

Epidemiological Correlates of Use of Contraceptives Methods and Appraisal of Health Education on Status of Knowledge and Practices among Married Woman

Shabana Anjum¹, P. M. Durgawale², Mahadeo Shinde³

¹Professor and Head of the Department Medical Surgical Nursing, Jabalpur Institute of Nursing Sciences and Research, Jabalpur (M.P.) India

²Professor And Head Department of Community Medicine Krishna Institute of Medical Sciences Deemed University, Karad. Dist-Satara (India) 415539

³Professor Krishna Institute of Nursing Sciences, Krishna Institute of Medical Sciences Deemed University, Karad Dist-Satara (India) 415539

Abstract: *The study aimed to epidemiological correlates of use of contraceptives methods and appraisal of health education on status of knowledge and practices among married women. Longitudinal/ cohort interventional design was used in randomly selected population. The one group pre-test post-test used to appraisal of health education on status of knowledge and practices among 1200 married women at Jabalpur city. RESULTS -majority 510 (42.5%) of sample were from the age group of 28-37 years, 776(64.7%) were had age at marriage was 18-25 most of them were having more than one child (multipara) 645(53.8%) and more than half of them were housewife 635 (52.9%), among them maximum had high school education 285 (23.8%).majority of women knew about female sterilization 1123(93.6%) followed by the chemical method (oral pills) 864 (72%) and mechanical method of family planning (loop and condoms) 579(48.3%). After the health education married women knowledge was improved to 100% about female sterilization followed by condom 99%, skin implants 86%, oral pills 85% and emergency contraceptives 85%. Out of 1200 married women of Jabalpur city currently were using one or other method of contraception, most of them were used oral pills 521 (43.4%).Most 86% of married women had misconception should not use contraceptive method followed by it causes large weight gain. Sociodemographic variable were significantly associated with existing knowledge level of married women specially age at marriage, age at first child,, occupation,, income, education were highly significant.*

Keywords: Epidemiological Correlates, Contraceptives Methods, Health Education

1. Introduction

Women remain one of the most under-served segments of the Indian population. An alarmed number of women who want to space or limit their families currently do not have access to or cannot afford or use appropriate means to do so. Although India was the first country to adopt family planning as a National programme during 1951-52, the demographic situation in the country is still a matter of grave concern. The low use of spacing methods is reflected in early child bearing and short birth intervals. Wherever, services exist, women are constrained for using the family planning methods by cultural mores or pressure to rebuild the population. The recent changes in the institution of family, education and economic independence of women have affected the traditional system and brought some structural changes in the status and role of women as a housewife in the family [1]. India alone has a population of 1 billion. It could be more important to understand the factors that led to this population explosion and the complex links between population growth rates and levels of development. And to acknowledge that India is in the midst of a demographic transition, with fertility rates definitely declining, though not as fast as was expected [2]. The United Nations "World Population Prospects", released on 24th February, 2005 in New York, estimates that there will be 1,395m people in India by 2025, and 1,593m in 2050[1]. The slogan for world health day 2005 "make every mother and

child count," reflect the reality that today, government and the international community need to make the health of women and children a higher priority [4]. An Expert Committee (1971) of the WHO, defined family planning as "A way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitudes and responsible decisions by individuals and couples, in order to promote the health and welfare of the family group and thus contribute effectively to the social development of a country". Increased population has adverse effect on our per capita income. More than 40% of India's population live below the "poverty line" this leads to sickness and in turn sickness to poverty. People suffer from various illnesses and they cannot afford adequate medication due to poverty [5]. Population explosion has created various social problems like unemployment, overcrowding, illiteracy, low standard of living, urban deterioration, inadequate housing poor and inadequate nutrition [6]. As there is no spacing of children, the child gets very little attention. This causes malnutrition and insecurity in the child. Family planning is essential, for the health and happiness of the family [7].

