



REPRODUCTIVE MORBIDITY PROFILE AMONG EVER MARRIED WOMEN (15-44) YEARS OF RURAL ETAWAH DISTRICT, UTTAR PRADESH: A CROSS-SECTIONAL STUDY

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ABSTRACT

Introduction: Reproductive Tract Infections (RTIs) including Sexually Transmitted infections (STIs) are silent epidemics and are recognized as public health problem and rank second as the cause of healthy life lost among women of reproductive age. Considering the importance we planned study in our area with following Objective: To know the prevalence of reproductive morbidity among married women (15-44 Yrs) in rural area of Etawah district and to find out associated factors.

Methods: A cross sectional study was done on 370 married women of rural area of Etawah district. Multi stage random sampling was adopted. A structured questionnaire was used to assess the morbidity and correlated factors. Chi -square test used for analysis. Morbidity was based on symptoms.

Results: Among 370 married women 173(46.76 %) women had one or more symptoms of reproductive morbidity. Per woman average symptoms of reproductive morbidity was found to be 1.6. Most common symptoms of reproductive morbidity were vaginal discharge (28.92%), lower abdominal pain (21.08%) and menstrual problem (20.27%).

Conclusion: Study reveals that prevalence of reproductive morbidity is very common among women of reproductive age group.

Key word: Reproductive morbidity, Married women, silent epidemic.

INTRODUCTION

Reproductive morbidity is a broad concept that encompasses health problems related to Reproductive organs and functions, including and outside of childbearing. Reproductive morbidity can be broadly categorized into three subgroups: obstetric morbidity, gynaecological morbidity and contraceptive morbidity. Reproductive morbidity in general, is an outcome of not just biological factors but of

women's poverty, powerlessness and lack of control over resources as well. Also, the global emergence of sexually transmitted infections has brought attention to women's reproductive and sexual health.¹ Reproductive Tract Infections (RTIs) including Sexually Transmitted infections (STIs) are silent epidemics and rank second as the cause of healthy life lost among women of reproductive age after maternal morbidity and mortality in developing countries.^{2,3} Concern

with sexual and reproductive health gained momentum with the International Conference on Population and Development (ICPD, 1994).¹

Reproductive tract infections (RTIs) are a global health problem among women, especially in South East Asia Region (SEAR) countries. They may progress to serious complications and cause a high degree of morbidity during the sexually active period of life. More than a million women and infants die of the complications of RTIs every year,⁴ the disease prevalence is estimated to be 6% in India and a total of 30 million people may be affected out of 340 million worlds over. The estimates also indicate that about 40% of women have RTI/STI at any given point of time but only 1% completes the full treatment of both partners.⁵ The WHO assessed in 2008 that "Reproductive and sexual ill-health accounts for 20% of the global burden of ill-health for women, and 14% for men."⁶

Though there has been increasing concern over the general health and morbidity status of women in India. There is paucity of evidence base about various dimensions of reproductive morbidity. On other side, recent efforts in different developing countries including India to study reproductive morbidity at community level suggest high prevalence of gynaecological and obstetrics morbidities. There is no single study about reproductive morbidity in our study area; a need was felt to carry out survey in married women (15-44 yrs) in rural area of Etawah district of Uttar Pradesh with the objectives: 1) to find out prevalence of reproductive morbidity in married women (15-44 Yrs) in rural area of Etawah district. 2) To find out relation of symptoms of reproductive morbidities with different variables.

MATERIAL AND METHOD

The present study was a field based cross-sectional study carried out in rural area of Etawah district, Uttar Pradesh to assess the prevalence of reproductive morbidity among married women 15-44 years age groups. Approval for this study was obtained from the institutional ethical committee of our institute UPRIMS & R, Saifai, Etawah. Assuming prevalence (35.2%)⁷ in married women (15-44 years) and absolute error 5% the minimum sample size was calculated to be 365 women in rural area by considering level of significance $\alpha=0.05$. Study period was July 2014 to Dec 2014. Multi-stage random sampling was

adopted. In the first stage Saifai block was selected randomly by simple random sampling among 8 blocks of Etawah district. In the second stage we listed all villages of this block. Among all villages 10 villages were selected by simple random sampling through lottery system. Since total sample size was 370, so 37 married women were enrolled in each village for study purpose. In each selected village, first house was selected by putting down pencil at the centre of the village. Tip of the pencil is selected as direction of the survey in the village. The first house which came in this direction was enrolled as first house and continued till reaching the target no of 37 in each village. We interviewed all married women after taking informed written consent, if present more than one in any household counted as individual number.

