

Knowledge and Use of Contraceptives among Currently Married Women in Mizoram

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Received date: July 20, 2022, Manuscript No. IPJCS-22-14129; Editor assigned date: July 25, 2022, PreQC No. IPJCS-22-14129 (PQ); Reviewed date: August 09, 2022, QC No. IPJCS-22-14129; Revised date: September 21, 2022, Manuscript No. IPJCS-22-14129 (R); Published date: October 20, 2022, DOI: 10.36648/2471-9749.7.11.001

Citation: Pautunthang N (2022) Knowledge and Use of Contraceptives among Currently Married Women in Mizoram. J Reproduct Health Contracept Vol:7 No:11

Abstract

Using National Family Health Survey (NFHS) data and reports for Mizoram, the analysis revealed that the level of awareness of contraceptive methods is considerably high in Mizoram (99.5% in NFHS-5). However, only 31.2% of currently married women used any contraceptive methods in NFHS-5. This indicated a wide gap between the knowledge and actual use of contraceptives. Any modern contraceptive method is more popular (30.8% in NFHS-5), whereas traditional contraceptive methods are negligible in the state (0.4% in NFHS-5). The most used contraceptives were female sterilization (13% in NFHS-5), pills (12.9% in NFHS-5) and intrauterine devices (2.8% in NFHS-5). There is a significant association between residence, age, education, and living children towards current contraceptive use. There is inter-district variation in the contraceptive prevalence rate. As per the NFHS-5, the contraceptive prevalence rate among currently married women is highest in the district of Champhai (50%), whereas it is lowest in the Aizawl district (21.6%). The contraceptive prevalence rate in the state has declined since NFHS-3 (59.9% in NFHS-3, 35.3% in NFHS-4 and 31.2% in NFHS-5). Contraceptive use in Mizoram is lower than the national figure in all the national family health surveys.

Keywords: Contraceptives; Modern methods; Traditional methods; Women; Unmet

Introduction

Contraception is the intentional prevention of conception or impregnation through various devices. It is an unnatural method of preventing pregnancy as a result of sexual contact through a complex process [1]. There are two types of contraceptive methods: permanent and temporary. Sterilization is permanent contraception that both men and women can get done. Tubal ligation is a permanent sterilization process performed on women. Permanent sterilization conducted on males is vasectomy. Temporary methods are usually used for birth spacing. Contraception can also be categorized into modern methods and traditional methods. The modern method includes

sterilization, pill, IUD/PPIUD, injectable, condoms, diaphragms etc. Traditional method includes rhythm, withdrawal methods, etc. Women have a wider choice of contraceptive methods as compared to men.

Contraception is an essential tool for population control. The utilization of contraceptive methods is directly related to fertility rates. Therefore, the usage of contraceptive methods has a significant impact on fertility levels in each region. The demand for contraception varies dramatically between and within states. Within societies, the acceptance of contraceptive methods and contraceptive choices vary. Fertility is generally high where contraceptive prevalence is low and vice versa. The factors that contribute to such a diverse picture operate at the individual, family, and community levels, with their milieu in India's socio-economic and cultural context. Contraceptive services could improve the mother's health, which will help the family's social and economic well-being. Increasing contraceptive prevalence is one of the steps needed to reduce fertility and improve maternal and child health. Contraception is the single most essential fertility intervention, reducing the burden of unwanted pregnancy and promoting healthy living among young women [2].

Literature Review

The existing literatures were collected from published writing in books, journals and conference proceedings, magazine, newspapers, and internet sources. The literature review provides information and builds knowledge to show how this study could add to family planning. The use of contraceptives is not a new practice in human society. In all cultures, people used to regulate their fertility through either traditional medicine or cultural practice to prevent conception.

Knowledge of contraceptives methods

Knowledge and contraception usage are the indicators most frequently used by national and international organizations to assess the success of family planning programmes. Since the 1960's, many fertility surveys and knowledge, Attitude, and Practice (KAP) studies have been undertaken worldwide [3]. Onwuzurike and Uzoichukwu interviewed 334 Nigerian, non-

pregnant women living in a high density, low income urban area of Enugu on knowledge, attitude and practice of family planning. Knowledge and approval of family planning were high, but the use of family planning was low, as only 20% of the women were using a family planning method. The most familiar methods for both use and current use were the safe period/billings ovulation chart, condom, Intra Uterine Contraceptive Device (IUCD), and injections.

According to Shastri, in Kerala, knowledge of sterilization was the highest, and the diaphragm was the least, irrespective of religion, age and education. However, there was a wide gap between knowledge and practice of sterilization. Among the Muslims, the practice of sterilization was the lowest compared to Hindus and Christians. On the other hand, the condom method was more prevalent among educated people. Income and education are essential correlates of knowledge, as seen in his paper. Rao et al., in their study on knowledge, attitude and practice of family planning in Tamil Nadu, reveal good knowledge and favorable attitude (80%) towards family planning among the fishers community [4]. Sterilization and abstinence are widely practiced among them. Knowledge of permanent methods and abstinence is more than that of temporary methods.

A contrastive research study of the status of Balaiah, in a study on contraceptive acceptance in a tribal area of Maharashtra, finds that knowledge and practice of contraceptives were less among non-acceptors than among acceptors. Non-acceptors reported that their husband's attitude was unfavorable. A study on determinants of contraceptive use dynamics finds that the knowledge and practice of contraception are mostly confined to female sterilization. The awareness and use of other contraceptive methods are relatively small and found only among better-educated females and those with high socio-economic status [5]. Singh, in his study on adoption of family planning practices and associated factors in the Pardarganj area of Delhi, reveals that half of the illiterate females have accepted family planning, and the majority of them are sterilization acceptors.

