

A Study on Knowledge, Awareness and Perc Eption of Oral Contraceptiv E Use and Risk among Women in Few Areas O F South Bengaluru

*Swathy.Y¹, Bommini Kartheek¹, Keerthi Shree.G¹, Karumanchi Bhavana¹,
Apoorva Dev²

(Dept of clinical pharmacy practice, PES College of pharmacy affiliated to RGUHS, INDIA)
Corresponding Author: Swathy.Y

Abstract: In socio-cultural politico setting like India, access to or promotion of contraception among young adult is very limited. Educating young women about emergency contraception may help to prevent unwanted pregnancies. Unwanted pregnancy continues to be a significant public health issue and poses a major challenge to the reproductive health of women, and particularly among young adults in developing countries. Pregnancies that are unintended, at highest instance occurs between 18-24 years of age, because of which education to women about the contraceptive practices and about the risks associated with contraceptive use become important. Many women using oral contraceptives are unaware of the serious side effects produced by them, which actually have a greater impact in the later life, this study suggest the strategies on promotion regarding serious side effects associated with oral contraceptive usage should be focused by we pharmacists. During the course of the study questionnaires were used to obtain and conclude the results. However, risk associated with the use of (Oral Contraceptive Pills) OCP's can't be eliminated. Instead the reduction of incidence has been achieved when we conducted awareness programmes and educated women regarding the long term and short term risks associated with the use of oral contraceptive method.

Keywords: awareness programmes, contraceptive methods, Oral contraceptive pills, risks of OCP's,

Date of Submission:14-07-2017

Date of acceptance: 27-07-2017

I. Introduction

Awareness is the ability to directly know and perceive, to feel, or to be conscious of events, objects, thoughts, emotions, or sensory patterns. In this level of consciousness, sense data can be confirmed by an observer without necessarily implying understanding.^[1] Contraception is any method used to prevent pregnancy. There are many different methods of birth control including condoms, IUDs, birth control pills, the rhythm method, vasectomy, and tubal ligation.^[2] Surprisingly, in socio-cultural politico setting like India, access to or promotion of contraception among young adult is very limited. Educating young women about emergency contraception may help to prevent unwanted pregnancies.^[3]

In India the population has been increasing gradually due to reasons like :-

- Early marriage
- Poverty and illiteracy
- Age old cultural norm

In socio-cultural politico setting like India, access to or promotion of contraception among young adult is very limited. Educating young women about emergency contraception may help to prevent unwanted pregnancies,^[9] Pregnancy is not a disease. But more fundamentally neither is human fertility. Rather, our fertility is a completely normal part of the physiology of the sexually mature person and is the only normal physiologic function medical providers treat as if it were a disease by chemical suppression, manipulation, or surgical elimination.^[15] Unwanted pregnancy continues to be a significant public health issues among adolescents and young women, posses a major challenge to the reproductive health of women in most of the developing countries. Some teenagers with unintended pregnancies resort to abortions, which are often performed under unhygienic and potentially life threatening conditions and others bear their pregnancies to term, incurring the risk of morbidity and mortality related to pregnancy and delivery, together with serious social risks. [9] Contraception has been a single most important intervention to reduce burden of unwanted pregnancy and promote healthy living among young women.^[3] Knowledge of emergency contraception (EC) can help them avoid such unintended pregnancies.^[10] Sexarche is happening earlier in now a days resulting in younger adolescence engaging in sexual habits .However, majority of college students without science background lack

awareness of the harms of unsafe sexual encounters.^[10] In India, the mostly known and used contraceptive is condom for males and I-pill for women which contains of levo-norgesterol. Rarely foams, pessaries, female condoms, intra uterine devices are used. Addressing the issue of unintended pregnancy is a national priority. One proposed strategy to reduce unintended pregnancy is to improve access to oral contraceptives by changing them to over-the-counter (OTC) status. Which was less effective strategy due to lack of awareness.^[12] Oral contraceptives (birth control pills) are used to prevent pregnancies, oestrogen and progestin are two female sex hormones usually given in combination or progestin alone which act by preventing ovulation.^[14] Despite numerous “pill scares” concerning its medical complications, the pill has remained the contraceptive method of choice among fertile women independent of marital status.^[25] The use of contraceptives has been recognized as a key element in reducing fertility for all age groups in many developing countries. Birth spacing has been identified by the World Health Organization as one of the six essential health interventions needed to achieve safe motherhood. Studies indicate that the total fertility rate of a nation is inversely related to the prevalence rate of contraceptive use.^[39]