Inclusion criteria: Women of age group 15 - 44 years who was resident of selected study area and those who gave consent to participate in the study.

Exclusion criteria: A lady who was in the puerperium period, women who had any major and chronic gynecological problems such as cervical cancer, those not willing to participate in the study.

The tools used for data collection were pre-designed, pretested structured questionnaire method. Validity of the questionnaire was done by conducting pilot study among randomly selected 10% married women of study population. Before the start of the study participants were told about the purpose of the study and informed verbal consent along with guarantee of anonymity to the individuals. It sought information on socio-demographic characteristics, reproductive morbidity that included symptoms of vaginal discharge, lower abdominal pain, vaginal ulcer, painful/burning micturation and menstrual problems. The menstrual problems studied were dysmenorrhoea, oligomenorrhoea, polymenorrhoea and menorrhagia. For quality assurance of data on each survey day in the evening the questionnaires were checked for completeness. If any information was missed or there was any confusion regarding any particulars, the respective households were revisited again on the next day. 10% of the total questionnaires were cross checked by the faculty member of the department. The data thus collected were coded and entered into computer in SPSS version 16 software package worksheet and analyzed accordingly. Percentage distribution and cross table

were generated. Chi-square test was applied for drawing inference.

RESULTS

In the present study a total of 370 ever married women were interviewed. Among 370 married women 173(46.76 %) women had one or more symptoms of reproductive morbidity. Per woman average symptoms of reproductive morbidity was found to be 1.6. As shown in table 2 that abnormal discharge was the main symptom of reproductive morbidity complained by 107(28.92%) married woman, accompanied by lower abdominal pain in 78 (21.08%). Other associated symptoms related to reproductive morbidity were menstrual problems (20.27%), painful /burning sensation while micturating (4.05 %) and vaginal ulcer (0.27%)

Table 3 and 4 showed that overall, prevalence of any symptom of reproductive morbidity was significantly higher among those women who are in 25-34 yrs as compared to age group in 15-24yrs (54.21% vs. 33.64 %). Women who had 3 or more children had more prevalence (61.74%) of reproductive morbidity while it was low (39.68%) in women who had no children, it was significantly associated. Prevalence of reproductive morbidity was found to be significantly maximum in those women who delivered at home and minimum prevalence in those women

whose last delivery occurred at the institute (57.86% vs. 37.84%). Significantly low prevalence (27.85%) of reproductive morbidity was observed in those women whose last delivery was conducted by doctors whereas, it was high (59.30%) whose last delivery conducted by un-trained personnel. All the women complaining of lower abdominal pain (21.08%) also had history of vaginal discharge.

Table 1: Prevalence of Cases of Reproductive Morbidity in Married Women

Status of RTI	Women (n=370) (%)
Without symptoms of Reproductive Morbidity	197 (53.24)
With symptoms of Reproductive Morbidity	173 (46.76)

Table 2: Distributions of cases of Reproductive Morbidity on the basis of symptoms (Multiple-response)

Symptoms	Women	Prevalence (%) (N=370)
Vaginal discharge	107	28.92 %
Lower abdominal Pain	78	21.08%
Menstrual Problems	75	20.27%
Pain/ burning micturating	15	4.05 %
Vaginal Ulcer	01	0.27%
Total	173	46.76%

Table 3: Distribution of cases of Reproductive Morbidity on socio -demographic characteristics

