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Original Research Article

The matrilineal society of Meghalaya: trends of family planning and its implications on maternal health

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ABSTRACT

Background: The key health indicators pertaining to maternal health are TFR, contraceptive usage and MMR. As per the NFHS V, the use of any contraceptive method is 27.4% and total fertility rate is 2.9 in Meghalaya, which reflects on the poor performance of the state towards achieving the goals set by the National Health Policy 2017. The current MMR of Meghalaya is 211/1 lakh live birth, one of the highest amongst the Indian states. The two most important causes of maternal mortality in Meghalaya are post-partum haemorrhage and anaemia- both avoidable causes of maternal mortality related to higher order pregnancies and lack of adequate spacing between two consecutive pregnancies, thereby increasing the importance of contraceptive use. The aim of the study was to identify factors associated with poor uptake of contraceptive measures and their implications on maternal health in a matrilineal society.

Methods: A cross sectional study was conducted in the department of obstetrics and gynaecology, NEIGRIHMS where 200 patients, indigenous to Meghalaya, were recruited over a period of one year and were interviewed using a validated questionnaire pertaining to family planning practices.

Results: Factors such as number of live births, religion and residence were seen to influence the utilization of contraceptive methods.

Conclusions: There is still a wide gap to be filled- more sincere and dedicated efforts are needed to empower women to make informed decisions by increasing awareness about the importance of family planning and its implications on maternal health.

Keywords: Family planning, TFR, MMR, Matrilineal society, Meghalaya

INTRODUCTION

As per the NFHS V, the use of any contraceptive method is 27.4% and total fertility rate is 2.9 in Meghalaya, which reflects on the poor performance of the state towards achieving the goals set by the National Health Policy 2017.¹

The current MMR of Meghalaya is 211/1 lakh live birth, one of the highest amongst the Indian states.² The two most important causes of Maternal mortality in Meghalaya are post-partum haemorrhage and anaemia- both avoidable causes of maternal mortality related to higher order

pregnancies and lack of adequate spacing between two consecutive pregnancies, thereby increasing the importance of contraceptive use.¹

Why analysis of maternal health is important?

Maternal health not only plays a vital role in the wellbeing of the women and the community as a whole, but has significant socio-economic implications. Maternal health is an indicator of the wellbeing of our future generation. A healthy mother leads to a healthy family which develops into a strong health system leading to a healthy economic system.

The WHO states that ‘maternal health’ refers to the health of women during pregnancy, childbirth and the postnatal period. Each stage should be a positive experience, ensuring women and their babies reach their full potential for health and well-being. It encompasses the healthcare dimensions of family planning, preconception. The WHO states that ‘maternal health’ refers to the health of women during pregnancy, childbirth and the postnatal period. Each stage should be a positive experience, ensuring women and their babies reach their full potential for health and well-being. It encompasses the healthcare dimensions of family planning preconception, prenatal, and postnatal care in order to ensure a positive and fulfilling experience, in most cases, and reduce maternal morbidity and mortality, in other cases.³

Good maternal health is crucial for the welfare of the whole household, especially children who are dependent on their mothers to provide food, care, and emotional support. The death or chronic ill-health of a mother increases the probability of death and poor growth and development of her children.⁴ Improvement in financial and geographical access to good quality intrapartum care based in health centres is therefore important in any poverty eradication strategy.⁵ For every woman who dies of pregnancy- and childbirth-related complications, another 20 women experience a form of morbidity- such as an obstetric fistula or uterine prolapse- that carries long-term consequences, which can encumber health, wellbeing, and even social and economic status. Therefore, efforts to improve maternal health need to look beyond maternal death.

Maternal health in a matrilineal society?

Though a large number of communities around the globe follow a patrilineal system in which the lineage is traced through the father, there are certain parts where the lineage is traced through the mother, known as the matrilineally.⁶

The indigenous people of Meghalaya are a matrilineal society where the children or offspring belong to the mother’s lineage, therefore a sense of duty and responsibility to the children is taken for granted which makes it easier for the father to disown them upon death of the mother- a common practice especially in the rural and sub urban areas of Meghalaya. This leads to broken families, lack of proper care, nutrition and education of these children which would further result in various negative socio-economic repercussions.