2. Rationale of the Study

The essential aim of family planning is to prevent the unwanted pregnancies. An unwanted pregnancy may lead to an induced abortion. From the point of view of health, abortion outside the medical setting is one of the most

dangerous consequences of unwanted pregnancy. There is also evidence of higher incidence of mental disturbances among mothers who have had unwanted pregnancies [11]. The health impact of family planning occurs primarily, through the avoidance of unwanted pregnancies, limiting the number of births and proper spacing, and timing the births particularly the first and last, in relation to the age of the mother [10]. Recent studies on adolescent reproductive health in Kenya indicate high incidence of maternal mortality and morbidity. The incidence of health problems varied by socio-economic and demographic characteristics of the mothers. Early pregnancies have also been associated with higher than usual risk of morbidity during childbirth and high incidences of maternal and perinatal deaths [12]. In India lack of information, or misinformation, about different methods can confuse and discourage people from using any contraception. Some women are prevented from using any contraception. Some women are prevented from using contraception by a partner or are unable to access services because of their youth or unmarried status. In many cases, these obstacles can be overcome through contraceptive education and social marketing programs.

The natural family planning methods, like calendar rhythm, basal body temperature, cervical mucus Ovulation method special circumstances periods of erratic ovulation puberty, lactation, pre menopause, discontinuation of ovulation effectiveness of natural family planning achieving pregnancy, achieving couple autonomy [3]. Barrier methods could be offered as a useful alternative method of contraception. Nonoxynol-9 (a spermicidal) is a locally acting, non-hormonal method free from systemic side-effects [4]. Women who had accepted the monthly Injectable contraceptives Cyclofem and Mesigyna and had attended family planning centers to learn the acceptability of these two Injectable contraceptive, shown successfulness of these Injectable contraceptives [14]. Whereas Better-educated women are much more likely than less-educated women to practice contraception, and women who work outside of the home are more likely than those who do not to use contraceptives [15].

There is also lack of knowledge and awareness of the women regarding method of family planning give rise a problem to mother as well as child and in the family. Education gives a better understanding, and makes the person think scientifically. The proportion of pregnancies ending in abortion was lower between both illiterate women and women with more than 12 years of education than among women with some education [16].

3. Aims and Objectives

Epidemiological correlates of use of contraceptives methods and appraisal of health education on status of knowledge and practices among married women.

4. Objectives

- 1) To assess the status of knowledge, attitude and practices regarding use of contraceptive methods among married woman.
- 2) To assess the status of knowledge regarding use of contraceptive methods among married woman after health education.
- 3) To compare the knowledge regarding use of contraceptive methods among married woman before and after health education.
- 4) To correlate the selected demographic variables with the status of knowledge and practices regarding use of contraceptive methods.

4.1 Assumptions

- Married woman will have very little knowledge and practices regarding use of contraceptive methods.
- Married woman will improve the knowledge and practices regarding use of contraceptive methods.
- Nurses have an important role to imparting knowledge and practices regarding use of contraceptive methods.

4.2 Hypothesis

- **H₀:** There will be no significant difference in knowledge and practices regarding use of contraceptive methods among married woman.
- **H₁:** There will be significant difference in knowledge and practices regarding use of contraceptive methods among married woman.

4.3 Material and Methods

The study aimed to epidemiological correlates of use of contraceptives methods and appraisal of health education on status of knowledge and practices among married women.

4.4 Research Approach

The research method adopted for the present study was evaluator approach because the present study was aimed to epidemiological correlates of use of contraceptives methods and appraisal of health education on status of knowledge and practices among married women.

4.5 Research Design

In the present study, Longitudinal/ cohort interventional design was used in randomly selected population. The one group pre-test post-test used to appraisal of health education on status of knowledge and practices among married women.

4.6 Setting of the Study

The study was conducted in the 60 municipal corporation wards of Jabalpur city. Jabalpur city is governed by Municipal Corporation which comes under Jabalpur Metropolitan Region. The Jabalpur city is located in Madhya Pradesh state of India.

