

ORIGINAL ARTICLE

Prevalence of Gynaecological Morbidity and Treatment Seeking Behaviour among Married Women in Rural Karnataka: A Cross Sectional Survey*Lida Mathew¹, Ansuya^{1*}, Lakra Alma Juliet Francis¹**¹Manipal College of Nursing, Manipal University, Udupi District-576104 (Karnataka) India***Abstract:**

Background: Reproductive morbidity is any morbidity or dysfunction of the reproductive tract or any morbidity which is a consequence of reproductive behaviour including pregnancy, abortion, childbirth or sexual behaviours. *Aim and Objectives:* To determine the prevalence of gynaecological morbidity and treatment seeking behaviour among married women of reproductive age group in Udupi. *Material and Methods:* A cross sectional descriptive survey conducted among married women in reproductive age group of 18-45 years. A total of 330 women were selected by purposive sampling from six villages of Udupi Taluk. Pretested questionnaire on symptoms and treatment seeking behaviour on gynaecological morbidity was used to collect the data. *Results:* The prevalence of gynaecological morbidity among study population was 66.4% with majority having symptoms suggestive of reproductive tract infections and dysfunctional uterine bleeding and menstrual disorders. Among 219 women who reported symptoms of gynaecological morbidity, 63.9% women had sought some form of treatment and 45% of the women went only to private hospital. There was significant association between gynaecological morbidity and number of children ($\chi^2 = 24.215$, $p < 0.001$) and postnatal exercise practiced ($\chi^2 = 4.769$, $p = 0.035$). *Conclusion:* Prevalence of gynaecological morbidities is high in this community. In spite of having gynaecological morbidity, many did not seek treatment due to various barriers Hence, women must get health education to seek health care earlier to prevent further complications of the disease.

Keywords: Gynaecological Morbidities, Treatment Seeking Behaviour, Reproductive Age.

Introduction:

Reproductive morbidity is 'any morbidity or dysfunction of the reproductive tract or any morbidity which is a consequence of reproductive behaviour including pregnancy, abortion, childbirth or sexual behaviours [1]. Reproductive morbidity has three categories – obstetrical, gynaecological and contraceptive morbidity. Gynaecological morbidity is the disorders of the genital tract which are not directly related to pregnancy, delivery and puerperium [2]. Gynaecological diseases are either infectious or non-infectious in origin. Non-infectious includes dysfunctional uterine bleeding, menstrual disorders, infertility, cervical cell changes and genital prolapse. Infectious includes reproductive tract infections (includes upper and lower genital tract) sexually transmitted infections such as syphilis and Urinary Tract Infections (UTIs) [3]. Right from the onset of puberty to the post-menopausal period most of the women experience one or the other symptoms of gynaecological morbidity. Even though these symptoms negatively affect their reproductive life as well as daily living activities, they rarely report to health care system. They will neglect the symptoms and will not seek any health care services due to several barriers. An Indian Council of Medical Research (ICMR) task force study stated that percentage of women complaining on gynaecological problem in India varied greatly between 35-58.9% [4].

Government of India launched the Reproductive and Child Health (RCH) Programme in 1997. Focussed in reducing total fertility rate and maternal mortality rate, but forgot that the health of the women is also affected by problems that are no related to pregnancy or child birth. That causes a marked difference in the prevalence of reported gynaecological morbidity from 24.4% to 74.1% at various regions of India [5].

Treatment seeking behaviour of women in gynaecological problem is purely depends upon the individual perception. When women think these gynaecological symptoms are normal for them or non-serious they don't take any treatment from health care system [6]. Health seeking behaviour is also based on how women view their own health state as well as how they experience each symptoms of gynaecological morbidity. Purposeful ignorance of the symptoms of gynaecological problems by the married women is a major factor to raise the complication of gynaecological morbidity and it leads to mortality of women. The prevalence of gynaecological morbidity is increasing day by day and initiation of treatment is delayed due to some barriers. Most of the women perceived that gynaecological morbidity is normal for them and they keep this condition secret. As we all know initial identification and treatment prevent further complication. With this view in mind this study would be helpful to create awareness regarding gynaecological morbidity and for those who have not taken any treatment for their symptoms, motivate them to take treatment from health care services. Thus it will help in reducing gynaecological morbidity and allow women to have a better quality of life.