II. Methodology

It is descriptive cross-sectional study conducted in few areas of south Bengaluru. A self-administered questionnaire was used to collect data from the participants. It is comprised of close ended and open ended questions on awareness and practices regarding oral contraception. The questionnaire from the pre-session comprised of various details like demographics i.e. age, marital status, age of menarche , knowledge regarding the contraceptives, side effect seen when used the oral contraceptives etc. the other questions regarding the effects of OCPs on menstruation, risks, time of usage of oral contraceptives etc. were asked.

III. Results

A total of 381 subjects participated in the awareness programme which was conducted for a period of six months from October 2015 to March 2016.

Age groups	Total number of people
18-21	175
22-25	119
26-29	35
30-33	28
34 and above	24
Total	381

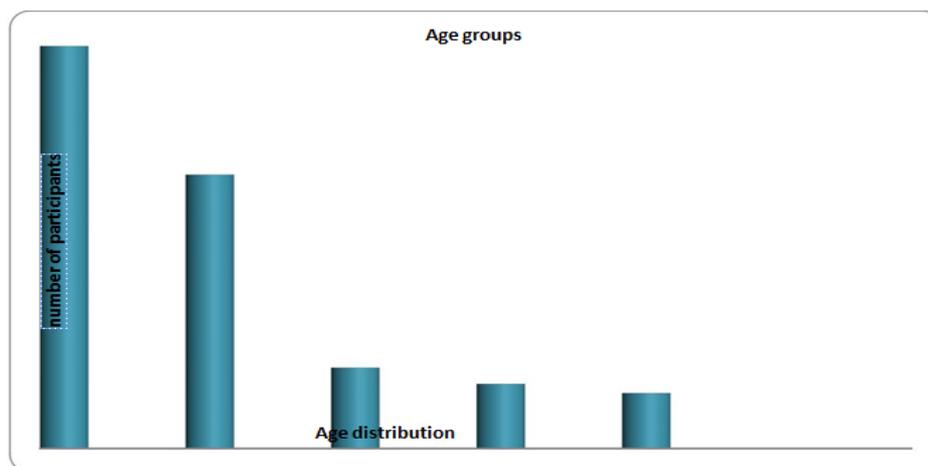


Fig.1: graph representing age distribution among the subjects

Table.2: marital status of the subjects	
Marital status	Number of participants
Married	124[33%]
Unmarried	257[67%]
Total	381

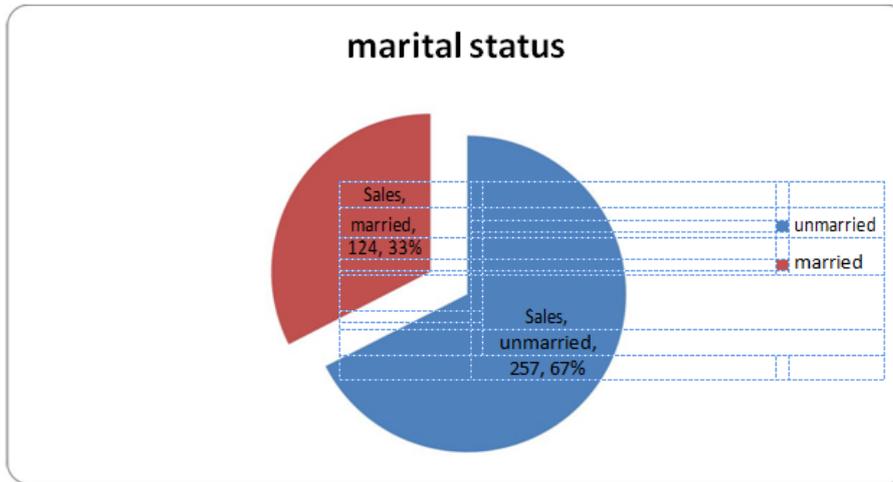


Fig.2: Chart representing marital status of subjects
Majority (n=257, 67%) of the subjects were unmarried and (n=124, 33%) were married.