A contrastive research study of the status of women, contraceptives and fertility in Orissa finds that knowledge of 26 family planning methods is lower among scheduled castes and scheduled tribes than in other castes women. Knowledge, awareness, and family planning methods are relatively higher among the women in coastal areas than in tribal areas. Furthermore, the proportion of people who utilize modern contraceptives has risen over time.

Factors influencing contraceptive use

Many factors influence the acceptance of contraceptives at the individual, family, and societal levels. Work done by Narzary and Gautam on Indian women's contraceptive usage has shown that factors such as age, education, number of living children, preference for sons, place of residence, caste, knowledge of contraceptives, economic status of household and mass media exposure significantly influence a woman's usage of contraceptive.

The place of residence has a significant impact on contraceptive use. In the study conducted in developing countries, rates of contraceptive use among married women in rural areas are lower than in urban areas. Contraceptive use differs little between rural and urban locations in Eastern European and Central Asian countries. As with differences in contraceptive use by level of education, differences by rural or urban residence vary among countries. In countries where contraceptive use is widespread, rural-urban differences are smaller than those where contraceptive prevalence is low [6].

In developing countries, women who reside in rural places usually have difficulty acquiring any method of birth control measure to control the number of children, which is also associated with poverty [7]. This is usually experienced in Sub-Saharan African countries, for example, in Kenya, Uganda, Somalia and many other countries facing such challenges, with current statistics using the demographic and health survey's data indicating that 16, 15 and 24% respectively. The fertility differentials are attributed to accessibility to modern contraceptives, whereas access is low in rural areas and high in urban areas.

The age of women is highly related to contraceptive use in any country. Contraceptive use is lowest among young women, rises to a peak among women in their thirties, and then drops as women get older. Users' percentage decreases with age because they are no longer at risk of becoming pregnant. Ram studied contraceptive use dynamics among married young women aged 15-24 in India to understand spatial variation. According to the result, progress in the country's family planning programme is severely restricted among young women aged 15-24. Many women use female sterilization, and condom use is quite limited and has only steadily changed over the last 15 years. The study reveals significant differences in contraceptive use among married young adolescents in different states. According to the study, contraceptive use is higher in socioeconomically and demographically developed states like Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Gujarat, Maharashtra, etc. However, it is lower in states like Rajasthan, Bihar, Madhya Pradesh, and Uttar Pradesh.

Education is a very significant factor that determines contraceptive use. Education is the most dynamic and impactful strategy for instilling a good attitude in couples toward contraceptive methods and measures [8]. Many literatures confirmed that education, particularly female education plays a significant role in the success of family planning. Studies show that most women with at least any level of education are more likely to use contraception than those without education. According to research done in Uganda, it was discovered that women with primary education use contraceptives compared to those with no education level [9].

Audinarayana and Shakilia studied socio-economic and demographic factors influencing the use of fertility control regulating methods in a Tamil Nadu Village. The results suggested that the educational status of wives closely followed by husbands, the overall socio-economic status (index), and age at marriage significantly influence contraceptive methods. Studies show that higher education of the woman (or partner)

better chances of spacing and contraception. Many studies show the change in acceptance level of spacing methods when women are given proper information (IEC) and counseling (health education) on the same. A study done in K S Hedge Hospital, Mangalore, also supports that the higher the couple's education, the higher the contraceptive acceptance by the couple [10]. A study done in Accra and Ghana also supports that higher education of women (also the couple) increases contraceptive methods to reduce parity.

There is a disparity among studies on religion as a factor influencing spacing. Some studies found more spacing methods among Hindus and Sikhs, and other studies showed more spacing of births and child survival among Christians. A strong inverse relationship has also been observed between religiosity and contraception among cross-sections of women in Dacca city. But the differential contraceptive practices among the religious groups are mainly due to differences in socio-economic status such as education, income, health, and variation in cultural practices. When the variables are controlled, religion per se may not be an important determinant of contraceptive use.

A study was carried out, and it was discovered that religion affects the use of contraceptives in Mozambique [11]. It was realized that women affiliated with any religion were surprisingly more likely to use contraceptives than those not affiliated with any religion. In addition, Catholics and Protestants used more contraceptives than other religious groups like Muslims, seventh days, orthodox, and others. Another study in Nigeria found that contraceptive use is higher among Christians than Muslims. In Uganda, research indicates that one's religion strongly influences contraceptive use. Both Catholics and Muslims cite their religions as a primary reason for not using contraceptives.

In India, contraception use was found to be less common among Muslim and Hindu women. There is a comparatively lower use of any method for spacing among Muslims. A study in Karnataka shows that Muslim women tend not to use contraceptives and have more children for having male children [12]. Different studies have identified demographic factors such as the number of living children, desired family size, the experience of child death etc., as significant factors that influence contraceptive use.

A well-known study of tribal access to family-planning services demonstrated the misunderstandings and access issues connected with various approaches. A survey conducted in three talukas in south Gujarat revealed a discrete pattern of attitude and acceptability in these areas. Adiya and Kattunayakan women in Kerala had minimal contraceptive use and a high unmet need for family planning, according to a micro-level study conducted on tribes in south India. Because the tribes have a poor educational level, they are more susceptible to low contraceptive use and unmet need than other socio-economic groups.

Impact of contraceptive use

Contraception is vital in lowering fertility and providing information about service delivery improvements. Ross, et al. found that contraceptive prevalence is highest in countries

where access to contraceptive methods is consistently high across methods. The increased availability of a range of contraceptive methods would allow individuals and couples to achieve their reproductive goals, whether they wish to delay, space or limit births. The study of Steele et al. concludes that the presence of a nearby public health facility is associated with higher modern method adoption after birth and lower method failure rates, and the presence of a pharmacy reduces the chances of discontinuation due to side effects or health concerns.