Women in the matrilineal society not only look after their children but they support their family by working outside the home and at the same time, taking the responsibility of household duties and childcare.

Even though women in Meghalaya play vital roles within their community and household, the high level of maternal mortality ratio, which according to the latest survey (NFHS 4), is 211/1 lakh live birth, and is one of the highest

in the country, is a strong proof that the health needs of women are neglected.

Family planning and maternal health?

The Government of India has implemented many schemes and has also introduced newer forms of contraceptive methods to the already existing ‘basket of choices’ under the National Family Planning Programme. These are readily available, free of cost at most Government setups in Meghalaya. These initiatives have been taken to push the state and also the nation as a whole towards achieving the various goals set up by the National Health policy, 2017 and the global goals as per the sustainable development goals (Table 1).

Table 1: Meghalaya: key maternal health indicators.¹⁶

Indicator	Current status	National target (NHP)
Total fertility rate (children per women)	2.9	2.1
Current use of any contraceptive method (%)	27.4	90

Despite the various efforts put in by the Government, there is still a wide gap to be filled.

Research shows that adequate attention to family planning in countries with high birth rates can not only reduce poverty and hunger but also avert 32 per cent of maternal and nearly 10 per cent of childhood deaths, respectively.⁷

Family planning-effectual system of improving the health of mothers and children and has far-reaching benefits which go beyond health, impacting all 17 sustainable development goals.

The aim of the study was to analyse the family planning in a matrilineal society and its impact on maternal health.

This study has potential for development into the next level of research funding where risk factors identified in this study can be further investigated in long term clinical studies to evaluate the impact of specific intervention on the Contraceptive usage, TFR and MMR.

METHODS

Study type

Cross sectional study was carried out.

Study site

This study was conducted in the department of Obstetrics and Gynaecology OPD and emergency department of NEIGRIHMS.

Study duration

The study duration was one year, from 1st October 2020 to 30th September 2021.

Selection criteria

The study group included 200 married women of reproductive age group above 18 years, attending the outpatient department (OPD) of the department of obstetrics and gynaecology and emergency services of NEIGRIHMS.

All women were indigenous to Meghalaya and belonging to the matrilineal society.

Ante-natal patients, post-natal patients and those willing to give an informed written consent were recruited for the study.

Procedure and data collection

After going through the informed consent document and after taking written consent, the participants were recruited for the study. Data collection was done by face-to-face interviews on paper-based forms using a predesigned validated questionnaire. The women were asked regarding knowledge, awareness, and attitude towards different contraceptive methods along with the reasons for stopping of contraception. Information on various socio-demographic factors such as age, parity, number of live births, family structure, residence and religion were collected. The questionnaire also enquired about source of knowledge and awareness about family planning. Trends in MMR, contraceptive usage and total fertility rate were analysed as per the National Family Health Surveys (NFHS IV and V).

Ethical considerations

Ethical clearance required for the study was taken from the Institute Ethics Committee. The respondents were informed about the study and consent was taken. Confidentiality and anonymity of information were maintained.

Statistical analysis

The raw data which was collected from the respondents were first entered to excel and then required checks were put in, to ensure nominal data entry errors. Once entered, data cleaning was carried out. All the quantitative data was then transferred to Statistical Package for the Social Sciences (SPSS) for further analysis. Data thus collected were tabulated and descriptive analysis was done to describe the results in percentage. In order to examine the factors determining the use of any contraceptive methods, a binary regression analysis was carried out. Contraceptive methods as the dependent variable, and a set of independent variables were employed. Odds ratios (OR)

are given with 95% confidence intervals (CI). $P \leq 0.05$ was considered significant for the statistical analyses.