A STUDY

Table.3: Educational background of the subjects

Educational background	Number of participants
Science	104 [27%]
Non science	277 [73%]

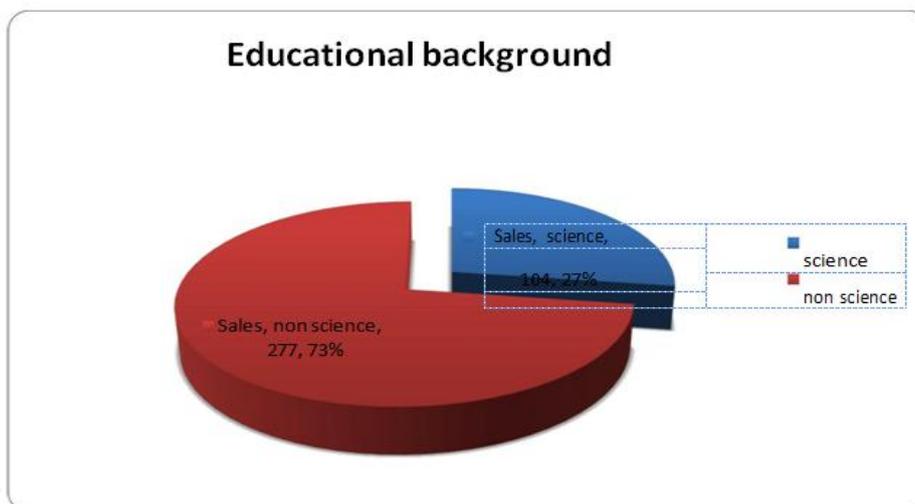


Fig.3: Describes the educational background of the participants

Majority(n= 277,73%) of the participants were from science background, and (n= 104,27%) of the participants were from non-science background.

Table.4: knowledge about contraceptives

Contraceptives	Number of participants
Pills	128
Others	93
none	160

Among the participants, (n= 198, 33.5%)were aware of oral contraceptive pills, (n= 93,24.4%) were aware about the other contraceptives methods like condoms, copper T, hormonal patches etc. and(n=160, 41.9%) were not aware of any contracept methods.Other than the pills, majority of the participants (n=83, 21.7%)in the study knew about the condoms.

Table.5: pre and post session questionnaire asked to assess the knowledge of the participants

SL.NO	Questions asked to assess the knowledge of participants	Pre-session		Post-session	
		correct	wrong	correct	Wrong
1	If a woman has been taking oral contraceptive pills, is it necessary to use any other forms of contraception?	98	283	366	15
2	Can a woman safely take ocps throughout her lifetime?	129	252	362	19
3	Is it important for a woman to take the ocps everyday at the same time?	281	100	358	23
4	The women who use ocps can smoke?	231	150	355	26
5	Does OCP cause birth defects?	75	306	372	9
6	Will the fetus be harmed if a woman accidentally takes OCP while she is pregnant?	203	178	351	30
7	Does usage of OCP result in abortion?	40	341	370	11
8	If a woman has been taking OCP for a long time, will she still be protected from pregnancy after she stops taking OCP ?	100	281	379	2
9	Should a woman take a "rest" from OCP after taking them for a time?	80	301	376	5
10	Does OCP protect against against sexually transmitted diseases?	26	355	360	21
11	Does the OCP increases the risk for breast cancer?	259	122	380	1
12	Is there any difficulty in becoming pregnant after stopping the use of OCP?	229	152	356	25