One of the proximate drivers of fertility is contraception, the most significant factor in the fertility shift. Contraception allows couples to choose when and how many children they want. As a result of the increased usage of contraceptive methods, maternal and newborn mortality has decreased [13].

Research gap

Various studies have been conducted on contraceptive use. Studies on the trend and pattern of contraceptive methods at the national level may not be able to capture regional differences. Therefore, a study at the regional level is essential. Family planning methods are not widely accepted in North East India, where attitudes vary from state to state and even within states. Information about knowledge and utilization of contraceptive methods is of practical use to policymakers and administrators for the formulation of policies.

Mizoram is a small state in India's north-eastern region. The state is characterized by the highest tribal population (94.5%) among the states of India. Mizoram ranks second highest in terms of literacy (91.58 %) and urbanization (51.51%) and 87 per cent of the population embraced Christianity. Even though there are various literatures on population, fertility, and family planning, relatively few studies have been conducted in Mizoram. Hence, it is interesting to study the knowledge and use of contraceptives in Mizoram. Therefore, this paper explores the knowledge of different contraceptive methods among currently married women in Mizoram.

Objectives

- To study the levels and trends of contraceptive knowledge and use in Mizoram.
- To examine the contraceptive use by socio-economic characteristics in Mizoram.
- To analyse the district-wide differences in the use of contraceptives in Mizoram Sources of data.

The present study utilizes data from the National Family Health Surveys (NFHS). The NFHS is an important component of the project to strengthen the survey research capabilities of the population research centers in India. NFHS was launched by the Ministry of Health and Family Welfare (MOHFW), Government of India. The survey provided state and national fertility estimates, infant and child mortality, family planning practice, maternal and child healthcare, and services for mothers and children. Another objective of NFHS was to provide high-quality data to academicians and researchers to undertake analytical research on various populations and health topics. The NFHS of

India is similar to other developing countries' Demographic Health Survey (DHS).

The state of Mizoram was included in the national family health survey since the first round. The first round of NFHS collected information from 1,087 households and 1,045 women. The second NFHS is based on 1,373 households and 1,048 women. The third round of NFHS is based on a representative sample of 1,513 households. The survey interviewed 1,791 women aged 15-49 and 665 men aged 15-54 from all the selected households. The NFHS-4 collected information from 12,279 women aged 15-49 and 1,749 men from 11,397 households. In NFHS-5, data was collected from 7,257 households, 7,297 women aged 15-49 and 1,105 men aged 15-54 [14]. Only currently married women 15-49 years of age are included in the present analysis.

In this survey, knowledge and use of contraceptive methods were collected from the respondents. Individual level data of currently married women aged 15-49 has been used for the analysis. Since couples mostly use contraceptive measures, never-married women were excluded from the analysis. The percentage of women practicing or whose sexual partners are practicing at least one method of contraception is known as the contraceptive prevalence rate. It is commonly calculated for women ages 15-49 that are currently married. Frequencies and cross-tabulation have been carried out by using SPSS. Graphs and tables are used to present the results. Information was also collected from research articles and reports to write this paper.

Results

Knowledge of contraceptive methods

Policymakers can benefit from information on contraceptive technique awareness and use [15]. Comprehensive knowledge and use of contraceptives are essential for reproductive health. Lack of knowledge about contraceptive options can be a significant barrier to couples promoting and using contraception. In the national family health survey, information on knowledge of contraceptives was obtained by asking questions from eligible women.

Figure 1 presents the extent of knowledge of currently married women as obtained from their responses. The percentage of women who knows any contraceptive method declined from NFHS-1 to NFHS-2. Since NFFHS-2, the awareness of contraceptive methods among women has increased. In NFHS-5, the knowledge of contraception is almost universal in Mizoram.

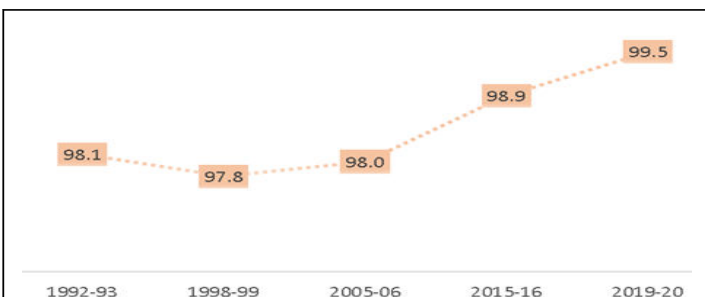


Figure 1: Percentage of currently married women knowing any contraceptive method, 1992-2020, Mizoram.

Source: National family health survey, 1992-2020, Mizoram.

The knowledge of any modern contraceptive method is above 98% in Mizoram. The proportion of married women who know any modern contraceptive methods increased from 98% in NFHS-3 to 99.5 in NFHS-5. The knowledge of any traditional contraceptive method is comparatively lower. While 98% of married women in 2005-06 know any modern methods, only 27.1% know the traditional methods. Unlike the modern method, knowledge of the traditional method shows a fluctuating trend. It showed an increasing trend from 43.7% in 1992-93 to 54.6% in 1998-99. It declined from NFHS-2 to NFHS-3 (27.7%) and showed a continuously increasing trend. According to the NFHS-5, 62.3% of currently married women in Mizoram know any traditional contraceptive methods (Figure 2).