RESULTS

Demographic characteristics

A total of 200 women participated in the study. The mean age of the respondents was 31.05 (SD: 6.67) years. Majority of the women in the study population are in the age group of 25-35 years (62.5%). Most of the participants belonged to urban areas (56.3%) compare to rural areas (43.5%), with nearest government facilities located at distance of 2-10 km (42%).

Majority (65.5%) was from Christian religion with the number of parity they had, is mostly 1-2 times (56.5%) and number of living children being 54 percent have one-two, and 17.5 percent have 3-4 live children and 7 percent have more than four live children (Table 2).

Knowledge and awareness of contraception

When the participants were enquired about the knowledge and awareness of contraception, it was found that 82.5 percent of the women are aware about the contraceptive methods. Out of 82.5 percent only 67.5 percent have knowledge on different type of contraceptive methods. When further asked to list the different type of contraceptive methods, it is observed that 40 percent knows atleast three types, 28.89 percent knows atleast two types, and 15.56 percent knows more than 3 types and 15.56 percent knows one type of contraceptive methods. In spite of having the awareness regarding contraceptive methods only 37.04 percent of the participants are using any kind of contraceptive methods. The adoption percentage of contraceptive methods is not according to the knowledge and awareness of contraceptive methods. There is no positive association between the knowledge and practice of contraceptive methods. The women acquire the knowledge about contraceptive methods, mainly from health workers/facilities (53.94%). A distribution source of knowledge regarding different methods is shown in (Table 3).

Reason for adopting the preferred method of contraception

Criteria for the choice of the method were decided according to easy to used (62%), doctor advice (16%), safety (12%) and easy availability (10%) (Figure 1).

Reason for discontinuing of contraceptives

Out of 50 women who have use contraceptive method, 36 (72%) women have reported to stop using due to various reasons, mostly 21 (42%) wanted to conceive; 4 (8%) facing irregular menstruation, 2 (4%) fear of infertility; 1 (2%) reported of giddiness and 9 (18%) justified of some other reasons Table 3. 16 (32%) of the participant also

reported negative effects with the usage of contraception. Majority mentions less menstrual flow 6 (37.5%) followed by daily spotting 5 (31.25%) (Table 4).

Problems associated with usage of contraceptives

16 (32%) of the participant also reported negative effects with the usage of contraception. Majority mentions less menstrual flow 6 (37.5%) followed by daily spotting 5 (31.25%) (Table 5).

Knowledge and awareness about family planning

Seventy-three (36.5%) out of 200 women have been exposed to family planning with 148 (74%) have knowledge about spacing. Mostly 86 (58.11%) state that spacing is important for the health benefit of both mother and child and 75(37.5%) want a spacing of 3-4 years (Table 6).

Analysis of socio-demographic factors associated with the adoption of contraceptive method

To assess the adjusted effects of the selected variables such as age, residence, religion and number of living children on contraceptive use, we considered logistic regression models. Findings from the analysis show that women of the age group 25-35 years are more likely to use a contraceptive method, with an OR of 1.75 (C.I. 4.62-0.66). The odds of using a contraceptive method are higher among women residing in rural than in urban with an OR at 1.96 (CI 3.75-1.027). For religion, women belonging to the non-Christian religious groups are more likely to used contraceptives when compared with Christian women with the OR at 2.74 (CI 5.28-1.42). This can be attributed to the fact that certain religious sects do not encourage contraceptive use. The number of live births is the most crucial factor influencing the use of contraceptive methods. Women with one to two children are more likely to use a contraceptive method than women with no child or more than two children, with the OR at 2.14 (CI 6.71-0.68) (Table 7).

Table 2: Distribution of respondents by various socio-demographic factors.

Variables	No. of women	Percentage
Age (years)		
<25	31	15.5
25-35	125	62.5
36-45	39	19.5
>45	5	2.5
Residence		
Urban	113	56.5
Rural	87	43.5
Nearest government health facility (km)		
<2-1	80	40
2-10-2	84	42
>10-3	36	18
Religion		
Hindu	35	17.5
Muslim	8	4
Christian	128	64
Others	29	14.5
21,000-30,000	40	20
31,000-40,000	02	1
>40,000	36	18
Family type		
Joint	61	30.5
Nuclear family	139	69.5
Parity		
None	25	12.5
1-2	113	56.5
3-4	41	20.5
>5	21	10.5
No. of living children		
None	43	21.5
1-2	108	54

Continued.