A STUDY ON

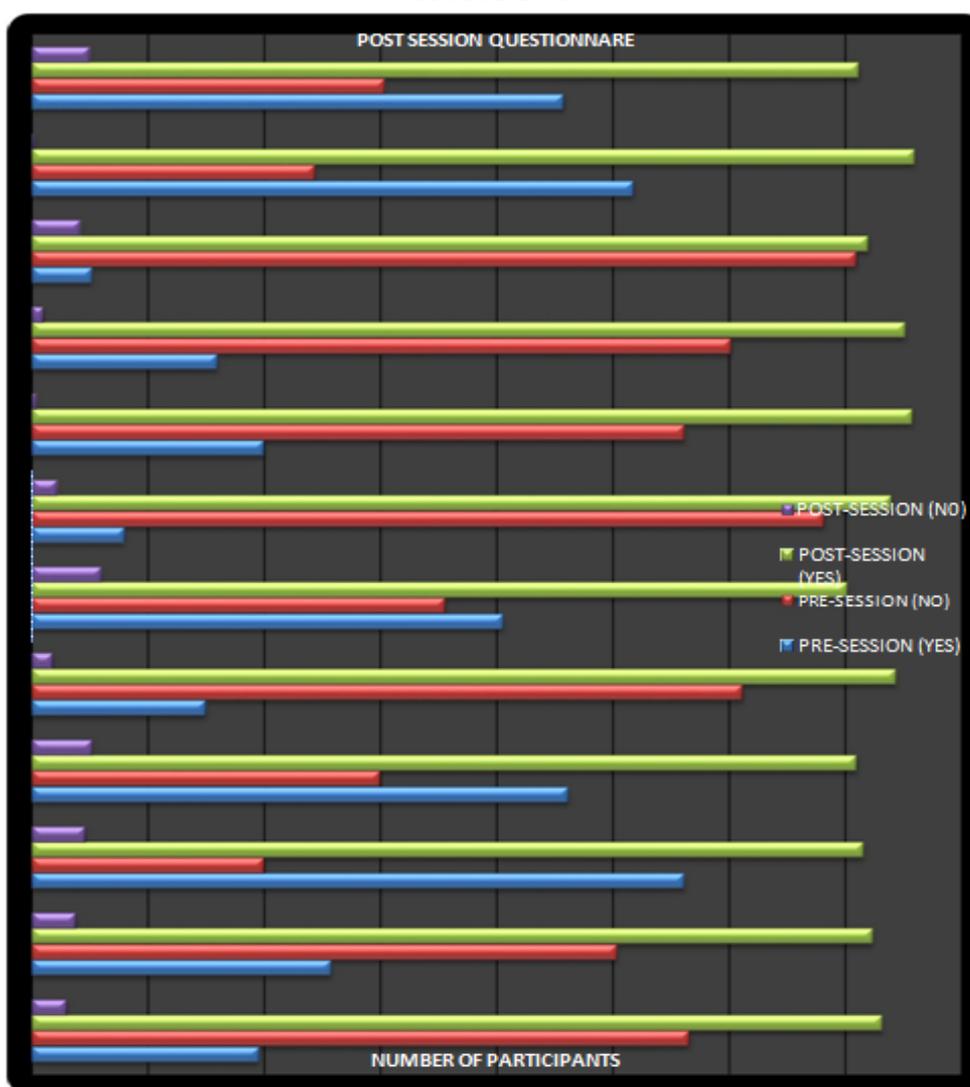


Fig.5: Representing the pre and post session questionnaire

Table .6: Comparison of knowledge regarding different methods of contraception pre and post the session

	Pre-session		Post –session	
	YES	NO	YES	NO
Awareness of different contraceptive methods				
Pills	128 (33.5%)	253 (66.4%)	379 (99.4%)	2 (0.52%)
Others	93 (24.4%)	288 (75.5%)	302 (79.2%)	79 (20.7%)
None	160 (41.9%)		2 (0.52%)	
TOTAL	381 (100%)			

Out of 381 participants, majority (n=128,33.5%) of them were aware about the oral contraceptive pills pre-session as well as post – session i.e., (n=379,99.4%).

The below graph describes the awareness of different contraceptive methods among women.