Jabalpur Population 2011 As per provisional reports of Census India, population of Jabalpur in 2011 is 1,054,336; of which male and female are 546,561 and 507,775 respectively. Although Jabalpur city has population of 1,054,336; its urban / metropolitan population is 1,267,564 of which 663,096 are males and 604,468 are females. Jabalpur Literacy Rate 2011 In education section, total literates in Jabalpur city are 841,399 of which 453,820 are males while 387,579 are females. Average literacy rate of Jabalpur city is 88.90 percent of which male and female literacy was 92.65 and 84.88 percent. Jabalpur Sex Ratio 2011-The sex ratio of Jabalpur city is 929 per 1000 males. Child sex ratio of girls is 901 per 1000 boys. Jabalpur Child Population 2011. Total children (0-6) in Jabalpur city are 107,882 as per figure from Census India report on 2011. There were 56,746 boys while 51,136 are girls. The child forms 10.23 % of total population of Jabalpur City. The rationale for selection of these two areas in Jabalpur City was their geographical proximity, economy in terms of time, easy transport facilities, administrative approval, co-operation and above all.

4.7 Population

The population of the present study comprised of Married women in reproductive age group (18-45 yrs) of 60 municipal corporation wards of Jabalpur city.

4.8 Sample and Sampling Technique

According to Tablot, a sample is a portion of the population that has been selected to represent the population of interest.

4.9 Sample Size

Sample size for this study was 1200 Married women approximately 20 from each wards from 60 municipal corporation wards of Jabalpur city were selected which fulfilled the sampling criteria.

Randomly selected married women considering inclusion and exclusion criteria was thought to be the most appropriate for this study.

4.10 Sampling Criteria

4.10.1 Inclusion Criteria

1. The study subjects will be included in the study only from municipal corporation wards
2. The study subjects will be those who are married.
3. The study subjects will be in the age of 18-45 years.
4. The study subjects will be those who are willing to participate in the study.

4.10.2 Exclusion Criteria

1. Widows and diverse women will be not included in the study.
2. The study subject who are not willing to participate in the study.

3. The study subject with permanent method of sterilization.

4.

5. Tools and Technique

5.1 Instrument

The instrument termed as "Contraceptive methods knowledge and practice inventory" for married women was used to assess the knowledge and practice regarding Contraceptive methods.

The instruments consist of Six parts:

1. Sociodemographic scale
2. Contraceptive methods knowledge inventory
3. Contraceptive methods practice inventory
4. Inventory for future use of Contraceptive methods
5. Attitude of married women regarding practice of contraceptive methods
6. Questionnaire regarding misconception of contraceptive methods

5.2 Data Collection Technique and Tool

The most important and crucial aspects of any research is data collection, which provide answers to the questions under study. Data collection relies on instruments. The present study aimed at assessing the existing knowledge and practice of contraceptive methods and effectiveness of health education in terms of knowledge gained by married women in selected areas of Jabalpur City. Thus, a structured questionnaire was prepared and used for data collection and health education on Contraceptive methods was prepared.

6. Development of the Tool

Treece and Treece emphasized that the instrument selected in research should be as possible the vehicle that would best obtain data for drawing conclusion pertinent to the study. The structured questionnaire was prepared for assessing the knowledge and practice regarding contraceptive methods among married women. The health education was prepared on contraceptive methods. Opinions and suggestions of experts in the field and the exposure of investigator in the area of research were considered. A thorough review of the published as well as unpublished literature concerning the knowledge and practice of married women regarding contraceptive method and its relation with the socio demographic variables were undertaken to get cues for the development of a scientific instrument. Formal and non formal discussion held with the peer group. The opinion from the subject experts was taken.

6.1 Scoring

A score of (1) is assigned to correct response and (0) assigned to each wrong answer. Total score of the knowledge, practice and future use of contraceptive methods

was 16 and misconception about contraceptive methods were 15. The score range from a minimum of zero to a maximum of 16. The status of knowledge has been classified as:

Table 1: Distribution of Knowledge and Practice Score

Status of knowledge and Practice	Score
Poor	0 – 05
Average	06 – 10
Good	11 – 16

6.2 Validity of Tool

Content validity of health education was assessed by distributing to the research expert in the field of nursing, obstetrics and community department who validated the structured questionnaire and health education. The agreement level of the expert was 100 percent of the teaching programme.