Variables	No. of women	Percentage
3-4	35	17.5
>5	14	7
Diet		
Veg	6	3
Non-veg	194	97

Table 3: Knowledge and awareness of contraception among the married women.

Characteristics	Response	No. of women	Percentage
Knowledge on contraceptive (N=200)	Yes	165	82.5
	No	35	17.5
Knowledge on different type of contraceptive (N=200)	Yes	135	67.5
	No	65	32.5
List of the different types of contraceptives such as: condoms, oral contraceptive pills (OCPs), injection, intra-uterine device (IUD), female sterilization (N=135)	Know only one type	21	15.56
	Know two types	39	28.89
	Know three types	54	40
	Know more than three types	21	15.56
Use contraception before (N=135)	Yes	50	37.04
	No	85	62.97
Knowledge sources of contraceptive methods (N=165)	Friends	23	13.93
	Relatives	10	6.061
	Healthcare workers/facilities	89	53.94
	Media	19	11.52
	Others	5	3.03

Table 4: Knowledge and awareness of contraception among the married women.

Knowledge (N=50)	No. of women	Percentage
Giddiness	1	2
Irregular menstruation	4	8
Wanted to conceive	21	42
Fear of infertility	1	2
Want a girl child	9	18
Still using	14	28

Table 5: Problem associated with usage of contraceptives.

Characteristics	Response	No. of women	Percentage
Problem with using contraception (N=50)	Yes	16	32
	No	34	68
Problems faced while using contraception (N=16)	Giddines	2	12.5
	Spotting daily	5	31.25
	Less menstrual flow	6	37.5
	UTI	1	6.25
	White discharge	1	6.25
	Others	1	6.25

Table 6: Problem associated with usage of contraceptives.

Characteristics	Responses	No. of women	Percentage
Exposed to family planning messages (N=200)	Yes	73	36.5
	No	127	63.5
Spacing? (N=200)	Yes	148	74
	No	52	26
Benefits (N=148)	Health benefits of both mother and child	86	58.10811

Continued.

Characteristics	Responses	No. of women	Percentage
	Care for the new born	24	16.21622
	Financial Stability	15	10.13514
	More than two benefits	23	20.94595
Wait before the birth of another child (N=200)	2 year	31	14.5
	3-4 years	75	37.5
	5-6 years	27	13.5
	>6 years	5	1
	doesn't want more	10	5
Last/current pregnancy planned (N=200)	Yes	112	56
	No	88	44

Table 7: Problem associated with usage of contraceptives.

Variables	Adopter N (%)	Non-adopter N (%)	Total	Odds ratio	95% CI of OR
Age (years)					
<25	6 (19.35)	25 (80.65)	31	Reference	
25-35	37 (29.6)	88 (70.4)	125	1.75	4.62-0.66
36-45	7 (17.95)	32 (82.05)	39	0.91	3.05-0.272
>45	0 (0)	5 (100)	5	0	
Residence					
Urban	22 (19.47)	91 (80.53)	113	Reference	
Rural	28 (32.18)	59 (67.8)	87	1.96	3.75-1.027
Religion					
Christian	23 (17.97)	105 (82.03)	128	Reference	
Others	27 (37.5)	45 (62.5)	72	2.74	5.28-1.42
Family type					
Joint	18 (29.51)	43 (70.49)	61	Reference	
Nuclear family	32 (23.02)	107 (76.98)	139	0.71	1.41-0.36
No. of living child					
None	4 (9.3)	39 (90.70)	43	Reference	
1-2	34 (31.19)	75 (68.81)	109	4.42	13.36-1.46
3-4	8 (23.53)	26 (76.47)	34	3	10.99-0.82
>4	4 (28.57)	10 (71.43)	14	3.90	18.38-0.83

Note: Bolded text indicates statistically significant differences (p<0.05).