Material and Methods:

A descriptive cross sectional survey was conducted among 330 married women in the reproductive age group of 18 to 45 years residing in Udupi District, Karnataka. Udupi district has 3 taluks, i.e., Udupi, Kundapura and Karkala. Udupi taluk was selected for the study. Six villages under Udupi taluk were selected through simple random sampling. Purposive sampling technique was used to select the samples.

The baseline proforma was used to collect the background data of the sample. It consists of two sections. Section A was demographic proforma which included age, religion, education, occupation, family income, marital status, type of family. Section B was tool on reproductive history which included age at marriage, age at first delivery, number of children, mode of delivery, place of delivery, any postnatal exercise practiced, age at last child birth, use of contraception, undergone Pap smear test, difficulty faced during delivery. Questionnaire on self-reported symptoms of gynaecological morbidity (tool 2) was used to collect the information on gynaecological problems. Items were related to the symptoms of reproductive tract infections, sexually transmitted infections, sexual problems, vaginal prolapse, dysfunctional uterine bleeding, menstrual disorders and infertility. Questionnaire on treatment seeking behaviour (tool 3) was used to collect the information on same. The reliability of the tool was established by administering the tool to 20 sample using test retest split half method and found to be reliable (tool 2; $r=0.99$ and tool 3: $r =0.96$). This study was approved by the Institutional Ethical Committee and informed consent was taken form study subjects. Data were analysed with Statistical Package for Social Sciences (SPSS) version 16.

Results:

A total of 330 married women in the reproductive age group were included in this study and the sample characteristics are presented in Table 1.

The data presented in Table 1 shows that 26.1% of the study population belonged to the age group of 41-45 years. 45.8% had completed high school education and 82.7% were housewives.

Table 2: Antibiotic Resistance Pattern of Enterobacter Isolates

Sample characteristics	Frequency (n=330)	Percent
Age (in years)		
18-25	32	9.7
26-30	68	20.6
31-35	68	20.6
36-40	76	23
41-45	86	26.1
Religion		
Christian	11	3.3
Hindu	271	82.1
Muslim	48	14.5
Education		
Primary	56	17
High school	151	45.8
PUC	55	16.7
Undergraduate	52	15.8
Post graduate	16	4
Occupation		
House wife	273	82.7
Self-business	36	10.9
Non professional	5	1.5
Professional	16	4.8

Sample characteristics	Frequency (n=330)	Percent
Occupation		
House wife	273	82.7
Self-business	36	10.9
Non professional	5	1.5
Professional	16	4.8
Family Income per month (In Rupee)		
Less than 5000	11	3.3
5001-15000	114	34.5
15001-25000	185	56.1
More than 25000	20	6.1
Marital status		
Married	326	98.8
Widow	3	0.9
Divorced	1	0.3
Type of family		
Nuclear	262	79.4
Joint	66	20
Extended family	2	0.6

Table 2: Reproductive Characteristics of the Women in the Study

Reproductive characteristics	Frequency	Percent
Age at marriage (in years) (n=330)		
13-23	169	51.2
24-33	154	46.7
34-43	7	2.1
Age at first delivery (in years) (n=289)		
15-25	171	59.2
26-35	112	38.8
36-45	6	2.1
Number of children (n=330)		
No children	41	12.4
1-2 children	247	74.8
3-4 children	42	12.7
Mode of delivery (n=289)		
Only vaginal delivery (includes forceps/ vacuum delivery)	188	65
Only cesarean section	85	29.4
Both vaginal and cesarean section	16	5.5