6.3 Content validity

According to Freeman (1968), validity of content, however, should not depend upon the subjective judgment of only one specialist. It should be based upon careful analysis by several specialists, of instructional objective and of the actual subject matter studies.

In the present study, the structured questionnaire along with blue print and the health teaching were submitted to twenty experts. Experts were from the nursing and medical fields of community and obstetrics. Eleven experts from nursing field, seven experts were doctors in obstetrics and community department, one expert was educationist and one expert was statistician.

Modification of items in terms of simplicity and order were made. Some items from demographic data were deleted and some items were added.

All the experts gave the opinion to make the health education in brief and in language, which was easily understandable. Accordingly, the areas were identified for simplification and the questionnaire and teaching were modified and the final draft was prepared. Both the structured questionnaire and teaching were translated to Hindi language.

6.4 Criteria Based Validity

To establish criterion based validity instrument was administered to married women of Jabalpur city. It was found that instrument was tapping the area of knowledge and practice successfully for which it was structured.

6.5 Reliability

After establishing the validity of the tool to be used for the study, the final tool was made and then the reliability of the tool was done. The reliability was done in five municipal corporation wards of Jabalpur city. In this study, the reliability determined by administering structured

questionnaire to 100 married women of reproductive age group (18 yrs-45 yrs).

Items of the tool were coded and the reliability co-efficient of correlation was calculated using 'test retest method'. The method of test retest is used to test internal consistency of the tool as well as correlation to the item with the test as a whole. The correlation was obtained by using the Karl Pearson Formula. This was found as '0.82' which is significant.

6.6 Health Education

The Health education for giving information about contraceptive methods and this was prepared after doing intensive study of the relevant literature related to contraceptive methods. The areas of health education as follows:

- Introduction
- Definition
- Discussion about different types of contraceptive methods

During the process of structuring the health education investigator at the onset discussed and consulted with guide, obstetrician and experts in nursing. The time schedule to impart planned teaching was kept between 30-40 minutes. Questions were framed and visual aid was used. So the women were able to easily understand the matter of planned teaching programme.

6.7 Ethical Considerations

Ethical clearance and approval to conduct this research was obtained from the Research Ethics Krishna Institute of Medical Sciences Deemed University, Karad. Permission to conduct the study was also requested from the Municipal corporation department of health and research department. The ethical considerations took into account the personal and revealing nature of the study, which required that voluntary, informed consent, using the consent form designed for this study, needed to be obtained from the participants. Prior to administering the questionnaires, the aims and objectives of the study were clearly explained to the participants and written informed consent was obtained.

Confidentiality and anonymity were ensured throughout the execution of the study as participants were not required to disclose personal information on the questionnaire. Provisions were made to have participants' concerns relating to the study addressed and misconceptions corrected. Participants were informed that their participation was voluntary and that they could withdraw from the study at any time if they wished to do so.

6.8 Pilot Study

A pilot study is a small preliminary investigation of the same general characteristics as the major study which is designed to acquaint the researcher with problems that can

be correlated in preparation for a larger research study (Treece and Treece, 1986)

The pilot study was conducted to assess the feasibility of the study and to decide data analysis plan.

Administrative permission was granted formally from the Municipal corporation office (department of research). The pilot study was conducted on 100 married women of reproductive age group (18-45 yrs). The pre test was given on the first day.

The health education was given to group. The post test was conducted after one month.

Data was analyzed by statistical tests. The pilot study did not show any major change in the design of questionnaire and the health education developed by the researcher.

6.9 Procedure for Data Collection

A formal permission was obtained from the municipal corporation office of the Jabalpur. The study was conducted from the following schedule was followed for data collection. After identifying the sample, objectives of the study were discussed and consent for participation in the study was taken from the selected group. The investigator assured the subjects about the confidentiality of the data. The investigator herself administered the self structured questionnaire for the pre test. The duration of data collection for each sample was 30 to 40 minutes. During the pre test the participants were seated away from each other and discussion was not allowed to prevent contamination. The health education on contraceptive methods was disseminated to the experimental group after the pre-test and brief introduction. The instruction about post-test was given to the respective participants. Time taken for post test by each sample was approximately 15 minutes. After the data collection, all the participants were thanked for their participation in the study.