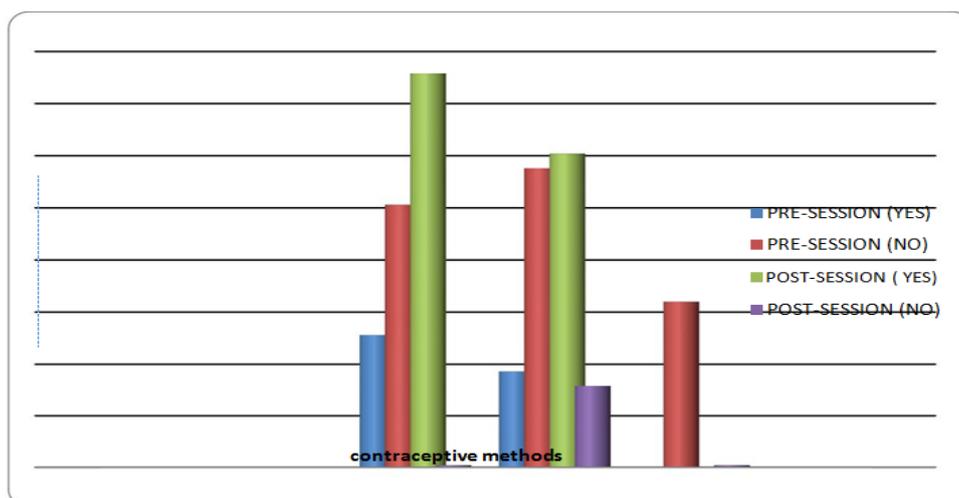


Fig.6: Representing the ccomparison of knowledge regarding different methods of contraception pre and post the session

Table .7: Side effects reported by the users among the participants.

Side effects observed	Number of participants	Percentage(%)
Headache	65	54%
Vomiting	52	43%
Weight gain	4	3%

The above table represents the side effects reported by the users among the participants. From our study we observed that among the users (n=74),headache was the major side effect reported by the participants(n=65,54%).

Table.8: Post the session people who increased their knowledge

SL.NO	Number Of Participants	YES	NO
1	381	372 [97.6%]	9[2.36%]

IV. Discussion

The present study was focused on identifying the knowledge, awareness and perception of OCP use among women in few areas of south Bengaluru. Contraception allows women the freedom to enjoy the sexual relationship as reported in a qualitative study. The large number of induced abortion in India reflect the unmet need for contraceptive usage. In India, OCP's are available over the counter in the private sector as well as through government supply .Anybody can procure them without the physician advice i.e., without any prescription. So, OCP's are misused among the women to prevent unprotected intercourse ,due to many obstacles to knowledge preventing the same. Understanding current knowledge, perceptions and identifying the awareness among the women with regard to OCP is necessary. Contraceptive use has been increased in nearly every country in recent decades. The study provided us an insight to explore the knowledge, perception and awareness of OCP's among women in few areas of south Bengaluru. Our study highlights students who were aware of OCP, knowledge regarding correct time of use. A Total of 381 participants were followed for a period of 6 months. Among them, 128 participants were aware about OCPs and 93 were aware about other methods and 160 were not aware about any of the contraceptive methods. This study included both married(n=124,33%) as well as unmarried women(n=257,67%).When the participants were interviewed regarding the perception of OCP's ,married women mentioned that OCP's are used as one of the best method for birth spacing and few mentioned that women's work is strongly linked to the contraceptive use. While, Unmarried women believed that OCP's usage are the safer, easier and best way to prevent unintended pregnancy compared to IUD insertion. Combined pills induced nausea in 30-50% of women and vomiting in 15-25% women. Among the

participants, number of users who experienced headache (n=65,54%) ,vomiting (n=52,43%) and weight gain(n=4,3%) as common side effect which was reported as an immediate effect of ocp's. In India, educated women were aware about only 11.2% about OCPs. The study included the participants with different educational background, that included participants from science background (n=104, 75%) like pharmacy, B.S.C etc and participants with non-science background(n=277,73%) i.e., S.S.L.C and below, B.com, MBA etc. Majority of the participants from the science background were aware about OCPs through social media and other print media, but had a little knowledge about benefits and risks. Whereas, non-science background participants were aware of existence of OCPs through advertisements, but had no knowledge regarding benefits and risks. From the present study, it is evident that there is a strong and intensive need to educate about the usage and risks associated with OCPs among young women and adolescents, as they are in high risk of unintended pregnancy. Majority of the participants in the study reported that, the usage of OCPs were found to be higher due to anxiety and fear about unintended intercourse and lack of knowledge when compared to other methods of contraception which are considered to interact with sexual activity. Therefore, educating them about risks(which includes both short term as well as long term risks) is of major concern. The study gave the community a through insight to understanding the risks and benefits and were more educated and open minded to learn newer methods of contraception on contrary to primitive methods of intercourse. And were more aware upon the usage of the same.

