

Reproductive Morbidities and Treatment Seeking Behaviour among Rural Women in Manipur- Community Based Study

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Reproductive morbidity is a public health problem that affects the health and well being of women's life around the world. The magnitude of reproductive problems of women both at national and global is high. In this paper, an attempt was made to assess the self reported reproductive morbidities, treatment seeking behavior and factors influencing reproductive health among two communities of women in Manipur. Both qualitative and quantitative data were collected from two hundred fifty women in the age group of 18 to 40 years by using in-depth interview and focus discussion methods. Analysis revealed that a large number of women (71.6%) had at least one or two kinds of reproductive health problems. The predominant reproductive health problems reported by the respondents were menstrual related problems (53%), urinary tract infection (51%) and white discharge with bad odour and itching (41%). Prevalence of unintended pregnancy was found among 24 per cent of the selected respondents. Income, standard of living, abortion history, number of pregnancy and number of living children have significant factors influencing reproductive health of the respondents. Treatment seeking behavior was poor as they are not aware about the

consequences of reproductive ill health. Further, higher proportions of the tribal women reported symptoms of reproductive health problem compared to the non-tribal. The study felt the need to provide information on effect of reproductive health problems through awareness camp at village level in order to increase knowledge and practices of good reproductive health of women.

Keywords: Reproductive; morbidities; women; behaviour; health; Manipur.

1. INTRODUCTION

Reproductive morbidity is a public health problem that affects the health and well being of women's life around the world. The World Health Organization (WHO) estimates that about 30-60 million women suffer severe illness as a result of serious maternal complications and about one third of women in developing countries suffer from such morbidity [1]. An estimated of about 340 million new cases of reproductive tract infections (RTIs), including sexually transmitted infections (STI), emerge each year, with 151 million of them occurring in Asia [2]. World Health Organization (1990) defined reproductive morbidity as any condition or dysfunction of reproductive tract or any morbidity which may be a consequence of reproductive behaviour including pregnancy, abortion child birth or sexual behaviour. It has been categorized into three type's namely obstetric morbidity, gynecological morbidity and contraceptive morbidity. Obstetric morbidity refers to ill health in relation to pregnancy and childbirth while gynecological morbidity includes health problems outside pregnancy such as RTIs, menstrual problems, cervical ectopic, infertility, cancers, prolepses and problems related to intercourse and contraceptive morbidity include ill health problems related to limit fertility, either by using any kind of contraceptive methods.

Studies have shown that women who suffered from reproductive health problems did not seek medical treatment due to influence by factors of socio cultural barriers [3,4]. Gender inequality [5] financial constraints, lack of perceived need [6] and psychosocial constraints including stigma [7] were few factors. An analysis of self-reported symptoms of gynecological problems among 3,600 recent mothers in Karnataka State, India reported that approximately one-third of all women had at least one current symptom that includes feeling of weakness and tiredness (suggestive of anemia); menstrual disorders; white or colored vaginal discharge (suggestive of lower reproductive tract infection); and lower

abdominal pain and discharge with fever [8]. Besides, they are poorly informed about the symptoms and consequences of reproductive ill health [9,10]. With time, most of these symptoms may subsequently develop into serious reproductive health ailments if no proper care is given, particularly during pregnancy and delivery, and may also result in miscarriage, ectopic pregnancy, pelvic inflammatory diseases and so on. In order to achieve the goal of universal access to reproductive health, the burden of the illness and their risk factors of reproductive ill health should be assessed in different areas [11]. Further, a study on the health seeking behavior for reproductive morbidity of women in Manipur was scanty. Keeping this in view, this study was undertaken among two ethnic groups in Manipur. The objectives of the study were to study the prevalence of reproductive health problem with reference to gynecological morbidity and to understand the factors influencing reproductive morbidity.

