Original Research Paper Volume - 5 | Issue - 1 | January - 2021 | ISSN (O) : 2663-0729 | ISSN (P) : 2663-0710

A STUDY ON PREVALENCE OF CONTRACEPTIVE USE AND ITS DETERMINANTS AMONG ELIGIBLE COUPLES IN RURAL HEALTH TRAINING CENTRE (RSTC) AREA OF SRI KRISHNA MEDICAL COLLEGE, MUZAFFARPUR, BIHAR.

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ABSTRACT

BACKGROUND: Root of most of the health related problems are due to population which can be best controlled by family planning. Family planning is a fundamental right of every human being. Family planning plays a key role in improving the health of the mother and the child. Yet there are still significant levels of demand for family planning that are unmet and these can lead to unintended pregnancy. **AIMS AND OBJECTIVE:** To find out the couple protection rate (CPR) and risk variables that affect contraceptive practice among eligible couples. **METHODS AND MATERIALS:** A Community-based cross-sectional observational study design was conducted from March 2020 to September 2020 among 200 systematically selected currently married women of reproductive age to get relation between various factors that could affect contraceptive practices. A Pre-tested interviewer-administered questionnaire was used to collect the data. Descriptive statistics were done to summarize the data. **RESULT:** Most of the study population (55%) was young adults of age 22 -28 years, 63% belong belongs to nuclear families, CPR was 63.40%. permanent method used by the couple was only 47%. Higher number of contraceptive couples users were married during 21-26 (73%), literate up to class X^{th} (72%), having 3 or 4 living children (76.5%) and socioeconomic status of class II (82%), female literacy rates was higher and tubectomy was commonest contraceptive methods. **CONCLUSION:** CPR was high, though different factors like age at marriage, type of family, number of living children, literacy status of female partner, and socioeconomic status significantly affected contraceptive behaviour of the study population.

KEYWORD

Family Planning, couple protection rate, contraception, Eligible couple.

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INTRODUCTION:

According to Census 2011 decadal population growth rate of 17.64) with a crude birth rate of 21.6 and current total fertility rate (TFR) 2.68 (NFHS-3). Declining fertility in large part is due to women's increased use of contraceptive methods. Their use of modern methods increased from 42.8 to 48.5% between NFHS-2 to NFHS-3. National Family Welfare Programme which was incepted in 1951 in India, first in the world, now is going on as Reproductive Child Health-II programme under the umbrella programme NRHM. The range of contraceptive products delivered through the programme has been widened, 'cafeteria choice' approach has been adopted to provide contraceptives to eligible couple, and goal for couple protection rate (CPR) was 63.4%. Family planning is the decision making process by which the need or demand for contraceptives, and meeting the demand or the supply of contraceptives are dependent on each other. As women's demand for contraception increases, the need for governments, donors, manufacturers and other stakeholders to supply the demand becomes increasingly critical [1]. It is an important step toward breaking the cycle of poverty for women, their families and their communities. Yet much remains to be done before the right to self-determined family planning can be fully realized. Improvements in meeting the demand for family planning require not only data on overall levels and trends in contraceptive prevalence and unmet need for family planning but also an assessment of the diversity of contraceptive methods used [2]. Researchers have shown that Reproductive age, women have varying contraceptive needs. Because of side effects, daily intake and similar complain, many women do not use oral contraceptives effectively which can lead to unintended pregnancy. Rather, they choose long-term reversible contraception like Intra Uterine Devices (IUDs) and implants [3]. The total demand for family planning is currently defined as the percent of married or in union women aged 15– 49 years who want to delay or limit child bearing (i.e. the combination of women with unmet need and women using family planning constitutes the total demand for family planning) [4]. Yet there are still significant levels of demand for family planning that are unmet. If this unmet need were met, unintended pregnancies would be reduced, women's health and lives would be improved, can prevent an estimated 2.7 million infant deaths globally and the consequent impact on fertility would result in lower population growth [5]. The growing use of contraception around the world has given couples the ability to choose the number and spacing of their children and has tremendous lifesaving benefits. But, contraceptive use is still low and the need for contraception high in some of the world poorest and most populous places [6]. Contraceptive use was increased

worldwide over the last decade but, Africa has still a high unmet need for family planning that approximately 25% of women and couples in Sub-Saharan Africa who wanted to space or limit their births are not using any type of contraception [7]. Half of the married women worldwide now use a modern method of contraception, but 200 million women still have an unmet need that they would like either to stop having children or delay their next birth for at least 2 years but are not using an effective contraceptive method. This unmet need is fuelled by lack of information, fear of social disapproval or a husband's opposition, religious or cultural beliefs, and concern for contraceptive side-effects or impacts on health. This could lead to increased unwanted pregnancy and induce abortion [8–10]. In many resource-poor settings, the growing unmet need for contraception is astounding. So, couples who wish to have fewer children are unable to determine the size of their families as funds for family planning continues to be scarce and existing programs and services fail to meet the concerns and desires of their users [11]. In Ethiopia, the strategy was emphasized on delivery of short-acting methods, especially pills where the probability of an adult woman dying from a maternal cause during her reproductive lifespan is about one in 40 [12, 13]. EDHS 2011 indicated that unmet need for contraceptives was about 25% with a total demand of 54% [14]. Although family planning use among women of reproductive age has been increased from its virtual nonexistence level, it is still low in Ethiopia. This is as a result of low availability of a variety of contraceptive methods [15]. Availability of quality family planning services, diversity of the methods and correct information enable women to make informed choices. This study has determined the level of family planning and identified factors associated with demand for family planning and hoped to be used as an input for program and health policymakers in designing family planning service. According to Census 2011 decadal population growth rate of 17.64) with a crude birth rate of 21.6 and current total fertility rate (TFR) 2.68 (NFHS-3). Declining fertility in large part is due to women's increased use of contraceptive methods. Their use of modern methods increased from 42.8 to 48.5% between NFHS-2 to NFHS-3. Contraceptive prevalence rate of India was 56.3% as per the NFHS-3 data [16]. Under the National Rural Health Mission (2007-2012) programme goal set for TFR was 2.1 [17].