V. Conclusion

Awareness & knowledge regarding the benefit risk ratio of OCP's were found to be increased after educating the women. However, risk associated with the use of OCP's cannot be eliminated; the reduction of incidence rate of risks has been achieved by the conducting our awareness program. This study shows that mere awareness about OCPs is not enough, there is an urgent need to revise and reinforce the ongoing programmes with emphasis on creating awareness with respect to serious side effects associated with the OCPs use. During our course we concluded that the majority of subjects that were exposed to the OCP were very less compared to the amount of subjects that were unexposed.

ACKNOWLEDGEMENTS

First of all we are thankful to the almighty and our parents for their blessings and unceasing encouragement and support in successful completion of this dissertation work. The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning of the people, who made it possible, whose constant guidance and encouragement crowns all effort with success. We would like to express our profound deep sense of gratitude and heartfelt cordial thanks to my respected, honourable guide Mrs.M. Apoorva Dev., Asst. professor, Dept of pharmacy practice, P.E.S College of pharmacy, for inspiring us to successfully carry out this project. She not only provided us valuable intellectual guidance, Innovative and constructive ideas in shaping the dissertation and its development but also gave us complete independence, encouragement, constant scrutiny and timely advice to make the dissertation successful. We are extremely thankful and indebted to Prof.Dr.S.Mohan, Director, P.E.S College of pharmacy, Bangalore, who has always given us constant backup, whole hearted support and encouragement for our research work, by providing us with all the facilities that has led to successful completion of our Thesis. We would also like to thank Mr.Srinivasan.R Asst. professor and HOD, Dept of pharmacy practice, P.E.S College of pharmacy, Bangalore, DR.Ponnam Pravalika ,Asst professor, Dept of pharmacy practice, P.E.S college, Bangalore and Dr.Sanjay Sharma ,Asst professor, Dept of pharmacy practice, P.E.S College of pharmacy, Bangalore for their constant support and guidance in successful fulfilment of this work. We would like to thank our friends Phalgun.D.B , Bhavana chowdary, Chaitra.T, Johncy Nathasha, Bhashwanth pasupuleti, Jyothi, Phanisham kamineni for all the Guidance and support. We would like to thank one and all who directly or indirectly, have lent the hand in this venture.

References

- [1] World Health Organisation; [Http://www.who.gov/Awareness](http://www.who.gov/Awareness)
- [2] Webmed Various Birth Control Methods [Http://www.webmd.com/Sex/Birth-Control/](http://www.webmd.com/Sex/Birth-Control/)
- [3] Usha Ram; Contraceptive Use Among Young Married Women In India,
- [4] World Population And Indian Population [Http://www.worldometers.info/World-Population/India-Population/](http://www.worldometers.info/World-Population/India-Population/)
- [5] Census India Srs Bulletins". Registrar General Of India, Govt Of India. 2013
- [6] Births And Deaths In India [Http://www.medindia.net/Patients/Calculators/Pop_Clock.Asp](http://www.medindia.net/Patients/Calculators/Pop_Clock.Asp)
- [7] Indian Census 2011 [Http:// www. Indian Census.Net/Indian-Population/](http://www.IndianCensus.net/Indian-Population/) Rumani Saikia Phukani; Reasons For Over Population In India , [Http://www.mapsofindia.com/My-India/India/Overpopulation-In-India-Causes-Effects-And-How-To-Control-It](http://www.mapsofindia.com/My-India/India/Overpopulation-In-India-Causes-Effects-And-How-To-Control-It)
- [8] .VanphanomSychareun,VisanouHansana,KeokedthongPhongsavan; Awareness And Attitudes Towards Emergency Contraceptive Pills Among Young People In The Entertainment Places, Vientiane City, Lao Pdr; Unintended Pregnancy Leading To Morbidity And Mortality. *Bmc Women's Health*. 2013; Published Online 2013 Mar 21
- [9] Puri S, Bhatia V, Swami Hm, Singh A ; Awareness Of Emergency Contraception Among Female College Students In Chandigarh, India; *Indian J Med Sci*. 2007 Jun;61(6):338-46.
- [10] National Health Survey-4 2015-2016