As 41 nulliparous women were included in this study, hence number of samples changed in few items (330-41=289). The data presented in Table 2 shows that, majority, i.e., 65% women underwent vaginal delivery, 92.4% women delivered at hospital and only 2.8% women delivered at home. Majority of the women, i.e., 63.3% delivered their

Reproductive characteristics	Frequency	Percent
Place of delivery (n=289)		
Home	8	2.8
PHC	14	4.8
Hospital	267	92.4
Postnatal exercise practiced (n=289)		
No	230	79.6
Yes	59	20.4
Age at last child birth (n=289)		
15-25	92	31.8
26-35	183	63.3
36-45	14	4.8
Use of contraception (Current user)(n=330)		
No	206	62.4
Yes	124	37.6
Had difficulty during delivery (n=289)		
No	196	71.8
Yes	93	28.2
Pap smear test done (n=330)		
No	311	94.2
Yes	19	5.8

last child between the age of 26-35 years. More than half of the samples (62.4%) were not using any method of contraception and 28.2% women had difficulty during delivery. Among the study population 5.8% women had tested for Pap smear at least once.

Prevalence of Gynaecological Morbidity:

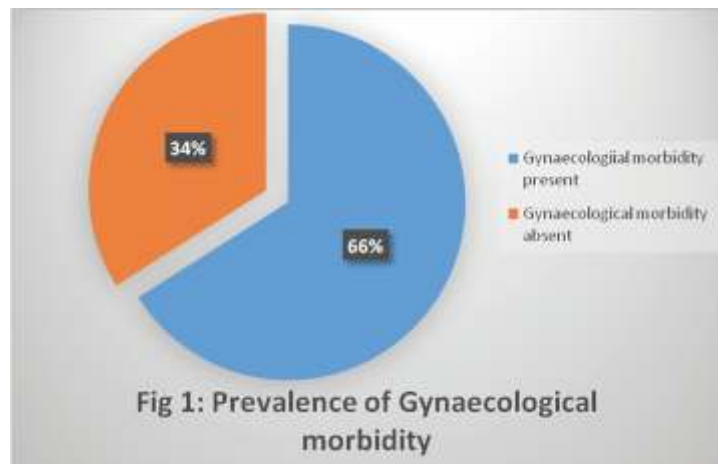


Fig. 1: Shows out of 330 Participants, 219 (66.0%) Women Reported At Least One Symptom of Gynaecological Morbidity.

Table 3: Symptoms Related to Gynaecological Morbidity (n=219)

Symptoms related to gynaecological morbidity (multiple responses)	Frequency	Percent
Lower abdominal pain with excessive white vaginal discharge	68	20.6
Lower backache with excessive white vaginal discharge	83	25.2
Dryness in vagina	16	4.8
Ulcers in and around vagina	43	13
Itching in and around vagina	5	1.5
Foul smelling white discharge from vagina	7	2.10
Pain in vagina	3	0.9
Pain while urinating	19	5.8
Blood in urine	2	0.6
Swelling of glands in groin	8	2.4
Pain during intercourse	25	7.6
Sexual dissatisfaction	9	0.3
Post coital bleeding	1	3
Feeling of something coming out from vagina	10	3

Continued...

Symptoms related to gynaecological morbidity (multiple responses)	Frequency	Percent
Feeling of fullness of vagina or feeling of dragging sensation on the lower pelvic region	8	2.7
Feeling of uneasiness when in lying position or feeling of passing 'gas' or 'noise' through vagina	10	3
Unbearable pain during menstruation	60	18.2
2 or more than 2 menstrual cycles in a month	20	6.1
Irregular menstruation	50	15.2
Duration of menstrual bleeding more than 5 days or excessive in amount	48	14.5
Duration of menstrual bleeding less than 3 days or less in amount	29	8.8
Spotting in between the menstrual cycles	8	2.4
Excessive bleeding from vagina apart from normal menstruation	14	4.2
Any fertility related problems (like inability to conceive after having regular unprotected sex)	36	10.9

Out of 219 women with gynaecological morbidity, symptoms related to reproductive tract infections and symptoms related to dysfunctional uterine bleeding and menstrual disorders were most common, followed by the symptoms related to infertility, sexual problem and uterine prolapse.