6.10 Data Analysis

Data collected were tabulated, analyzed and statistically evaluated. Chi-square test was used to find out significance difference among various socio-demographic groups who were having knowledge of contraceptives. Descriptive and inferential statistics were used to analyze the data in this study. The analysis was based on completed questionnaires. Data were imported into licensed copy of SSPS version 20 software. Analysis included frequency and percentage distributions of sample demographic variables, existing knowledge and practice score and misconception about use of contraceptive methods. Inferential statistics used for Effectiveness of health education and association to various variables assessed by using Pearson Chi-Square test and Fisher's Exact Test.

7. Results and Discussion

The institution of marriage defines and circumscribes the life of a woman as wife, a mother and a house maker. Thus it is fairly common for both men and women to discuss family planning. Lack of time, education and awareness are deep rooted constraints for women to perform their multi-dimensional role. The present study aimed at assessing the existing knowledge and practice of contraceptive methods and effectiveness of health education in terms of knowledge gained by married women in selected areas of Jabalpur City. From the 60 municipal corporation wards approximately 20 eligible married women from each ward of Jabalpur city total 1200 sample were randomly selected for the study.

7.1 Sample Characteristics

Analysis of frequency percentage of demographic variable shows that majority 510 (42.5%) of sample were from the age group of 28-37 years, 776(64.7%) were had age at marriage was 18-25 and approximately 607 (50.6%) of them had first child at the age of 18-25 years most of them were having more than one child (multipara) 645(53.8%) and more than half of them were housewife 635 (52.9%), among them maximum had high school education 285 (23.8%), The majority of 579 (48.3) were Hindu roughly 871 (72.6%) of married women were having menstruation ones in a month and 428 (35.7%) had monthly household income of 6000-10000 and most of them 777(64.8%), were from nuclear family. The important Source of knowledge about use of contraception methods was Family members and friends 74 (39.5%).

7.2 Findings related to knowledge of contraceptive methods

- Awareness plays an important role in motivating females to have a favourable attitude towards family planning and to adopt family planning behaviour. In the present study majority of women knew about female sterilization 1123(93.6%) followed by the chemical method (oral pills) 864 (72%) and mechanical method of family planning (loop and condoms) 579(48.3%) followed by the reason might be that the respondents were influenced by the effect of mass media (Television and Radio). Awareness about the natural method was low which might be attributed to the fact that there were no open discussions about these matters at home. Only 21% married women know about the emergency contraception.
- After the health education married women knowledge was improved to 100% about female sterilization followed by condom 99%, skin implants 86%, oral pills 85% and emergency contraceptives 85%.
- Before Giving health education maximum samples had poor knowledge 1177 (98.1%) of contraceptive methods and after administration of health education most of samples had good knowledge 1172 (97.7%) of contraceptive methods which shows that awareness about

contraceptive method is important to increase use of family planning measures

7.3 Findings related to practice of contraceptive methods

Out of 1200 married women of Jabalpur city currently were using one or other method of contraception, most of them were used oral pills 521 (43.4%) as a choice of contraceptive method followed by condom use 421 (35.1%) and 257 (21%) of married women not practiced any form of contraception ever for spacing the child birth, only 107 (8.9%) used IUD and 4% used emergency contraceptive method.

7.4 Findings related to future use of contraceptive methods

Analysis related to future use of contraceptive methods shows that most of married women were willing to use contraceptive method in future among them majority of women want to use female sterilization 1152 (96%) for themselves as a permanent methods as for temporary method 229(19%) want to use oral pill and 126 (10%) interested in condom use. only 38 (3%) selected IUD for future use and few of them 1% intended to use emergency contraception in future.