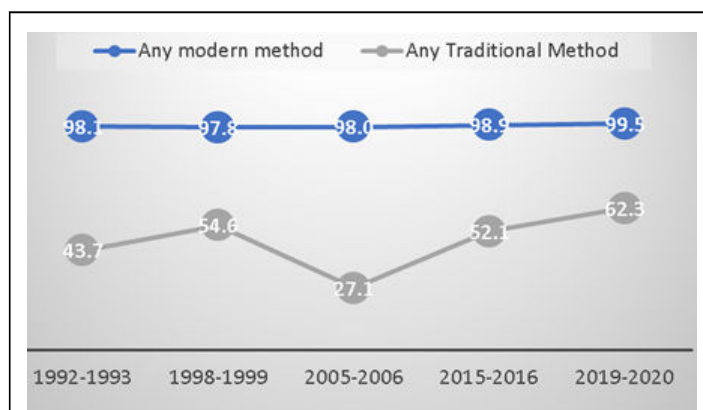


Figure 2: Percentage of currently married women aged 15-49 knowing any modern method and any traditional method, 1992-2020, Mizoram.

Source: National family health survey, 1992-2020, Mizoram

In Mizoram, pill, IUD, condom, and sterilization are women's most common modern contraceptive methods. The knowledge of sterilization is widespread in the state of Mizoram. Intuitive knowledge is higher for female sterilization than male sterilization. Female sterilization is the most widely known contraceptive method from NFHS-1 to NFHS-3. More than 98% of women know about female sterilization. The government family planning programme promotes three temporary methods of contraception: the pill, the IUD, and condoms. Therefore, the knowledge of these methods, especially condoms, is very high. 96.7% and 97.9% of currently married know condoms in NFHS-4 and NFHS-5, respectively. The knowledge of pills increased substantially between NFHS-1 and NFHS-2 and then fell slightly between NFHS-2 and NFHS-3. From NFHS-3 onwards, it shows a continuously increasing trend. IUD is also well known among married women in Mizoram. In NFHS-4, 86.9% of currently married women know IUD. The knowledge of male sterilization is quite limited among currently married women. For instance, only 30.7% of women in NFHS-3 know about male sterilization (Figure 3).

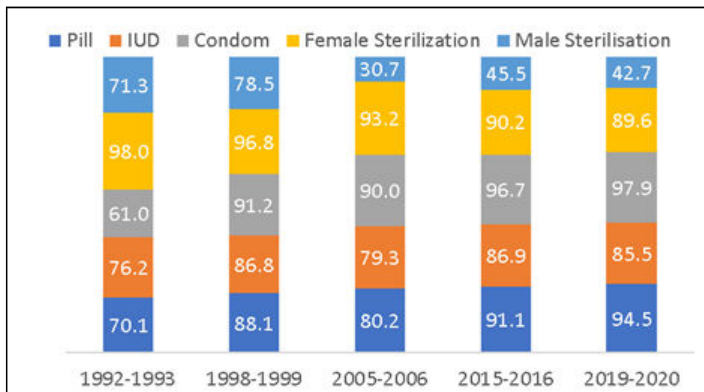


Figure 3: Percentage of currently married women aged 15-49, knowing any modern method by specific method, 1992-2020, Mizoram.

Source: National family health survey, 1992-2020, Mizoram.

In Mizoram, traditional methods of contraception are generally less well known than modern methods. Periodic abstinence and withdrawal methods are the two commonly known traditional methods. The safe period method was known to more women during NFHS-1 and NFHS-2. However, from NFHS-3, more women know the withdrawal method compared to the safe period method. The knowledge of traditional methods among women was meager during NFHS-3. It is evident that Mizoram women are unaware of traditional contraceptive methods (Figure 4).

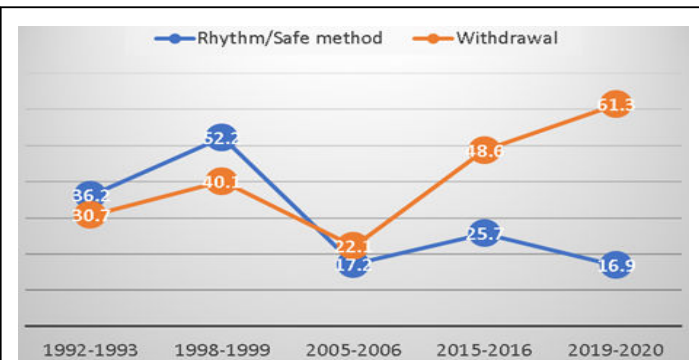


Figure 4: Percentage of currently married women aged 15-49, knowing any traditional method by specific method, 1992-2020, Mizoram.

Source: National family health survey, 1992-2020, Mizoram.

Current use of contraceptive methods

A woman's capacity to choose when she wants to get pregnant directly impacts her health and happiness. Contraceptive provides for the spacing of pregnancies and can

Table 1: Percentage distribution of currently married women aged 15-49 by types of contraceptive methods currently used, 1992-2020, Mizoram.

| Types | 1992-93 | 1998-99 | 2005-06 | 2015-16 | 2019-20 |
|-------------------|---------|---------|---------|---------|---------|
| Any method | 53.8 | 57.7 | 59.9 | 35.3 | 31.2 |
| Any modern method | 52.9 | 57.1 | 59.6 | 35.3 | 30.8 |
| Pill | 2.5 | 5.4 | 10.6 | 13.2 | 12.9 |

delay births in young women who are at a higher risk of health issues and death from early childbearing, as well as prevent pregnancies in older women who are at a higher risk of health problems and death from early motherhood [16].

The use of different contraceptive methods in Mizoram, from NFHS-1 to NFHS-5, is shown in the following table. In Mizoram, the contraceptive prevalence rate grew consistently from 53.8% in NFHS-1 to 59.9% in NFHS-3 before dropping to 31.2% in NFHS-5. Only 31.2% of Mizoram's currently married residents were using some kind of contraceptive method when the NFHS-5 survey was conducted. The use of modern contraceptive methods was 52.9% in NFHS-1, and the figure rose to 59.6 in the NFHS-3 and then leaps down to 30.8% in NFHS-5. Currently, the contraceptive prevalence in Mizoram is low, with 31.2% of currently married women aged 15-49 using any contraceptive methods. 30.8% used modern methods, and 0.4% used traditional methods.