Variable	Women (%)	Any symptom of Reproductive Morbidity (Prevalence) %	P value	Menstrual Problems (preval) %	Vaginal Discharge (Preval.)%	Lower Abdominal Pain (Preval.) %	Vaginal Ulcer (Preval.)	Burning/ Painful (Micturation) (Preval.)%
N	370	173		75	107	78	01	15
Age								
15-24	107 (28.92)	36 (33.64)	0.001	09 (8.41)	22 (20.56)	14 (13.08)	00	00
25-34	190 (51.35)	103 (54.21)		44 (23.16)	65 (34.1)	45 (23.68)	00	05 (2.63)
35-44	73 (19.73)	34 (46.58)		22 (30.14)	20 (27.40)	19 (26.03)	01 (1.37)	10 (13.79)
Literacy								
Illiterate	173 (46.76)	82 (47.40)	0.60	50 (28.90)	58 (33.52)	44 (25.43)	00	10 (5.78)
1 st to 8 th	109 (29.46)	55 (50.46)		15 (13.76)	29 (26.61)	23 (21.10)	01 (0.92)	03 (2.75)
9 th to 12 th	66 (17.84)	27 (40.90)		08 (12.12)	15 (22.72)	06 (9.09)	00	02 (3.03)
>12 th	22 (5.94)	09 (40.90)		02 (9.09)	05 (22.72)	02 (9.09)	00	00
Type of Family								
Joint	253 (68.38)	118 (46.64)	0.94	50 (19.76)	74 (29.24)	45 (17.79)	00	08 (2.82)
Nuclear	117 (31.62)	55 (47.01)		25 (21.36)	33 (28.20)	33 28.20	01 0.85	07 5.92
Parity								
0	63 (17.03)	25 (39.68)	<0.001	10 (15.87)	13 (21.00)	06 20.83	00	00
1-2	192 (51.89)	77 (40.10)		35 (18.23)	46 (23.96)	40 (20.83)	01 (1.30)	05 (2.60)
3	115 (31.08)	71 (61.74)		30 (26.09)	48 (41.74)	32 (27.83)	01 (0.87)	10 (8.70)

Table 4: Distribution of cases of Reproductive Morbidity on Obstetrics history

Variable	Women (%)	Any symptom of Reproductive Morbidity (Prevalence) %	P value	Menstrual Problems (preval.) %	Vaginal Discharge (Preval.)% Pain	Lower Abdominal (Preval.)%	Vaginal Ulcer (Preval.)	Burning/Painful (Micturation) (Preval.) %
n	307	148		65	94	72	01	15
Place of last Delivery								
Home	159(51.79)	92 (57.86)	<0.001	41 (25.79)	58 (36.48)	44 (27.67)	01 (.63)	09 (5.66)
Institute	148(48.21)	56 (37.84)		33 (22.30)	36 (24.32)	28 (18.92)	00	06 (4.05)
Last Delivery conducted by								
Untrained Personnel	140(45.60)	83 (59.30)	<0.001	40 (28.57)	53 (37.86)	39 (27.86)	01 (0.71)	08 (5.71)
Trained Dai	19 (6.19)	09 (47.37)		03 (15.79)	06 (31.58)	04 (21.05)	00	01 (5.26)
Health Worker	69(22.48)	34 (49.28)		12 (17.40)	19 (27.54)	16 (23.19)	00	03 (4.35)
Doctor	79 (25.73)	22 (27.85)		10 (12.66)	16 (20.25)	13 (16.46)	00	03 (3.80)
History of Abortion								
Present	22 (5.95)	11 (50.0)	0.75	09 (40.90)	10 (45.45)	06 (27.27)	00	02 (9.09)
Absent	348 (94.0)	162 (46.5)		66 (18.97)	97 (27.87)	72 (20.69)	01(0.29)	13 (3.73)

Table 5: Distribution of Cases of Reproductive Morbidity on Methods of Contraception

Variable	Women (%)	Any symptom of Reproductive Morbidity (Prevalence) %	P value	Menstrual Problems (preval.) %	Vaginal Discharge (Preval.)% Pain	Lower Abdominal (Preval.)%	Vaginal Ulcer (Preval.)	Burning/Painful (Micturation) (Preval.) %
n	370	173 (46.76)		75 (20.27)	107 (28.92)	78 (21.08)	01 (0.27)	15 (4.05)
Use of Contraception								
Used	93 (25.14)	41 (44.8)	0.5	27 (29.03)	25 (26.88)	14 (15.05)	00	08 (8.60)
Unused	277 (74.86)	132 (47.80)		48 (17.32)	82 (29.60)	64 (23.10)	01 (0.36)	07 (2.52)
Methods of Contraception								
Cu -T	41 (44.09)	20 (48.78)	0.23	17 (41.46)	17 (41.46)	10 (24.39)	00	00
Sterilization	36 (38.71)	17 (47.22)		08 (22.22)	07 (19.44)	04 (11.11)	00	00
Condom	16 (17.20)	04 (25)		02 (12.5)	01 (6.25)	00	00	00