7.5 Findings related to attitude of married women regarding use of contraceptive methods

In the present study attitude of married women regarding practice of contraceptive methods shows that 757(63.1%) visited depocentre, and maximum 719(59.9%) of them visited a health facility to get information, advice about family planning and most of them 822 (68.5%) would like to visit a health facility for Family planning in near future. It is favorable that most of married women around 509(42%) very uncomfortable to talked openly with husband or family members about contraceptive methods, among them majority of women approved of adopting FP methods to avoid getting pregnant 856 (71.3) but the main reason for not adopting a FP method because lack of knowledge 998 (83.6%) followed by side effects 4%, cost 3% and 2.7% given nno reason for not using any method of contraception. Only 1% opposed because of husband disapproval.

7.6 Findings related to misconception of contraceptive methods

Regarding misconception of contraceptive methods before giving health education most of married women had misconception that young women 1038 (86%) should not use contraceptive method followed by it causes large weight gain 981(81%) after administration of health education most of the misconception were cleared regarding use of contraceptive method to 99%.

7.7 Finding related to Effectiveness of health education

Participation in family planning education groups was not easy for these women. Participatory education methods caused discomfort or uneasiness. They were uncomfortable in expressing their own ideas and also were fearful of the risks of invasion of their privacy. It is observed that knowledge of family planning methods are on the rise and attitudes are favourable towards family planning. Effective family planning programmers can play an important role to bring down the fertility rate.

- In present study before health education most of the married women 97% had poor knowledge score of contraceptive methods which was increased to 31% in average and 97.4% in good knowledge score after administration of health education.
- Pre test mean score was 2.8383 and S.D. was 1.2152 while in post test mean score was 13.6250 and S.D. was 1.44778 this showed significant difference in knowledge score before and after administration of health education.
- The paired sample mean was -10.7867 and S.D. was 1.7461. Since the p-value for the test is less than 0.01, the null hypothesis is rejected at 95.0% confidence levels.

7.8 Findings related to Correlation of demographic variables and existing knowledge of contraceptive methods

- In the present study sociodemographic variable were significantly associated with existing knowledge level of married women specially age at marriage 0.00, age at first child .004, occupation.003, income.000, education .000 were highly significant to existing (pre test) knowledge score whereas other variables like menses, current age, type of family, parity, religion and source of knowledge were not having association with existing (pre test) knowledge score.

7.9 Discussion

In our study, non-use of a contraceptive was (21.4%) as compared to that in the study by Young et al 2 (39%) and by Aneblom et al 3 (33%). The maximum awareness in our study was for female sterilization (93.6%) and almost very low awareness (21.1%) for emergency contraception, while in other studies 18, 19 the majority were aware of most of the contraceptives including emergency contraception. Majority of the population in our area is well aware of female sterilization as a method of contraception but has a very poor knowledge of temporary methods.

The present study highlights a very low contraceptive use because of lack of knowledge as the main reason for a high fertility rate in our part of the city. The various reasons for this are mainly illiteracy, cost, social and religious taboos, and age at marriage. Hence, we recommend sustained efforts

to increase awareness and motivation for contraceptive use. This can be brought about by facilitating the access to more information, education and communication with the reproductive age couples, and improved social and welfare services. These couples should be given information about contraceptives at every visit to the health services to motivate them. Though very few women were aware of the existence of a contraceptive method, the most commonly used contraceptive was oral pill 43.4(34.5%). 96.0% were willing to undergo tubectomy in future whereas only 3% were willing to accept an intrauterine contraceptive device.

8. Limitation

Research on personal and intimate themes, such as use of contraceptive methods, are limited in the results they obtain. The participants may not feel free to express all their feelings and the full reality of their life. The closeness of the researcher collecting the data with the women was an essential condition for running the participant observation process. This may have reduced the limitation of the research mentioned above. The results of this research were limited to this community and care must be taken not to generalize them in an indiscriminate way, although some natural generalizations are possible, because there are many similar urban communities in Jabalpur city.

9. Future Scope

The study throws light upon the awareness of women regarding family planning aspects. Thus the successful limitation of family size by the married women depends not only on their small family norms but also on their psychological acceptance of family limitation, knowledge of birth control methods, availability of contraceptives, psychological and economic costs and more importantly an environment favourable to the practice of birth control. A lot of educational and motivational activities and improvement in family planning services are needed to promote the use of contraceptives and reduce the high fertility rate.