Female sterilization accounts for the most significant proportion of contraceptive use in Mizoram. However, the share of female sterilization in contraceptive use has been continuously declining from 44.5% in NFHS-1 to 13% in NFHS-5. The percentage of male sterilization is negligible. The most common modern spacing methods married women uses in Mizoram are Pill and IUD. The proportion of women who used the pill increased from 2.5% in NFHS-1 to 12.9% in NFHS-5. IUD is used by 5.1% of married women in NFHS-1 and only 2.8% in NFHS-4. The condom was used by only 0.7% in NFHS-1 and 1.9% in NFHS-5.

Mizoram is abnormally low in the use of traditional contraceptive methods. Traditional contraceptive use among married women in Mizoram decreased from 0.9% in NFHS-1 to 0.4% in NFHS-5. Among traditional methods, two significant rhythm/safe period method and withdrawal method methods were included in the table. According to the national family health survey-1, 0.7% of married women reported using the safe period method, while 0.2% said they used it as a method of withdrawal. There were no cases of withdrawal among the married women in NFHS-2 who used a safe period method. According to the national health and nutrition examination survey-3, only 0.3% of women reported using withdrawal methods. In NFHS-4, no women reported the traditional method. In NFHS-5, 0.4% of the women use the withdrawal method. There were no cases in the safe period method (Table 1).

| | | | | | |
|------------------------|------|------|-------|-------|-------|
| IUD | 5.1 | 5.4 | 4.7 | 3.3 | 2.8 |
| Condom | 0.7 | 0.9 | 1.4 | 1.3 | 1.9 |
| Female sterilization | 44.5 | 45.2 | 42.9 | 17.5 | 13 |
| Male sterilisation | 0.1 | 0.1 | 0 | 0 | 0 |
| Any traditional method | 0.9 | 0.7 | 0.3 | 0 | 0.4 |
| Rhythm/safe method | 0.7 | 0.7 | 0 | 0 | 0 |
| Withdrawal | 0.2 | 0 | 0.3 | 0 | 0.4 |
| All women | 906 | 918 | 1,054 | 6,501 | 4,012 |

Source: National family health survey, 1992-2020, Mizoram.

Socio-economic differentials in the current use of contraceptives

Table 2 shows differences in current contraceptive use by selected background characteristics. The contraceptive prevalence varies widely among socio-economic groups.

Place of residence

Place of residence has an immense impact on the utilization of contraception. As expected, the use of contraceptive methods is higher in urban areas than in rural areas except in NFHS-5. Surprisingly, in NFHS-5, the contraceptive prevalence rate is higher in rural areas than in urban areas. Because of the limited study in the state, it is very difficult to have a clear idea about the substantial decrease in contraceptive use. In all the previous rounds, the urban areas have a higher contraceptive prevalence rate than rural areas. The contraceptive prevalence among women in NFHS-1 in rural areas was 50.5%. There was not much difference between NFHS-1 and NFHS-2 as far as the rural area is concerned. In NFHS-3, the contraceptive prevalence rates were 54.8%, which was the highest in all the rounds of the survey. In NFHS-4, the contraceptive (any method) used rate declined to 31.5 percent and increased to 33.5% in NFHS-5. In the case of urban areas, the contraceptive prevalence rate was 57.1% in NFHS-1, 6.6% higher than the rural areas in the same survey. The percentage increased to 65.1 in NFHS-2. There was not much difference between NFHS-2 and NFHS-3. In NFHS-4, the contraceptive use rate declined to 38.5%, which further declined to 29.1% in NFHS-5.

Women's age

Regarding differences by age, experience with contraception rises through the age group 30-39 years and gradually decreases after that. As the age of women increases, the contraceptive use rate also increases. However, in NFHS-2 and NFHS-3, contraceptive use rates are highest in the age group 40-49 years. A very low rate is observed among younger married women 15-19. The contraceptive use rate is also low in 20-24 years.

Among the women aged 15-19, the contraceptive use rate was 5.9 percent in NFHS-1, increasing to 15.4% in NFHS-2. Then it declined to 8.4% in NFHS-3 and dropped to 8.2 in NFHS-4. In NFHS-5, contraceptive use among women aged 15-19 was 13.7% and increased by 5.5% from the NFHS-4. In the age group 20-24 and 25-29, the percentage of contraceptives increased from NFHS-1 to NFHS-3, showing a continuously declining trend. In the case of the age group 30-39 and 40-49, the contraceptive use rate peaked in NFHS-2 and then showed a continuously declining trend. The data shows that women utilize contraception less frequently when they are young. As people get older, they are more likely to use contraception. As women get older, they are more exposed to information regarding contraception [17].

Women's education

Education level plays an essential and significant role in using temporary methods of contraception. A meaningful relationship has been observed between the use of contraception and the education of females. Contraceptive use among women generally increases with an increase in education. It may be due to the fact that respondents with higher education were well aware of family planning methods and felt competent to use them. Women who had no schooling (illiterate) were less likely to use any contraceptive methods. For instance, while the contraceptive prevalence among women with 5-9 years of complete schooling was 40.7% in NFHS-4, it was only 19.5% among women with no education. In NFHS-5, contraceptive use is highest among women with 5-9 years of schooling compared to women who completed 12 or more years of education. Among women with no education, the contraceptive prevalence rate was not much different between NFHS-1 and NFHS-2. The contraceptive use among this group was highest in NFHS-3, 37.8%. In the NFHS-5, the contraceptive use rate was 27.5%, an 8% increase from NFHS-4. Contraceptive use among women who have completed less than five years of education shows a fluctuating trend [18]. Contraceptive use increased from NFHS-1 to NFHS-2 among women who have completed 5-9 years of education. Since then, the contraceptive use rate has been

declining till NFHS-5. The contraceptive use rate fluctuated among women who completed 10-11 years of education. It was highest in NFHS-3 (64.6%).