2. MATERIALS AND METHODS

Multi stage sampling design study was adopted for the study. The study was conducted in two districts of Manipur namely Thoubal and Chandel district. Kakching and Tengnoupal block of Thoubal and Chandel district respectively were purposively selected to study two diverse ethnic groups. The two ethnic groups selected for the study was Aimol and Meitei women. Aimol are the scheduled tribes while Meitei are non-tribal in Manipur. Ten Aimol villages under Tengnoupal block and ten leikais (locality) from pallel town of Kakching block were included in the study. From these villages, a total sample of 250 married women with 128 Aimol women and 123 Meitei women in the age group of 18 to 40 years having at least one living child of (between the ages of one to six years) 1year to 6 years child were randomly selected from both the ethnic groups. A self structured interview schedule was developed to elicit specific information. The schedule includes background information and reproductive gynecological health related

symptoms they suffered and their frequency of occurrences during the last one year prior to survey. In-depth interview were conducted to collect primary data by visiting the household of each participant. The data were analyzed using mean standard deviation chi square to find significant association between socio economic background and reproductive variables.

3. RESULTS AND DISCUSSION

Socioeconomic and demographic characteristics of the participants are shown in Table 1. Majority of the respondents were in the age grouped of 26 to 33 years followed by 34 to 40 years while 16.8 percent were of 18 to 25 years. The mean age group was 31.3 years. The level of education was low with only 28.4 percent having completed upto higher secondary school. Fourteen percent had not done any education and the main reasons were early marriage, financial constraint of family. This finding supports the view that early

marriage deprives educational opportunities of girls [12]. A study examining data from 27 sub-Saharan African countries found that each additional year of early marriage reduces the girl's individual probability of having some secondary school education by 5.6 percentage points, and it reduces the girl's individual probability of completing secondary school by 3.5 percentage points [13]. Husband educational levels were comparatively better than wives.

3.1 Age at Menarche

The age of onset at menarche is thought to be an important determinant of population size, reproductive performance, and other chronic outcomes such as cancers of the reproductive organs [14]. Menarche is affected by genetic, race, environmental conditions, nutrition, physical activity, geographic, location, urban and rural residence, health status and socio economic

Table 1. Background characteristics of the respondents

Variables	Number=250
Age	
18-25	42 (16.8)
26-33	119 (47.6)
34-40	89 (35.6)
Mean age group	31.3
Mean age at menarche (years)	
Mean age at menarche (years) of Aimol	13.6
Mean age at menarche (years) of Meitei	12.8
Mean age at marriage	
Mean age at marriage of Aimol	23.9
Mean age at marriage of Meitei	23.3
	24.5
Level of education of respondents	
Illiterate	35 (14.0)
Primary to high school	144(57.6)
Higher sec and above	71 (28.4)
Level of Education of Husbands	
Illiterate	18 (7.2)
Primary to high school	123 (49.2)
Higher sec and above	109 (43.6)
Mean Number of Pregnancy	
Mean Number of pregnancy by Aimol	2.5
Mean Number of pregnancy by Meitei	3.16
	1.86
Mean Number of Deliveries	
Mean Number of Deliveries by Aimol	2.19
Mean Number of Deliveries by Meitei	2.62
	1.71
Income	
Grade I (upto Rs.5000)	132 (52.8)
Grade II (Rs.5001 to Rs.10000)	24 (9.6)
Grade III (Rs.10001 and above)	94 (37.6)

Figure in parenthesis indicates percentage

factors [15-17]. The mean/median age of menarche from different parts of the world, including India, ranged from 12-13.4 years [18,19,20] which is similar to our findings. The earliest age at menarche of the selected Meitei women was reported 10 years while 12 years in case of Aimol tribe. However, the mean age of menarche for both the ethnic group was 13.2 years while the mean age of menarche of Aimol and Meitei women was 13.6 and 12.8 respectively. The contributing factor for earlier age at menarche by the Meitei women might be due to better nutritional status and better socio-economic factors. Interestingly, the mean age at menarche of the Aimol women (13.6) was found to be lower than the Anal tribe of the same district (14.94), and Tangkhul women (13.93 yrs) [21,22] but higher than the Garo tribal women (12.7 yrs) of Meghalaya [23].

3.2 Age at Marriage

Marriage is considered as the entry level into real reproductive period and is one of the important components in determining reproductive health status. Early marriage is one factor that contributes to reproductive health hazard, higher fertility rate, causes population explosions and improper management of children. In the present study, the median age at marriage of selected women was 24.0 years with sd of ± 4.67 . The average age at marriage of Aimol tribe (23.35 yrs) was found to be lower than the Meitei communities (24.59 yrs). However, the mean age at marriage of the Aimol women was found to be higher than the Anal tribe women (22.4 yrs) from same district (22.4yrs) and Mao women (22.7 yrs) [22].