A Study On Knowledge, Awareness And Perc Eption Of Oral Contraceptiv E Use And Risk Among

- [11] Mcintosh J, Rafie S, Wasik M, Mcbane S. Changing Oral Contraceptives From Prescription To Over-The-Counter Status: An Opinion Statement Of The Women's Health Practice And Research Network Of The American College Of Clinical Pharmacy. 2011 Apr;31(4):424-37. Doi: 10.1592/Phco.31.4.424.
- [12] Menstruationcycle [Http://Menstrupedia.Com/Articles/Physiology/Cycle-Phases](http://Menstrupedia.Com/Articles/Physiology/Cycle-Phases)
[Https://Courses.Washington.Edu/Conj/Bess/Contraception/Contraception.Htm](https://Courses.Washington.Edu/Conj/Bess/Contraception/Contraception.Htm)
- [13] Rebecca Peck, M.D., C.C.D., And Charles W. Norris, M.D. Significant Risks Of Oral Contraceptives (Ocps). February 2012.
- [14] Quick Starting Contraception Clinical Effectiveness Unit September 2010. Faculty Of Sexual & Reproductive Healthcare Clinical Guidance.
- [15] Percy Skuy History Of Contraception
- [16] MamoonaShafiq, Sikandar Ali Sheikh, Syed Hafeezul Hassan Variables Combined Oral Contraceptive Pills Improve Lung Function Department Of Physiology, Aziz Fatima Medical & Dental College, Faisalabad, Baqai Medical University, Karachi. Pak J Physiol 2012;8(1)
- [17] Who Family Planning/ Contraception
- [18] Women Safety Through Social Marketing In Present.Social Marketing, Contraceptive Use, Aids, Social Behaviour, Women Safety. Dr.K.ChandrasekarM.Balamurugan
- [19] Usha Ram; Contraceptive Use Among Young Married Women In India, Ph.D.
- [20] Tazeen S. Ali, GunillaKrantz, Raisa Gul.Gender Roles And Their Influence On Life Prospects For Women In Urban Karachi, Pakistan: A Qualitative Study
- [21] Provisional Population Totals Chapter 3 Census Of India 2001 Series 1, India, Paper 1 Of 2001
- [22] Unintended Pregnancy In The United States; [Https://www.Guttmacher.Org/Fact-Sheet/Unintended-Pregnancy-United-States](https://www.guttmacher.org/fact-sheet/unintended-pregnancy-united-states)
- [23] The Power Of The Pill: Oral Contraceptives And Women's Career And Marriage Decisions,Claudia Goldin And Lawrence F. Katz Harvard University And National Bureau Of Economic Research26. Nh. Us National LibraryOf Medicine Contraception Guide [Https://www.Patient.Info/Health/Contraception-Guide](https://www.patient.info/health/contraception-guide)
- [24] Puri S, Bhatia V, Swami Hm, Singh A, Awareness Of Emergency Contraception Among Female College Students In Chandigarh, India.
- [25] AulastTakkar, Indian Journal Of Medical Sciences ; 2005; 59;(4) ;143 [Http://www.Indianjmedsci.Org/Article](http://www.indianjmedsci.org/article).
- [26] Farhana Irfan, SajidAli ;Knowledge Of Emergency Contraception Among Women Of Childbearing Age At A Teaching Hospital Of Karachi; Journal Of Pakistan Medical Association. Various Hormonal And Birth Control Methods[http://www.Boulderwomenshealth.Org/Our-Services/Birth-Control/Nonhormonal-Methods/](http://www.boulderwomenshealth.org/our-services/birth-control/nonhormonal-methods/)
- [27] Faculty Of Sexual & Reproductive Healthcare Clinical Guidance Quick Starting Contraception Clinical Effectiveness Unit September 2010 Issn 1755-
- [28] Indian Journal Of Medical Sciences ; Vol: 59: Issue: 4 Pg:143 [Http://www.Indianjmedsci.Org/Article.Asp?Issn=0019-5359;Year=2005;Volume=59;Issue=4;Spage=143;Epage=149;Aulast=Takkar](http://www.indianjmedsci.org/article.asp?issn=0019-5359;Year=2005;Volume=59;Issue=4;Spage=143;Epage=149;Aulast=Takkar)