Religion

Religious affiliation not much affects the use of contraception. In NFHS-1, NFHS-2 and NFHS-4, the contraceptive prevalence among Christian were higher than in other religious groups. In NFHS-3, it was highest among Hindus (61.6%), and there was not much difference with the Christians (60.7%). The contraceptive use was lowest among Hindus in NFHS-4 and NFHS-5. The contraceptive use rate was lowest among the Buddhists in NFHS-1 and highest in NFHS-3 [19]. Among Christian women, contraceptive use increased from NFHS-1 to NFHS-3 and declined until NFHS-5.

Caste

Up to NFHS-3, the contraceptive prevalence was highest among the Scheduled Tribe (ST). In NFHS-1 and NFHS-3, the practice of family planning was lowest among OBCs. But in the NFHS-4, it was highest among OBCs and lowest among SC women. According to the NFHS-5, contraceptive use was highest among SC and lowest among OBC women. Among the Scheduled Tribe (ST) women, the contraceptive prevalence increased from NFHS-1 to NFHS-2. From NFHS-2, contraceptive use was continuously decreasing among ST. The contraceptive use among SC women shows a fluctuating trend; it was highest in NFHS-5(42%). In NFHS-5, the contraceptive use was lowest among OBC women (21.5%).

Number of living children

The number of living children affects the current use of any

contraceptive methods. The contraceptive prevalence rate is lowest among women with no children and highest among women with four or more children except in NFHS-5. The use of contraception increases as the number of living children increases. For instance, in NFHS-1, the current use of any contraceptive methods increases steadily from 25.2 percent for women with one child to 48.9% for women with 2 children, 67%with three children and 74.3% for women with four or more children. A similar pattern was observed in NFHS-1 to NFHS-4 also. However, in NFHS-5, the percentage was higher for women with three children compared to women with four or more children. Among women with no children, contraceptive use increases sharply from 0.9% in NFHS-1 to 4.4 per cent in NFHS-2. It declined to 1.5% in NFHS-3 and 0.5% in NFHS-4. The rate of contraceptive use among women with no children was highest in NFHS-5 (6.4%).

For women with only one child, contraceptive use slightly increases from NFHS-1 to NFHS-3. There was not much difference between NFHS-4 and NFHS-5. Among women with two children, the rate of contraceptive use has decreased from 48.9% in NFHS-1 to 47.4% in NFHS-2. In NFHS-3, the rate was 62% which was a 14.6% increase from NFHS-2. From NFHS-3, the contraceptive use rate was continuously declining among this group. Contraceptive use increases from 67% in NFHS-1 to 76.8% in NFHS-3 with three living children. It has decreased from 76.8% in NFHS-3 to 41.2% in NFHS-5. Among women with four or more children, contraceptive use increases from 74.3% in NFHS-1 to 78.8% in NFHS-2. It has declined to 46.9% in NFHS-4 but grew in NFHS-5 (38.3%). As the number of living increases, contraception also increases; this might be because women with more children are closer to completing their desired family size.

Table 2: Percentage distribution of currently married women age 15-49 by any contraceptive method currently used, according to selected background characteristics, 1992-2020, Mizoram

| Characteristics | 1992-93 | 1998-99 | 2005-06 | 2015-16 | 2019-20 |
|--------------------|---------|---------|---------|---------|---------|
| Place of residence | | | | | |
| Rural | 50.5 | 49.7 | 54.8 | 31.5 | 33.5 |
| Urban | 57.1 | 65.1 | 64.3 | 38.5 | 29.1 |
| Age | | | | | |
| 15-19 | 5.9 | 15.4 | 8.4 | 8.2 | 13.7 |
| 20-24 | 22 | 25.3 | 28.2 | 24 | 21.7 |
| 25-29 | 37.6 | 43.3 | 58.2 | 32.2 | 29.5 |
| 30-39 | 73.3 | 74.4 | 69.5 | 38.8 | 33.9 |
| 40-49 | 59.1 | 79.3 | 72.5 | 37.6 | 31.1 |
| Education | | | | | |
| No schooling | 35.4 | 35.2 | 37.8 | 19.5 | 27.5 |

| | | | | | |
|---------------------------|------|------|------|-------|------|
| < 5 years complete | 58.5 | 58.4 | 56.7 | 32.2 | 28.9 |
| 5-9 years complete | 49.4 | 63.9 | 62.4 | 40.7 | 32.4 |
| 10-11 years complete | 51.5 | 60.9 | 64.6 | 32.2 | 37.2 |
| 12 or more years complete | * | 55.7 | * | 33.4 | 26.3 |
| Religion | | | | | |
| Hindu | 42.1 | 36 | 61.6 | 18.4 | 26.6 |
| Christian | 54.1 | 60.2 | 60.7 | 36.8 | 31.1 |
| Buddhists | 16.7 | 0 | 38.6 | 21.3 | 33.4 |
| Caste | | | | | |
| ST | 54.1 | 58.8 | 37.2 | 34.9 | 30.9 |
| SC | * | 25 | 33.3 | 30.9 | 42 |
| OBC | 40 | * | 20 | 45.5 | 21.5 |
| No. of living children | | | | | |
| No children | 0.9 | 4.4 | 1.5 | 0.5 | 6.4 |
| 1 child | 25.2 | 26.8 | 33.3 | 21.3 | 21.1 |
| 2 children | 48.9 | 47.4 | 62 | 36.3 | 31.4 |
| 3 children | 67 | 72.3 | 76.8 | 43.8 | 41.2 |
| 4 or more children | 74.3 | 78.8 | 76.8 | 43.9 | 38.3 |
| No of women | 906 | 918 | 1054 | 6,501 | 4012 |