3.3 Age at First Pregnancy

The mean age at first birth for the selected respondents was 24.7 years while the mean age for first birth of Aimol and Meitei was 24.1 and 25.2 years respectively. This age is considered the best period for reproductive outcomes.

3.4 Number of Pregnancies and Deliveries

With regard to pregnancy outcomes of the respondents, the mean number of pregnancies of the subject under study was 2.52 but the number of deliveries was 2.19. Further analysis shows that the mean number of pregnancies of Meitei women was 1.86 while Aimol was 3.16 but the mean number of deliveries for the Meitei women

was 1.73 while 2.62 for the Aimol women. This implies that the unmet need for family planning among the Aimol women was higher compared to the Meitei women. The variation in number of pregnancy with number of live birth might be due to unplanned/unintended pregnancies associated with abortion and lack of awareness on contraceptive methods for birth spacing.

3.5 Unintended Pregnancy

Table 2 shows the profile of abortion distribution of the respondents. The prevalence of unintended pregnancy was high among the study population women. Out of 250 respondent, 60(24%) had experienced abortion. Previous child being too young was the most common reason for having an abortion as they were not physically and financially ready to afford for another child and therefore wish to postpone childbearing to a more suitable time so that they can focus more time on the existing children. Another reason reported was the desire to limit. It was also mentioned that there was a strong desire to avoid pregnancy however lack of prior contraceptive use has led to unintended pregnancy among the respondents. Unintended pregnancy is a pregnancy that came too soon or was not wanted at all because the woman already had the number of children she desired.. The findings are in line with a study conducted by Ganatra and Hirve [24] and Ganatra (2000) that the desire to limit family size and to space the next birth are the main reasons for abortion seekers. It is noteworthy that none of the respondents had aborted for sex selection unlike finding by Kulkarni and Chauhan [25] where gender discrimination and easy access to private hospitals were the major reasons for undergoing abortion. Unmet need for contraception and unintended pregnancy is one major issue of reproductive health problem. At least 1 in 10 married or in-union women in most regions of the world has an unmet need for family planning. Worldwide, approximately 12% of married or in-union women are estimated to have an unmet need for family planning; that is, they wanted to stop or delay childbearing but were not using any method of contraception [26]. It is evident from the findings that awareness of family planning method was poor.

3.6 Reproductive Morbidities

Reproductive morbidity is a broad concept that encompasses health problems related to reproductive organs and functions, including and

outside of childbearing [27] In the present study, women were asked about the common reproductive health problems experienced by them and found from the self reported symptoms (Table 3) that more than half (51.2 percent) of the study population had experienced at least one kind of reproductive morbidities during the one year preceding the survey while 20.4 percent reported to suffered from at least two or more reproductive morbidities while 26.4 percent had not encountered any such kind of reproductive morbidities. The reproductive health problem faced by the respondents were menstrual disorder like severe pain during menstruation, irregular period, and excessive bleeding (53 percent) followed by urinary tract infection like burning sensation while urinating and abnormal frequency of urination (51 percent) while 41 percent also reported to experienced lower reproductive tract infection like white discharge with bad odour and feeling of itching. Other problems encountered by respondents with less persistence were pelvic inflammatory disease like lower abdominal pain and pain in vagina (29 percent) and dyspareunia or pain during sexual activity (14 percent). The self reported reproductive health problem mentioned may be due to poor personal hygiene especially during menstruation, early marriage which is associated with early exposure to sex and frequency of pregnancy, unsafe abortion or due to unhygienic delivery leading to infection. Ooman [10] in his study also found that lack of menstrual and personal hygiene was found to be associated with RTIs and Bhatia and Cleland [8] have also documented that use of contraception especially, IUD, female sterilization and abortion procedures also increases risk of RTI/STI.