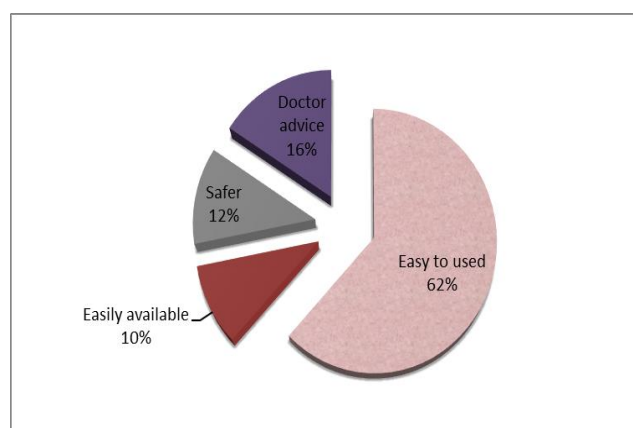


Figure 1: Reason for adopting the particular contraception family planning (percentage).

DISCUSSION

Out of 165 women who heard about contraceptive methods only 135 of them have knowledge about the different type

of contraception with mostly 40 percent have good knowledge where the know at least 3 types of contraceptive methods In spite of having good knowledge only 50 out of 135 women prefer to use any type of contraceptive methods.

The numbers of living children play a vital influencing factor on the contraceptive methods usage, in this study women with one to two children are more likely to use a contraceptive method than women with no child or have more than two children. Study done by Passah shows that women with two to three children are more likely to use a contraceptive method than women with one child or more than three children.⁸

The main sources of knowledge in this study were found to be health care workers with 53 percent compare to other sources. Study done by Barmanet al also reported that health worker being the main source of contraception knowledge. This could be one of the reason of the uneducated women in rural areas having good knowledge on contraceptive method due to the efforts done by the

health workers such as ASHAs in the community.⁹ Similar findings were seen in a study conducted in Peshawar district of Ethiopia by Binu et al showed that 80.3% of health workers contributed in spreading information concerning contraceptives.¹⁰

According to a current evaluate within the Lancet on human sources for health in India, Meghalaya has simply 2.5 medical experts according to 10,000 residents ratio, the bottom rate of any Indian state.¹¹

While the authorities have invested within the infrastructure of health facilities (in the shape of buildings, equipment and beds), the state of Meghalaya has a severe shortage of trained health workforce. Health centres have only 14.3% obstetrician or gynaecologist.¹² To reduce the effect of shortages inside the health system, local accredited social health activists (ASHA) are hired as extension workers in villages and work within a broader Mother and Child Health Programme context.

At the community level, women's point of contact within the public health system occurs with frontline workers (FLWs). Under the National Health Mission, FLWs, including accredited social health activists (ASHAs), provide health education, mobilization, and promotion through home visits and community meetings. ASHAs receive performance-based compensation for promoting key maternal health services, including family planning, early registration of pregnancies, and antenatal and delivery care. ASHAs can also distribute pills, condoms, and iron/folic acid tablets, and can assist women with developing a birth preparedness plan. In rural areas, ASHAs work closely with Anganwadi workers (AWWs), FLWs from the Integrated Child Development Services program who offer basic health and nutrition services to women and children. ASHAs and AWWs support the organization of monthly health, sanitation, and nutrition days in their communities with auxiliary nurse-midwives (ANMs) from the nearest health subcenter in attendance.¹³

A rural woman is more receptive to the advice of the ASHA, more likely because she is considered to be one of them and thus more trustworthy when it comes to giving advice. Being a matrilineal society, want of a girl child is one of the main reasons why high parity women want to conceive again. A matrilineal society places a great deal of importance on a daughter for she is the one through whom all succession, inheritance and lineage will carry on. Similar finding was reported by Marak et al.¹⁴

Religious belief is another contributing factor to less uptake of contraceptive methods. A study done by Gregus et al showed similar results.¹⁵ The high TFR and low contraceptive uptake (Table 1) are two important indicators reflecting the poor maternal health in Meghalaya. Inadequate spacing between two consecutive pregnancies contribute to anemia and PPH thereby having a significant impact on the MMR.