AIMS AND OBJECTIVE: (1) To find out the couple protection rate (CPR) and risk variables that affect contraceptive practice among eligible couples. This study has determined the level of family planning and identified factors associated with demand for family planning.

MATERIAL AND METHODS:

Study design: A community-based cross-sectional study design was employed.

Source population: All currently married women of the reproductive age group coming to the rural health *kanti training centre* (RSTC area) attached to Sri Krishna Medical College, Muzaffarpur district of Bihar were the source population.

Study population: 200 randomly selected married women age between 22 and 44 years who were living in *kanti rural health training centre* of SKMC, Muzaffarpur district of Bihar.

Inclusion criteria: All married eligible couple of age between 22 to 44, who are mentally and physically fit that were given the consent are included for the study.

Exclusion criteria: Physically and mentally unfit women, those not giving consent, married women of the reproductive age group who were critically ill, unable to talk or hear during the study period were excluded from the study. Exclusion criteria were separated, divorced, widow, consummation of marriage not occurred, hysterectomy done.

Information was collected by interviewing eligible couple visited to the RSTC area and also by home visit along with Anganwadi worker (AWW) and helper. Data also was collected by interviewing the wives of eligible couple while they attended Integrated Child Development Services (ICDS) centre along with their children. Interviewing of study participants was also carried out at the end of mothers meeting session conducted in ICDS centre.

All the study participants were explained the purpose of the study and were ensured strict confidentiality. Written informed consents were taken from the participants prior to the study. Before the study, necessary clearance was obtained from institutional ethics committee.

Case definition-

Socioeconomic status:

Socioeconomic status of the study subjects was classified into Class I (≥3,239), Class II (1,620–3,239), Class III (972–1,620), Class IV (486–972) and Class V (< 486) by using modified BG Prasad Classification based on Consumer Price Index of December 2009 of 657[18] (correction factor = 32.39).

Eligible couple

Currently married couples with wives aged between 15 and 49 years who were in need of family planning services are referred to as eligible couples [19].

CPR

It is defined as the percent of eligible couples effectively protected against childbirth by one or other approved methods of family planning, viz. sterilization, intrauterine device (IUD), condom, or oral pills [20]

Contraceptive prevalence rate

Percent of eligible couples protected against child birth by any method of family planning (modern and traditional methods) [21]

Contraceptive methods

Contraceptive methods are defined as preventive methods to help women avoid unwanted pregnancies [20]

Features of an idle contraceptive

Safe, effective, acceptable, inexpensive, reversible, simple to administer, independent of coitus, long lasting, and requiring little or no supervision [20].

STATISTICAL ANALYSIS:

After data collection, each questionnaire was checked. Data was entered and analyzed by SPSS version 20 statistical packages. Descriptive statistics were done to summarize the data.

RESULT:

Sixty-three percent of study population belongs to nuclear family and 37% was from joint family. 11.50% of study population belonged to general caste, 78% to scheduled caste (SC), and 10.5% of scheduled tribe (ST). Wife of 6.50% study population are illiterate, 34% up to class IV, 42.0% up to class X, and 8% up to class XII and above. Husband of 6.50% of study population are illiterate, 44.5% up to class IV, 42% from V to class X, 7% up to class XII and above. 62.35% of study population was housewives and 37.65% were housemaids. Eight percent of study population was unemployed, 37% were unskilled labourer, 23.00% were skilled labourer, 19.0% were self-employed, and 13% were service holder. Age at marriage of 23% of eligible couple was less than 18 years and 77%was 18–24 years.

Forty seven percent of study population belonged to the age

group of 20–24 years followed by 22% in 25–29 years age group, and 4% below 19 years of age.

Table-1: Distribution of study population according to age

Age (years)	No of eligible couple (n=200) Percentage	Percentage
≤19	08	4
20-24	94	47
25-29	44	22
30-34	32	16
≥35	22	11

Three percent of study population had no children, 17% had one child, 60% had two children, 12% had three children, and 8% had more than three children.

Fifty two percent of eligible couple was using permanent methods, 16.50% were using temporary contraceptives, and 34.50% were not using any. Current contraceptive practice of any approved method of study population was condoms-4%, oral contraceptive pill (OCP) - 18.50%, and sterilization 47%. There was no IUD user among the eligible couples.

DISCUSSION:

This study has attempted to assess demand for modern methods of contraceptive and associated factors among married women of reproductive age. We have attempted to find the contraceptive prevalence with various correlates that could have affected the contraceptive behavior. Factors known to affect contraceptive use are complex and interrelated, for example, women's status has been linked to their use of contraceptives and thus their fertility. Among indicators of female status are level of education, employment, mobility, and political activity Inspite of these efforts, several issues continue to daunt the programme and many goals remain underachieved, such as a significant proportion of pregnancies continue to be unplanned, contraceptive needs of millions of women remain unmet, and several subpopulation groups including adolescents and men continue to be underserved and neglected [21].

CONCLUSION:

CPR 63.40%; female literacy rate is exceptionally higher than national average. 92.50% wives of eligible couples are literate. Early marriage is a prominent feature in the study area. Thirty- six percent girls marry at the age of less than 18 years. 55.50% of study population belonged to Prasad socioeconomic status scale class III and IV. Tubectomy was the commonest type of contraceptive methods.

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