25.2% of the women reported lower backache with excessive white vaginal discharge as a symptom of reproductive tract infection. For symptoms related to dysfunctional uterine bleeding and menstrual disorders, 18.2% of the women reported unbearable pain during menstruation.

Table 4: Association between Gynaecological Morbidity and Selected Variables

Variable	Gynaecological Morbidity		χ^2	p-value
	Yes	No		
Age (in years) (n =330)				
Age below 25	21	11	0.033	0.985
26-35	91	45		
Age (in years) at marriage (n =330)				
10-20	53	34	2.241	0.354
21-30	152	73		
31 – 40	14	4		

Continued...

Variable	Gynaecological Morbidity		χ^2	p-value
	Yes	No		
Age at first delivery (in years) (n=289)				
15-25	105	66	3.712	0.168
26-35	69	43		
36-45	6	0		
Number of children(n =330)				
No children	39	2	24.215	0.000*
1-2 children	159	88		
3-4 children	21	21		
Mode of delivery (n=289)				
Only vaginal delivery	119	71	0.004	1
Only cesarean section	53	32		
Both vaginal and cesarean section	10	6		
Place of delivery (n=289)				
Home	3	5	3.674	0.165
PHC	11	3		
Hospital	166	101		
Postnatal exercise practiced(n=289)				
No	136	94	4.769	0.035*
Yes	44	15		
Age at last child birth (in years)(n=289)				
15-25	59	33	2.083	0.374
26-35	110	73		
36-45	11	3		
Use of contraception (n =330) (At present)				
No	139	67	0.304	0.631

Significant association between gynaecological morbidity with number of children ($\chi^2 = 24.215$, $p = 0.000$) and postnatal exercise practiced ($\chi^2 = 4.769$, $p = 0.035$).

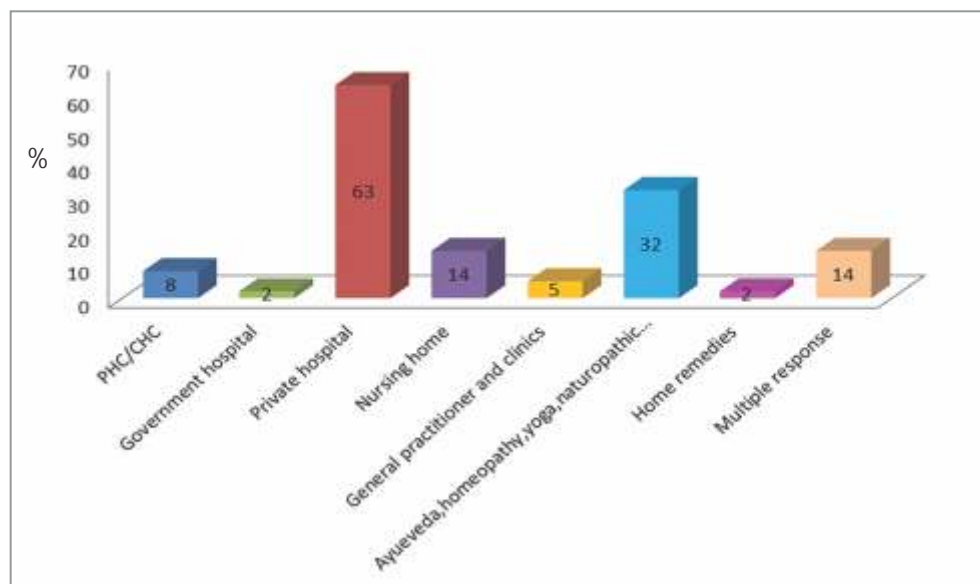


Fig. 2: Bar Diagram on Frequency of Treatment Seeking Behaviour for Gynaecological Morbidity