Vaginal discharge was higher (35.41%) among married woman between age group 25-34years and lower (20.56%) in age group 15-24 years. Prevalence of vaginal discharge was more (33.52%) in illiterate women and low prevalence (22.72%) among those women who were educated up to class 12th or more. It was maximum (41.74%) in women who had 3or more children while it was minimum (21 %) in women who had no children Women who delivered at home and delivery conducted by untrained personnel had higher prevalence of vaginal discharge (36.48% and 37.86%) respectively in comparison to those who delivered at the institute and delivery conducted by doctors (24.32% and 20.25%) respectively. The prevalence of vaginal discharge was found to be maximum (41.46%) among CuT users while it was lowest (6.25%) in condom users Apart from vaginal discharge and lower abdominal pain , another most common symptom was menstrual problem which was found to be (20.27%). Prevalence of menstrual problem was maximum (30.14%) among elder women in age group 35-44 years as compared to lower (8.41%)

in young married woman 15-24 years. Higher prevalence (41.46%) of menstrual problem reported by CuT users while lower prevalence (12.5%) in those woman who were using condom for family planning method. Another symptom reported was pain / burning sensation while urinating. Prevalence of painful and burning micturation increases from 2.63 % in age group 25-34 years to 13.79 % in age group 35-44 years.

DISCUSSION

In the present study prevalence of any symptom of reproductive morbidity was found to be (46.76%).It was high in comparison to the findings of Abraham et al (2014),⁸ Nandan et al (2002),⁷ Mani G et al (2014),⁹ Palai et al (1994),¹⁰ Thakur et al (2002)¹¹ who reported it 36.85%, 35.2%, 33.3 %, 22.6% and 17.7% respectively in their study. High prevalence in our study may be due to low level of awareness and perception about symptoms of reproductive morbidity. However other studies conducted in various

parts of India also reported high prevalence of RTI.^{12,13,14,15,16,17} Vaginal discharge was the common symptom in our study which is supported by findings of various studies.^{4,9} while Gupta et al (2015)¹⁸ reported lower abdominal pain was the main symptom in his study. Present study reveals that maximum prevalence (54.21%) of any symptom of reproductive morbidity was found in the age group 25-34 years age group in comparison to minimum (33.64%) in age group 15-24 years, probably maximum prevalence in women of 25-34 years age group because they are more sexually active and have prolonged reproductive life. Earlier studies have also revealed the same results.^{16,19,20} The prevalence of reproductive morbidity was found to be maximum (50.46%) in those women who were educated up to class 8th and it showed a decreasing trend with an increase in the level of education and found minimum prevalence (40.90%) who were educated up to class 12th or >12th. Low prevalence of reproductive morbidity with high level of education in our study may be attributed to high level of awareness about RTIs symptoms, timely utilizations of health care services and better personal hygiene. A similar observation was reported by Bansal et al (2001)²¹ in their study conducted in Udaipur city of Rajasthan. Prevalence of any symptom of reproductive morbidity in the present study was found maximum (61.74%) who had 3 or more children as compared to minimum (39.68%) who had no child, high prevalence of reproductive morbidity among women who had high parity in this study was due to repeated pregnancy and abortions. Earlier studies have also revealed the same results.^{4,16} In the present study 159 (51.79%) and 140 (45.60%) women had home delivery and delivery conducted by untrained personnel while institutional delivery & delivery conducted by doctors in our study area were found to be 48.12% & 25.73%. Prevalence of RTIs was found maximum (57.86%) in home delivery and delivery conducted by untrained personnel (59.30%) as compared to (37.84%) in institutional delivery and (27.85%) in delivery conducted by doctors in this study it may be due to iatrogenic infections resulting from the procedures carried out by traditions birth attendants during child delivery under unhygienic conditions or poor menstruation hygiene. Present study reveals that the small percentages of women who had history of miscarriage, or induced abortions (5.95% of the total sample) have high prevalence (50.0%) of reproductive morbidity. Similar to other studies,^{4,21} in our study, we also observed that 16 (17.20%) women whose hus-

band using condom showed the lowest prevalence (25.0%) of reproductive morbidity while 41(44.09%) women using CU-T showed high prevalence rate (48.78%). This confirms the well-known fact that contraceptives methods like condom have a protective role in the prevention of RTIs/ STIs.

Limitation of the study: Data collection was based on the symptoms reported by married women. Local examination of the married women of our study was not done because it was not feasible to do it in the field.

CONCLUSION

The study reveals that prevalence of reproductive morbidity is very high among rural women in Etawah district of Uttar Pradesh. It is necessary to increase awareness among women regarding symptoms and consequences of RTI/STI through information, education, and behavior changes. This would go a long way in reducing reproductive morbidity among sexually active population of our country.

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