3.6.1 Reproductive health problems according to community

With regard to the reproductive health problem experienced between place of residence and communities, the Aimol women had experienced

higher cases of reproductive health problems than its counterpart Meitei women of the study population and there was significant association between the two communities. This might be due to differences in access to health care facilities and transportation. Adhikari [28] in their studies of adolescent women in India and Nepal also reported in their study that relatively high rates of gynecological morbidities, especially in the settings where girls have limited access to adequate health care.

3.6.2 Treatment seeking behaviour

Respondent seek treatment only when they had severe reproductive health problem and happen frequently. Women who faced occasionally neglected for clinical examination as the symptoms come and go in due course of time. Treatment seeking behavior was poor since most women view that it is a common normal problem of women beside this other factors mentioned are financial constraint, gynecologist not easily available in their area and far distance from clinic. Study in South India on the health seeking behaviour of women with gynaecological morbidities also found that there is a higher probability of seeking treatment among women who have been experiencing a symptom for a longer time than for those whose experience is a more recent one [8]. Mishra and Mukhopadhyay [29] also found that place of residence and exposures to media are significantly associated with the treatment-seeking behavior of the girls.

3.6.3 Factors associated with reproductive morbidities

Table 4 presents the factors associated with reproductive morbidities by background characteristics of the respondents. It was observed that higher the family income, lower cases of reproductive morbidities of the selected women however there was no significant

Table 2. Distribution of abortion conducted by women

Abortion	Frequency N=250	Percentage (%)
Yes	60	24.0
No	189	75.6
Types of Abortion	Frequencies (N=60)	Percentage (%)
Spontaneous	36	60.0
Induced	24	40.0

Table 3. Types of self reported reproductive morbidities faced by respondents

Reproductive morbidities	N=250			Frequency			
	Yes	No	Total	Often	Sometimes	Never	Total
Pelvic Inflammatory Disease (Lower abdominal pain/vaginal white discharge with bad odour/itching (LRTI)	72 (29.0)	178 (71.0)	250 (100.0)	33 (13.0)	39 (16.0)	178 (71.0)	250 (100.0)
Burning sensation while passing urine	103(41.0)	147 (59.0)	250(100.0)	21(8.0)	82(33.0)	147(59.0)	250(100.0)
Pain during menstruation	127(51.0)	123(49.0)	250(100.0)	16(6.4)	111(44.4)	123(49.2)	250(100.0)
	132(53.0)	118 (47.0)	250(100.0)	18(7.0)	114(46.0)	118(47.0)	250(100.0)

Figure in parenthesis indicates percentage, LRTI =Lower Reproductive Tract Infection

Table 4. Distribution of reproductive health problems by women of aimol and meitei

SI. No	Reproductive morbidity	Number	Aimol (ST)	Meitei (SC)	Critical value
1	Two to three reproductive morbidities	145(58.0)	88(69.0)	57(47.0)	31.95**
2	At least one Reproductive morbidity	35(14.0)	24(19.0)	11(9.0)	
3	No Reproductive morbidity	70 (28.0)	16(13.0)	54(44.0)	
	Total	250	128	122	

Figure in parenthesis indicates percentage, ** 1% significance level

Table 5. Factors affecting reproductive health problems

Variables	At least one Reproductive problems	NO Reproductive problems	Total N=250	χ^2
Age group				
18-25	28	14	42	0.79 NS
26-33	85	34	117	
34-40	66	23	89	
Income				
Grade 1 (Upto Rs.5000)	93	39	132	0.25 NS
Grade 11 (5001-10000)	17	7	24	
Grade 111 (10001 and above)	69	25	94	
Level of Education				
Illiterate	30	5	35	8.55*
Upto Primary	91	50	141	
Higher sec and above	58	16	74	

Variables	At least one Reproductive problems	NO Reproductive problems	Total N=250	χ^2
Age at marriage				
Upto 25	132	47	179	1.42 NS
Above 25	47	24	71	
Abortion				
Yes (N=60)	53	7	60	10.87**
No (N=190)	126	64	190	
Number of pregnancy				
One (N=84)	50	34	84	9.07**
Two and Above (N=166)	129	37	166	
Used of any contraceptive methods				
Yes	87	19	106	9.93**
No	92	52	144	
Number of living children				
One	60	33	93	11.99**
Two	54	28	82	
Three and above	65	10	75	
Standard of living				
Low	45	20	65	21.0**
Medium	115	44	159	
High	7	19	26	

** 1% significance level, * 5% significance level NS=not significant

association between income and reproductive morbidities in the study groups. Similarly, age group and age at marriage are not shown significant relation with reproductive morbidities although the same has been shown to have a positive association in a study by Mishra and Mukhopadhyay [29].