Limitations

Limitations of the study are firstly, sample size of 200. A study with a larger sample size will be more helpful in drawing conclusions. Secondly, this was a hospital based study. Having a community arm for the study would have helped us further understand the trends of family planning amongst the matrilineal society of Meghalaya.

CONCLUSION

From this study we can conclude that even though there is awareness about family planning and knowledge about contraceptive methods among the women in Meghalaya, there is a discrepancy between the use of contraceptive methods and the knowledge. The uneducated women in rural areas having good knowledge on contraceptive method due to the efforts done by the health workers such as ASHAs in the community which is highly commendable. Collective efforts, must be intensified, by the Government, healthcare workers, social workers and even religious leaders in terms of awareness campaigns and programs emphasizing the importance of family planning and its positive effects, dissipating the misunderstandings and fears associated with the usage contraceptives.

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REFERENCES

1. International Institute for Population Sciences and ICF. National Family Health Survey (NFHS-5), India, 2019-20: Meghalaya. Mumbai: IIPS; 2021.
2. International Institute for Population Sciences (IIPS) and ICF. National Family Health Survey (NFHS-4), 2015-16: Meghalaya. Mumbai: IIPS; 2017.
3. WHO. Maternal health, 2020. Available at: https://www.who.int/healthtopics/maternalhealth#tab=tab_1. Accessed on 20 May 2023.
4. WHO. The World Health Report Make every mother and child count, 2005. Available at: https://www.afro.who.int/sites/default/files/201707w_hr2005_en. Accessed on 20 May 2023.
5. Gwatkin DR. How much would poor people gain from faster progress towards the Millennium Development Goals for health? *Lancet.* 2005;365(9461):813-7.
6. Singh M, Kaur A, Matra AA, Iyer A. Traditional gender roles and changing practices in the State of Meghalaya. *DU J Undergraduate Res Innov.* 2020;1(2):154-71.

7. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: the unfinished agenda. *Lancet.* 2006;368(9549):1810-27.
8. Passah MC. Influence of Sociodemographic Factors on the Utilization of Contraceptive Methods among the Married Women of Jowai Town, West Jaintia Hills District, Meghalaya. *Oriental Anthropol.* 2020;20:181-93.
9. Barman K, Roy M, Choudhary SS, Naznin W. Knowledge, attitude and practices of contraception among the married women of reproductive age. *New Ind J OBGYN.* 2021;7:224-7.
10. Binu KM, George D, Francis G, Ponnachan P, Thomas S, Doddappa H. Knowledge, attitude, and practice towards family planning. *MJPS.* 2021;7:87-90.
11. Rao M, Rao KD, Kumar AK, Chatterjee M, Sundararaman T. Human resources for health in India. *Lancet.* 2011;377(9765):587-98.
12. Ministry of Health and Family Welfare. District Level Household and Facility Survey DLHS 4 (2012–2013), Delhi, India, 2014. Available at: <http://rchiips.org/>. Accessed on 20 May 2023.
13. O'Neil S, Naeve N, Ved R. An Examination of the Maternal Health Quality of Care Landscape in India, 2017. Available at: https://www.macfound.org/media/files/50268_landscape_report_2017.03.02. Accessed on 20 May 2023.
14. Marak Q. Are Daughters Preferred in a Matrilineal Society? A Case Study of the Garos from Assam. *Anthropologist.* 2012;14(1):49-56.
15. Greguš J. Catholicism and contraception. *Ceska Gynecol.* 2019;84(6):468-74.
16. Ministry of Health and Family Welfare Government of India. National Health Policy, 2017. Available at: <https://main.mohfw.gov.in/sites/default/files/9147562941489753121>. Accessed on 20 May 2023.

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