Source: National family health survey, 1992-2020, Mizoram

Note: *Indicates percentage not shown based on fewer than 25 un weighted cases

Inter district variations in the current use of the contraceptive method

Inter district variations in contraceptive use are shown in the following table. The district level information is available in the fourth and fifth rounds of the national family health survey. The current use of any contraceptive methods across the district was varied. In NFHS-4, it ranges from 40.9% in both Aizawl and Serchhip districts to 27% in Lawngtlai district. In Aizawl and Serchhip districts, the contraceptive prevalence is higher than in the state (35.3%). In NFHS-5, there is an improvement in the use of contraceptives. Champhai district recorded the highest contraceptive use (50%). Surprisingly, the district of Aizawl is at the bottom (21.6%). Champhai, Mamit, Serchhip, Kolasib and Lunglei districts have recorded a higher contraceptive prevalence than the state's average. The more unsatisfactory

performance was recorded in the district located in the southern part of the state, such as Lawngtlai and Saiha (Figure 5).

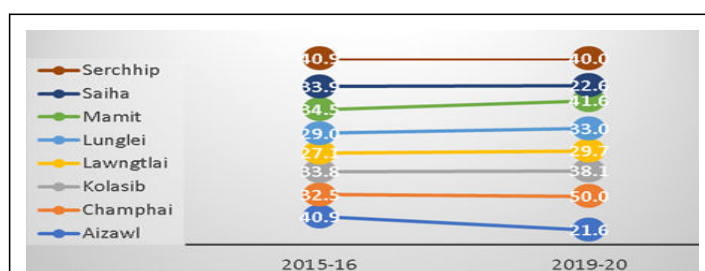


Figure 5: Percentage of currently married women aged 15-49 years using any contraceptive method by district, 2015-2020, Mizoram.

Source: National family health survey report, 2015-2020, Mizoram.

The districts of Champhai, Kolasib, Lawngtlai, Lunglei and Mamit show an increasing trend from 2015 to 2020. On the other hand, the use of any modern contraceptive methods declined in the districts of Aizawl, Saiha and Serchhip. In NFHS-4, the users of modern contraceptives were comparatively low in the districts of Lawngtlai (27%) and Lunglei (29%). It was highest in Aizawl and Serchhip districts. In NFHS-5, contraceptive use is lowest in the Aizawl district (21%), followed by the Saiha district (21.7%). On the other hand, the proportion of women who used any modern contraceptive method is highest in the Champhai district (49.6%), followed by the Mamit district (41.3 %).

In NFHS-4, the percentage of sterilised women is highest in the Saiha district. It is the lowest in the district of Champhai (12.7%). Aizawl, Kolasib, Lunglei and Mamit districts show an increasing trend. Half of the districts show a decreasing trend from NFHS-4 to NFHS-5. In NFHS-5, the prevalence of female sterilization is as low as 6.9% in the Aizawl district, followed by

7.9% in the Saiha district. Champhai district recorded the highest in female sterilization (22.5%). The prevalence of female sterilization is low in all the districts.

The other spacing methods include the pill, IUD, injectable, condom, emergency contraception, LAM, and other modern methods. The prevalence of is also low in most of the districts. In NFHS-4, the proportion was comparatively high in the districts of Serchhip and Aizawl. It is very low in the Saiha district. It has increased from NFHS-4 to NFHS-5 in the districts of Champhai, Kolasib, Lawngtlai, Mamit and Saiha. In the remaining districts, it is declining. In NFHS-5, the number of users of spacing methods is highest in the Saiha district. More women used the modern spacing method rather than the permanent method (female sterilization) except in a few districts. The traditional method is almost absent; even the highest is only 1% (Table 3).

Table 3: Percentage of currently married women age 15-49 years using any modern method, female sterilization, any modern spacing methods and any traditional method by district, 2015-2020, Mizoram.

| Types | Any modern method | | Female sterilisation | | Any modern spacing methods | | Any traditional method | |
|-----------|-------------------|---------|----------------------|---------|----------------------------|---------|------------------------|---------|
| | 2015-16 | 2019-20 | 2015-16 | 2019-20 | 2015-16 | 2019-20 | 2015-16 | 2019-20 |
| Districts | 2015-16 | 2019-20 | 2015-16 | 2019-20 | 2015-16 | 2019-20 | 2015-16 | 2019-20 |
| Aizawl | 40.9 | 21 | 20.4 | 6.9 | 20.5 | 14.2 | 0 | 0.5 |
| Champhai | 32.4 | 49.6 | 12.7 | 22.5 | 19.7 | 27.1 | 0.2 | 0.4 |
| Kolasib | 33.6 | 37.9 | 15.3 | 16.7 | 18.2 | 21.2 | 0.2 | 0.2 |
| Lawngtlai | 27.1 | 29.1 | 16 | 12.2 | 11.1 | 16.8 | 0 | 0.6 |
| Lunglei | 29 | 33 | 13 | 18.8 | 16 | 12.2 | 0 | 0 |
| Mamit | 34.5 | 41.3 | 16.6 | 17.7 | 17.9 | 23.6 | 0 | 0.3 |
| Saiha | 33.9 | 21.7 | 26.1 | 7.9 | 7.9 | 13.8 | 0 | 1 |
| Serchhip | 40.8 | 39.4 | 16.7 | 15.6 | 24.1 | 23.9 | 0 | 0.5 |

Source: National family health survey report, 2015-2020, Mizoram

Note: Any modern spacing methods includes-pill IUD/PPIUD, injectable, male condoms, female condoms, emergency contraception, Lactational Amenorrhoea Method (LAM), and other modern methods.