While reproductive morbidities were found significantly higher among women who used contraceptive methods. This finding is in line with Bhatia and Cleland [8] which have found use of contraception especially, IUD, female sterilization and abortion procedure increases risk of Reproductive tract infection. Also, it was noticed that women who have more number of living children are likely to get reproductive health problems as against women who have fewer number of children. The same trend was observed with women who have multiple pregnancies. Both number of living children and number of pregnancy are found significant association with more frequent cases of reproductive health morbidities of women. Interestingly, higher educational level of women, standard of living showed opposite trends. With increase in education level of women and better living standard, lower cases of reproductive morbidities were reported and found significant association. Similarly, personal hygiene practices have significant association with reproductive health problems. It was found that those women who have hygienic practices were less likely to report about reproductive morbidities. Ooman [10] in his study also found that lack of menstrual and personal hygiene was found to be associated with RTIs.

4. CONCLUSION

The study indicates high rate of reproductive morbidities but poor treatment seeking behavior. Socio- economic problem, lack of female gynecological centre in the nearby health care centre, embarrassment to share as it is considered private intimate problem, lack of reproductive morbidities symptoms and negligence due to poor knowledge on associated outcome of reproductive health problems were factors for poor treatment seeking behaviour. The study recommends creation of awareness programme on health effect of reproductive morbidities at village level by health care workers and even Community Science students under National Service Scheme (NSS) and Rural Agricultural Work Experience (RAWE) activities

about reproductive health care and to inculcate good personal hygiene.

CONSENT

The research information was collected with due consent from the respondents.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Wilhelmson, Gerdtham. The world health report, make every mother and child count. Switzerland, Geneva- WHO. 2006;7. [Crossref] [PubMed] [Google Scholar]
2. World Health Organization (WHO). Global prevalence and incidence of selected curable sexually transmitted infections: Overview and estimates. Geneva, Switzerland: WHO; 2001.
3. Aggarwal AK, Kumar R, Gupta V, Sharma M. Community based study of reproductive tract infections among ever married women of reproductive age in a rural area of Haryana, India. *J Commun Dis.* 1999;31(4):223–228. [PubMed] [Google Scholar]
4. Ray SK, Biswas R, Kumar S, Chatterjee T, Misra R, Lahiri SK. Reproductive health needs and care seeking behaviour of pavement dwellers of Calcutta. *J Indian Med Assoc.* 2001;99(3):142–143, 145. [PubMed] [Google Scholar]
5. Rahman MM, Kabir M, Shahidullah M. Adolescent self reported reproductive morbidity and health care seeking behavior. *J Ayub Med Coll Abbottabad.* 2004;16(2):9-14. [PubMed] [Ref List]
6. Prasad JH, Abraham S, Kurz KM, George V, Lalitha MK, John R, Jayapaul MN, Shetty N, Joseph A, 2005. Reproductive tract infections among young married women in Tamil Nadu. *India Int Fam Plan Perspect.* 2005;31(2):73-82. [PubMed] [Ref list]
7. Go VF, Quan VM, A C, Zenilman JM, Moulton LH, Celentano DD. Barriers to reproductive tract infection (RTI) care among Vietnamese women: implications