References

- [1] Bhawna Sharma, Shubhangna Sharma and Shipra Nagar, Kamla-Raj (2005,) Awareness Among Women Towards Aspects of Family Planning in Kullu District of Himachal Pradesh, Department of Human Development, College of Home Science, CSKHPKV, Palampur 176062, Himachal Pradesh, India J. Soc. Sci., 11(3): 249-251 (2005), E-mail: sn123plp@yahoo.com
- [2] Population of India- analysis, India will overcome China in population by 2030UN, Indian Census2001
- [3] InfoChange India News & Features development news India
Developed By 2008 www.tekdi.net
- [4] J.Park: 18th Edition, Park's Textbook of PSM, ssJan, 2005, p-349-351,653-665,502.

- [5] N C, Gupta, B.K.Mahajan: 3rd Edition, Textbook of PSM, 2003. P-398-544.
- [6] Bratati Banerjee: Socio-economic and Cultural Determinants on acceptance of Permanent Methods and Contraception (in West Bengal). The Journal of Family Welfare. Vol.50, No.1, June2004.
- [7] A Kansal R. Chandra, S.D.Kandpal, K. S. Negi: Epidemiological Correlates of Contraceptive Prevalence in Rural Population of Dehradun District. Indian Journal of Community Medicine Vol.30, No.2, April-June, 2005.
- [8] D.C.datta(1998), "text book of obstetric" 4th edition, new central book agency calcatta, 568-580.
- [9] Labbok MH, Klaus H, Perez A Efficacy studies in natural family planning: issues and management implications illustrated with data from five studies, Am J Obstet Gynecol. 1991 Dec; 165(6 Pt 2):2048-51
- [10] Yadav SC, Gaur LN, Gupta N, Roy M, Saxena NC, Nonoxynol-9 vaginal pessary: a preliminary Indian experience, Natl Med J India. 2006 May-Jun; 19(3):133-6.
- [11] Hassan EO, el Houssinie M., Acceptability of once-a-month injectable contraceptives Cyclofem and Mesigyna: focus group discussion, Contraception. 1999 Jun; 59(6):369-75.
- [12] Tanfer K, Wierzbicki S, Payn B Why are US women not using long-acting contraceptives, FamPlann Perspect. 2000 Jul-Aug; 32(4):176-83, 191.
- [13] Sahawneh F, Demographic and social characteristics of family planning acceptors in Jordan., Popul Bull ECWA. 1982 Jun-Dec ; (22-23):119-36.
- [14] John T. Noonan Jr.: Contraception, A History of its treatment by the catholic Theologians and canonists. The Bellnap Press of Harvard University, Cambridge, Massachusetts. 1965.
- [15] John Riddle: Eve's Herbs A History of Contraception & Abortion in the West, Harvard University Press. Reprint 1994.
- [16] Department of Family welfare & Government of India. No.5/10/91-PPV, Feb, 92.
- [17] Dr.A.P.Kulkarni, Dr. J.P.Baride S.: 2nd Edition Textbook of Community Medicine, 2002, p.31.
- [18] Aneblom G, Larsson M, Odland V et al. Knowledge, use and attitudes towards emergency contraceptive pills among Swedish women presenting for induced abortion. BJOG 2002; 109:155-60.
- [19] Bromham DR, Cartmill RS. Knowledge and use of secondary contraception among patients requesting termination of pregnancy. BMJ 1993; 306: 556-7.
- [20] Young LK, Farguhar CM, Mc Cowan LME et al. The contraceptive practice of women seeking termination of pregnancy in an Auckland clinic. NZ Med J 1994; 107:189-91.

Author Profile

Shabana Anjum, Professor and head of the department medical surgical nursing, Jabalpur institute of nursing sciences and research, Jabalpur (M.P.) India



P. M. Durgawale, Professor And Head Department of Community Medicine Krishna Institute of Medical Sciences Deemed University, Karad. Dist-Satara



Mahadeo Shinde, Professor, Krishna Institute of Nursing Sciences, Krishna Institute of Medical Sciences Deemed University, Karad Dist-Satara (India) 415539