Table 5: Association between Treatment Seeking Behaviour and Selected Variables (n=219)

Variables	Treatment seeking behaviour		χ^2	p-value
	Yes	No		
Level of education				
Primary-High school	89	39	5.326	0.07
PUC	20	20		
Undergraduate-Postgraduate	31	20		
Family income per month(in rupee)				
Less than 5000s	2	2	2.084	0.39
5001-25000	130	69		
More than 25000	8	8		
Age (in years)				
Age below 25	11	10	1.14	0.53
26-35	59	32		
36-45	66	41		

Significant; $p < 0.05$

Figure 2 shows that of the 219 women who reported symptoms of gynaecological morbidity, 140(63.9%) women had sought some form of treatment, while 79(36.1%) had not sought any treatment. Among 140 symptomatic women who had received treatment, 63 (45%) women went only to private hospital, 32(22.8%) women sought treatment only from Ayurveda, siddha, unani, homeopathy, yoga or naturopathy.

The study result shows that there was no significant association between treatment seeking behaviour and selected variables at 0.05 level of significance.

Discussion:

Community based information on prevalence of gynecological problems and service seeking behavior is scarce. This study has provided an estimate of self-reported gynecological problems. In this study, of the 330 married women, 219 women reported at least one symptom of gynaecological morbidity and the magnitude of gynaecological morbidity is 66.4% which is higher than the study reported from urban slum of Bhavnagar (45%) [7]. Symptoms related to reproductive tract infections such as lower backache with excessive white discharge (25.2%) and symptoms related to dysfunctional uterine bleeding and menstrual disorders such as unbearable pain during menstruation (18.2%) were the most common gynaecological morbidity in this study. Women presented with the symptoms of reproductive tract infection (26.4%), menstrual problem (26%) followed by dyspareunia, post coital bleeding and prolapse of uterus (3.7%). Among RTI, vaginal discharge (20.7%) in the study reported from Bhavnagar [7] which are comparable with our study findings. Study conducted among the rural women in Tamilnadu had found 45% of gynaecological problems [8]. Studies from Pakistan, Oman and India [2, 9, 10] have reported that magnitude of gynaecological

morbidity was more than half (50%) among the study population. Menstrual disorder either heavy bleeding, prolonged bleeding or painful menses was 45%, as reported in a study done in Pakistan [2]. Very high prevalence of low back (64%), vaginal discharge (57%) and low abdominal pain was reported in study done in New Delhi, India [11].

In this study, 63.9% women had sought some form of treatment, while 36.1% had not sought any treatment. Among 140 symptomatic women who had received treatment, 45% women consulted to private hospital followed by 22.8% women sought treatment only from Ayurveda, Siddha, Unani, Homeopathy, and Yoga or naturopathy had. Study conducted in Ludhiana, Punjab reported similar findings i.e., 31.5% women taken allopathic treatment followed by Ayurvedic treatment 10% [6]. The present study findings are contrary to study conducted in Lagos state university teaching hospital [12]. They found 87.8% patient sought medical care when they experienced symptoms of reproductive tract infections. 31.5% women went to government health center followed by pharmacy (22.5%).

In our study, significant association was found between gynaecological morbidity and number of children (p -value= 0.000) and postnatal exercises practiced (p -value=0.035). Our findings are contrary to other study conducted in a sub-district of Bangalore, Karnataka that significant association between gynaecological morbidity and number of pregnancy (p <0.001), age at first pregnancy (p <0.001), history of stillbirth (p <0.001), place of delivery (p <0.05) and use of contraception (p <0.001) [12].

