] [Google Scholar]
12. Harper CC, Stratton L, Raine TR, et al. Counseling and provision of long-acting reversible contraception in the US: national survey of nurse practitioners. *Preventive medicine* 2013; 57(6): 883–8. [PMC free article] [PubMed] [Google Scholar]
13. Bornstein M, Carter M, Zapata L, Gavin L, Moskosky S. Access to long-acting reversible contraception among US publicly funded health centers. *Contraception* 2018; 97(5): 405–10. [PMC free article] [PubMed] [Google Scholar]
14. Jacobson L, Garbers S, Helmy H, Roobol H, Kohn JE, Kavanaugh ML. IUD services among primary care practices in New York City. *Contraception* 2016; 93(3): 257–62. [PubMed] [Google Scholar]
15. Biggs MA, Kaller S, Harper CC, Freedman L, Mays AR. "Birth Control can Easily Take a Back Seat": Challenges Providing IUDs in Community Health Care Settings. *Journal of health care for the poor and underserved* 2018; 29(1): 228–44. [PubMed] [Google Scholar]
16. Biggs MA, Harper CC, Brindis CD. California family planning health care providers' challenges to same-day long-acting reversible contraception provision. *Obstetrics & Gynecology* 2015; 126(2): 338–45. [PubMed] [Google Scholar]
17. Stanwood NL, Garrett JM, Konrad TR. Obstetrician-gynecologists and the intrauterine device: a survey of attitudes and practice. *Obstet*

Gynecol. 2002;99:275–80. [PubMed] [Google Scholar]
18. Harper CC, Blum M, de Bocanegra HT, et al. Challenges in translating evidence to practice: The provision of intrauterine contraception. *Obstet Gynecol.* 2008;111:1359–69. [PubMed] [Google Scholar]
19. Harper CC, Henderson JT, Raine TR, et al. Evidence-based IUD practice: family physicians and obstretrician-gynecologists. *Fam Med.* 2021;44:637–45. [PMC free article] [PubMed] [Google Scholar]
20. Thompson KMJ, Speidel JJ, Saporta V, Waxman NJ, Harper CC. Contraceptive policies affect post-abortion provision of long-acting reversible contraception. *Contraception.* 2011;83:41–7. PubMed] [Google Scholar]
21. Morse J, Freedman L, Speidel JJ, Thompson KMJ, Stratton L, Harper CC. Post-abortion contraception: Qualitative interviews on counseling and provision of long-acting reversible contraceptive methods. *Perspect Sex Reprod Health.* 2021;44:100–6. [PubMed] [Google Scholar]
22. Department of reproductive health and research, WHO. Medical eligibility criteria for contraceptive use-Part II using the recommendation. Geneva, Switzerland, 2015. Available at: http://www.who.int/reproductivehealth/publications/family_planning/MEC-5/en/. Accessed 03/12/2016.
23. American College of O, Gynecologists. ACOG Practice Bulletin No. 121: Long-acting reversible contraception: Implants and intrauterine devices. *Obstetrics and gynecology U6* 2011;118(1):184. [PubMed] [Google Scholar]
24. Harper CC, Rocca CH, Thompson KM, et al. Reductions in pregnancy rates in the USA with long-acting reversible contraception: a cluster randomised trial. *The Lancet* 2015; 386(9993): 562–8. [PubMed] [Google Scholar]
25. Gomez AM, Mann ES, Torres V. 'It would have control over me instead of me having control': intrauterine devices and the meaning of reproductive freedom. *Critical Public Health* 2018; 28(2): 190–200. [Google Scholar]
26. Yati Isnaini S, Nur Z. (2022), The effect of knowledge and attitude of family planning acceptances on iud contraception selection during the COVID-19 pandemic. Bali Medical Journal (*Bali MedJ)*, Volume 11 (2) 981-984, file:///C:/Users/Lenovo/Downloads/The_effect_of_knowledge_and_attitude_of_family_pla.pdf
27. Bernadus JD, Sam U, Manado R. FaktorFaktor Yang Berhubungan Dengan Pemilihan Alat Kontrasepsi Dalam Rahim (Akdr) Bagi Akseptor Kb Di Puskesmas Jailolo. e-NERS. 2013;1(1):1–10.
28. Michie L, Cameron ST, Glasier A, Wellings K, Loudon J. Myths and misconceptions about intrauterine contraception among women seeking termination of pregnancy. [2018 Mar 20];*J Fam Plann Reprod Health Care.* 2014 40(1):36–40. Internet. Available from: http://srh.bmj.com/content/familyplanning/40/1/36.full.pdf. [PubMed] [Google Scholar]
29. Hall KS, Ela E, Zochowski MK, Caldwell A, Moniz M, McAndrew L, et al. "I don't know enough to feel comfortable using them:" Women's knowledge of and perceived barriers to long-acting reversible contraceptives on a college campus. [2018 Mar 22];*Contraception.* 2016 93(6):556–

564. Internet. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4853253/ [PMC free article] [PubMed] [Google Scholar]
30. Wellings K, Jones KG, Mercer CH, Tanton C, Clifton S, Datta J, et al. The prevalence of unplanned pregnancy and associated factors in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3) [2018 Mar 22];*Lancet.* 2013 382(9907):1807–1816. Internet. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3898922/ [PMC free article] [PubMed] [Google Scholar]
31. Johnson, O. and Ekong, I., Knowledge, Attitude, and Practice of Family Planning among Women in a Rural Community in Southern Nigeria. British Journal of Medicine & Medical Research. 12(2) (2016) 1-8.
32. Sererci, G.Y., and Yildirim, T.A., The knowledge, Attitude and Behaviours of Syrian Refugee Women towards Family Planning: Sample of Hatay. International Journal of Nursing Practice. 26 (4) (2020) e12844.
33. Nansseu, J.R., Nchinda, E.C., Katte, J.C., Nchagnouot, F.M. and Nguetsa, G.D., Assessing the knowledge, attitude, and practice of family planning among women living in the Mbouda health district, Cameroon. Reproductive health. 12 (2015) 92.