- for RTI control programs sex Transm Dis. 2002;29(4):201-6.
[PubMed] [Ref list]
8. Bhatia J, Cleland J. Self-reported symptoms of gynecological morbidity and their treatment in south India. *Studies in family planning*. 1995;26(4):203-216.
 9. Bang Ra, Bang At, Baitule M, Choudhary Y, Sarmukaddam S, Tale O. High prevalence of gynaecological diseases in rural Indian women. *Lancet*. 1989;1(2):85-89.
 10. Ooman N (Ed.). *A decade of research on Reproductive Tract Infections and Other Gynaecological Morbidity in India: What we know and what we don't know*. New Delhi: Rawat Publications; 2000.
 11. Sajna M V, Bina T, Rahael L. Prevalence of reproductive morbidity and its determinants among ever married women of reproductive age group (15-45 years) in a rural area of Kozhikode. *Public Health Review-International Journal of Public Health Research*. 2017;4(2).
 12. Sekine K, Hodgkin ME. Effect of child marriage on girls' school dropout in Nepal: Analysis of data from the Multiple Indicator Cluster Survey. *PLoS ONE*. 2014;12(7):e0180176.
 13. Nguyen MC, Wodon Q. *Impact of child marriage on literacy and education attainment in Africa*; 2014.
Available:<http://allinschool.org/wp-content/uploads/2015/02/OOSC-2014-QW-Child-Marriagefinal.pdf>.
 14. Rah JH, Shamim AA, Arju UT, Labrique AB, Rashid M, Christian P. Age of onset, nutritional determinants, and seasonal variations in menarche in rural Bangladesh. *J Health Popul Nutr*. 2009;27(6):802-7.
[PMC free article]
[PubMed] [Google Scholar]
 15. Delavar MA, Hajian-Tilaki KO. Age at menarche in girls born from 1985 to 1989 in Mazandaran, Islamic Republic of Iran. *East Mediterr Health J*. 2008;14(1):90-4.
[PubMed] [Google Scholar]
 16. Ersoy B, Balkan C, Gunay T, Onag A, Egemen A. Effects of different socioeconomic conditions on menarche in Turkish female students. *Early Hum Dev*. 2004;76(2):115-25.
[PubMed] [Google Scholar]
 17. Gaudineau A, Ehlinger V, Vayssiere C, Jouret B, Arnaud C, Godeau E. Factors associated with early menarche: Results from the French Health Behaviour in School-aged Children (HBSC) study. *BMC Public Health*. 2010;10:175.
DOI: 10.1186/1471-2458-10-175.
[PMC free article]
[PubMed] [CrossRef] [Google Scholar]
 18. Rao S, Joshi S, Kanade A. Height velocity, body fat and menarcheal age of Indian girls. *Indian Pediatr*. 1998;35:619-28.
 19. Wu T, Mendola P, Buck GM. Ethnic differences in the presence of secondary sex characteristics and menarche among US girls: The third national health and nutrition examination survey, 1988 -1994. *Pediatrics*. 2002;110:752-7.
 20. Ma HM, Du ML, Luo XP, Chen SK, Liu L, Chen RM, et al. Onset of breast and pubic hair development and menses in urban Chinese girls. *Pediatrics*. 2009;124:e269-77.
 21. Chakravarti R. *People of Manipur: Anthropogenetic study of four Manipur population groups*. Delhi: B.R. Publishing; 1986
 22. Maheo LM. *The Mao Naga Tribe of Manipur-A Demographic Anthropological Study*. New Delhi: Mittal Publications; 2004.
 23. Aimol Kh R, Nagar S. Reproductive Performance of Garo Women of Meghalaya. *Asian Journal of Home Science*. 2009;3(2):132-135.
 24. Ganatra B, Hirve S. Induced abortion among adolescent women in rural Maharashtra, India, *Reproductive Health Matters*. 2002;10(19):76-85.
 25. Kulkarni R, Chauhan S. Socio-cultural aspects of reproductive morbidities among rural women in a district of Maharashtra. *The Journal of Family Welfare*. 2009;55(2).
 26. United Nations. *World family planning highlights, department of economic and social affairs*, New York, ST/ESA/SER.A/414; 2017.
 27. Singh S, Singh SK. *Reproductive morbidity among the rural women in Maharastra*, Seminar paper; 2008.
Available:<https://epc2008.princeton.edu/papers/80626>

28. Adhikari RK. Early marriage and childbearing risks and consequences. adolescents sexual and reproductive health: evidence and programmes implication for South Asia. Geneva: World Health Organisation; 2002.
29. Mishra SK, Susmita Mukhopadhyay S. Socioeconomic correlates of reproductive morbidity among adolescent girls in Sikkim. *India Asia Pac J Public Health.* 2012;24:136
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