There was no significant association between treatment seeking behaviour and selected variables like level of education, family income, age and religion in the present study. The current

study findings are contradicted by a cross sectional survey conducted in a sub-district of Karnataka state situated about 70 kilometres from the Capital of Bangalore. The study revealed that there is a significant association between treatment seeking behaviour and age ($p < 0.01$), history of stillbirth ($p < 0.001$), history of abortion ($p < 0.001$) and exposure to health education ($p < 0.001$) [12].

Limitation of the study:

Since the study is based on self-reported symptoms of gynaecological morbidity, cervical cell changes are not considered in this study. Diagnostic accuracy of self-reported symptoms of gynaecological morbidity is not measured.

Prevalence of gynaecological morbidity purely based on verbalization of symptoms related to gynaecological problems of study participants.

Conclusion:

Our study shows that prevalence of gynaecological morbidity is high in this community. In spite of having gynaecological problems, only 60% sought treatment due to various barriers. So it is very important to identify and motivate people to acquire early treatment. Educating the public and screening camp is very much essential. Health care provider needs to encourage and motivate married women to seek treatment from health care system by eliminating the barriers and to achieve optimal health.

References

1. WHO. Measuring Reproductive Morbidity. Geneva. 1990.
2. Sajjan F, Fikree FF. Perceived Gynecological Morbidity among Young ever-married women living in squatter settlements of Karachi, Pakistan. *JPMA* 1999; 49(4):92-7.
3. Pati R. A Community-Based Assessment of Gynecological Morbidity in Mumbai, India. UCHC Graduate School Masters Theses 2004; 1-121.
4. Kambo IP, Dhillon BS, Singh P, Saxena BN, Saxena NC. Self reported gynaecological problems from twenty three districts of India. *Indian J Community Medicine* 2003; 28(2):67-72.
5. Abraham A, Varghese S, Satheesh M, Vijayakumar K, Gopakumar S, Mendez AM. Pattern of gynecological morbidity, its factors and Health seeking behavior among reproductive age group women in a rural community of Thiruvananthapuram district, South Kerala. *Indian J Community Health* 2014; 26(3); 230-237.
6. Kaur S, Jairus R, Samuel G. An exploratory study to assess reproductive morbidities and treatment seeking behaviour among married women in a selected community, Ludhiana, Punjab. *Nurs Midwif Res J* 2013; 9(3): 91-98.
7. Gosalia VV, Verma PB, Doshi VG, Singh M, Rathod SK, Parmar MT. Gynaecological morbidities in women of reproductive age group in urban slums of Bhavnagar city. *Natl J Community Med* 2012; 3(4):657-60.
8. Vasuki S, Jothy K. General gynecological problems among the rural women in Tamilnadu. *Asia Pacific J Res* 2014; 1(XVIV):68-74.
9. Riyami AA, Afifi M, Fathalla FM. Gynaecological and related morbidities among Ever-Married Omani women. *African J Reprod Health* 2004; 8(3):189-97.
10. Poornima S, Katti SM, Mallapur MD, Vinay M. Gynaecological problems of married women in the reproductive age group of urban Belgaum, Karnataka. *AlAmeen J Med Sci* 2013; 6(3): 226-230.
11. Garg S, Sharma N, Bhalla P, Sahay R, Saha R, Raina U, et al. Reproductive morbidity in an Indian urban slum: need for health action. *Sex Transm Infect* 2002; 78(1):68-69.
12. Rabiun KA, Adewunmi AA, Akinlusi FM, Akinola OI. Female reproductive tract infections: understandings and care seeking behaviour among women of reproductive age in Lagos, Nigeria. *BMC Women's Health* 2010; 10(8); 2-7.
13. Bhatia JC, Cleland J. Self-reported symptoms of gynecological morbidity and their treatment in South India. *JSTOR* 2015; 203-216.

*Author for Correspondence: Mrs Ansuya, Manipal College of Nursing, Manipal University, Udipi District-576104, Karnataka, India.. Email: ansuya.bengre@manipal.edu Cell: 9535894558.