- [29] Jyotsna Pundir, ArriCoomarasamy.Gynecology Book Evidence Based Algorithm.
- [30] World Health Organisation. [Http://Who.Int/Mediacentre/Factsheets/Fs244/En/](http://who.int/mediacentre/factsheets/fs244/en/)
- [31] Claudia Goldin And Lawrence F. Katz. Harvard University And National Bureau Of Economic ;
- [32] Research The Power Of The Pill: Oral Contraceptives And Women's Career And Marriage Decisions. June 4, 2016.
- [33] OltmansAnanat ,Daniel M. Hungerman . The Power Of The Pill For The Marginal Child: Oral Contraception's Effects On Fertility, Abortion, And Maternal & Child Characteristics; March 2008; [Http://Harris.Princeton.Edu/Seminars/Pdfs/Ananat.Pdf](http://harris.princeton.edu/seminars/pdfs/ananat.pdf)
- [34] Adam Sonfield, Kinsey Hasstedt, Megan L. KavanaughAnd Ragnar Anderson. The Social And Economic Benefits Of Women's Ability To Determine Whether And When To Have Children; Guttmacher Institute, 2013.
- [35] Mijatović V, Samojlik I, Petković S, Horvat O, Tomić Z, Sabo A. Hormonal Contraception--Habits And Awareness Female Students Of The University Of Novi Sad, Vojvodina, Serbia; Med Pregl. 2014 Sep-Oct;67(9-10):290-6.
- [36] Mounira Al Sheeha. Awareness And Use Of Contraceptives Among Saudi Women Attending Primary Care Centers In Al-Qassim, Saudi Arabia; International Journal Of Health Sciences (Qassim). 2010 Jan; 4(1): 11–21.
- [37] A S Whittemore, R RBalise, P D P Pharoah,R A Dicioccio. Oral Contraceptive Use And Ovarian Cancer Risk Among Carriers Of Brca1 Or Brca2 Mutations; Br J Cancer. 2004 Nov 29; 91(11): 1911–1915.
- [38] National Cancer Institute; [Http://www.Cancer.Gov/About-Cancer/Causes-Prevention/Risk/Hormones/Oral-Contraceptives-Fact-Sheet](http://www.cancer.gov/about-cancer/causes-prevention/risk/hormones/oral-contraceptives-fact-sheet) .
- [39] Megan L. KavanaughAnd Ragnar M. Anderson. Contraception And Beyond: The Health Benefits Of Services Provided At Family Planning Centers; Guttmacher Institute, 2013.
- [40] Free C, Ogden J, Lee R. Young Women's Contraception Use As Contextual And Dynamic Behaviour; A Qualitative Study Psychol Health 2005;20:673-69.
- [41] KishnaDahiya, Sonika Mann, Smiti Nanda; Women's Knowledge And Opinions Regarding Oral Contraceptives; Journal Of South Asian Federation Of Obstetrics And Gynecology, 2014.
- [42] Gleida. Measuring Contraceptive Use Paters Among Teenage And Adult Women. Fam Plan Prospect 1999;31:73-80.
- [43] Smith B, Gurney E, Aboulcla L. Emergency Contraception: A Survey OfWomens Knowledge And Attitude. Br J ObstetGynaecol 1996; 103:1109-16.
- [44] Graham A, Green L, Glasier A. Teenager's Knowledge Of Emergency Contraception. Questionnaire Southeast Scotland.Bmj 1996; 312: 1567;9.
- [45] Belzar M, Yoshida E, Tejriran T. Advanced Supply Of Emergency Contraception For Alodencnt Mothers Increased Utilization Condom Or Primary Contraceptive Use. J Adolesec Health 2003; 32:122-3.
- [46] Gynthia C. Harper Ma, Elertson.K. The Emergency Contraceptive Pill- A Survey Of Knowledge And Attitudes Among Students At Princeton University Am J ObstGynaecol 1995; 173;1438-45.

IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS) is UGC approved Journal with Sl. No. 5012, Journal no. 49063.

Swathy.Y. "A Study on Knowledge, Awareness and Perc Eption of Oral Contraceptiv E Use and Risk among Women in Few Areas O F South Bengaluru." IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS) 12.4 (2017): 55-62.