Unmet needs

For example, if a woman wants to delay or stop having children but isn't using contraception, she has an unmet need for family planning. Figure 6 shows the total unmet needs for family planning by districts in Mizoram. According to NFHS-5, 19% of currently married women in Mizoram have an unmet need for family planning, a slightly declined from 19.9% in NFHS-4. The unmet need for contraception is declining except in the Aizawl district. The most significant reduction is in the Champhai district. It shows a decrease of 13.1 percentage points between NFHS-4 and NFHS-5. This is followed by Mamit districts with a reduction of 6.6% points during the same period. The Lawngtlai district does not show much decline (0.8% points).

Surprisingly, in the Aizawl district, the unmet needs increase from 18.5 per cent in NFHS-4 to 24 per cent in NFHS-5 (Figure 6).



Figure 6: Percentage of currently married women aged 15-49 with total unmet need for family planning by districts, Mizoram, 2015-16 to 2019-20.

Source: National family health survey, 2015-16 to 2019-20, Mizoram.

Discussion

In Mizoram, family planning was formally introduced in 1966 by the health department, government of Mizoram [20]. Not much attention was given in the initial periods, and people were against birth control. However, after the government made a strenuous effort, particularly from 1977 to 1986; as a result, many people became aware and started family planning practices in the state. In 1997, the programme was given a new dimension: the Reproductive and Child Health (RCH) programme. In Mizoram, RCH was introduced in 1998, emphasizing providing more effective contraceptive services and reproductive health care for women and children. The government family planning programme promotes three temporary methods of contraception: the pill, the IUD, and condoms. Therefore, the knowledge of these three contraceptive methods is very high among married women.

The present paper highlights that knowledge and awareness do not necessarily lead to the use of contraceptives. In Mizoram, there is a significant gap in contraceptive knowledge and utilization. For instance, the knowledge of traditional contraceptive methods is relatively high among married women in Mizoram. However, Mizoram is abnormally low in the practice of traditional contraceptive methods. Although the government has always aimed to provide a choice of contraceptive methods, the history of the family planning programme indicates its focus on permanent methods of contraception. The programme emphasised almost exclusively sterilization from the beginning. Likewise, in Mizoram, female sterilization has become the most common practice. It's also worth noting that male sterilization is nearly non-existent in Mizoram. It is also observed that female sterilization is followed by IUD insertion, Pills, and condoms. However, the practice of these methods, except female sterilization, was less significant throughout the state. Female sterilization occupies a pivotal role in family planning among couples in Mizoram. Modern methods were more preferred than traditional methods in Mizoram [21].

The contraceptive prevalence in Mizoram from NFHS-1 (1992-93) to NFHS-3 (2005-06) is way better than the national contraceptive prevalence rate. In the first survey, 53.8% of married women in Mizoram used any contraceptive method. This shows a difference of 13% from the national average, which was 40.6 per cent. In NFHS-2, 57.7% of married women in Mizoram were using any contraceptive method; the national average in the same year was 48.2%. In NFHS-3, the contraceptive prevalence rate in Mizoram and India was 60 per cent and 56%, respectively. Compared with the national average, contraceptive methods in Mizoram reduced sharply from NFHS-4 (2015-16). The state was placed far below the national average in contraceptive use. While the national contraceptive prevalence rate was 54% in NFHS-4, it was only 35% in Mizoram. In the NFHS-5, the contraceptive prevalence

rate in Mizoram was 31.3%, which was lower than the national average.

Conclusion

The present study shows a wide variation in the knowledge and use of different contraceptive methods across background characteristics and the region (district). The attitude of women towards contraceptive use is influenced by various factors such as place of residence, age, education, religion, caste, number of living children etc. In terms of residence, it has been found that the contraceptive prevalence is higher in urban areas than in their rural counterparts. It has been found that the percentage of women using contraceptives decreases as the age group increases. A higher level of education leads to higher use of contraceptive methods. Contraceptive use is also increasing with the number of living children. These are some factors contributing to a woman's decision on contraceptive use. The proportion of family planning methods practice varies from one district to another. In general, the districts in the northern part of the state recorded a higher proportion of women using contraceptive methods than districts in the southern region.

In a tribal society like Mizoram, the use of the contraceptive method is rather complex. The Mizo people believed that their population was very small compared to the population of other states of India. The state's major NGOs generally believe that birth control is not ideal for a minority community like Mizos. Moreover, some religious groups are preaching against birth control. For instance, the synod executive committee of the Presbyterian Church has been discussing the issue and disseminates awareness among the church members about their stand against birth control from time to time. They are the largest denomination in the state, comprising 49.32% of its total population. They encourage their church members to have as many children as possible, which complies with the Bible's teachings. The Baptist Church also similarly propagated negative attitudes toward birth control. Recently, Mizoram's Sports Minister, Mr. Robert Romawia Royte, promised monetary rewards (Rs.1 lakh) to a living father with the largest number of children in his constituency when most Indian governments advocate population control policies. He made this remark in order to foster population growth in the Mizo communities, which are demographically small.

Through the family planning programme, the awareness of contraception was spreading among married women. Despite this, there is a significant disparity between the number of women who are aware of contraception and the number who actually use it. The state has a high level of knowledge and awareness, but the use of contraception is dismal. If a woman or her sexual partner in Mizoram are not using contraceptive, it is not due to a lack of knowledge. It seems some women are reluctant to use contraception even if they know. Converting the knowledge into practice is the real challenge in Mizoram as far as a contraceptive is concerned. A high level of knowledge and awareness does not match the contraceptive usage rate. The need of the hour is continuous awareness against reluctance in

contraceptive use to improve the state's contraceptive prevalence rate.

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