

Original Research Article

Prevalence and socio-demographic determinants of gynecological morbidity among ever married women of reproductive age group in field practice area of Navodaya Medical College Hospital and Research Centre, Raichur

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ABSTRACT

Background: India has made rapid progress in social, economy and health sectors since independence and simultaneous dramatic changes in lifestyle and social roles for women, mortality rates have shifted, resulting in a decreasing advantage for women. Explaining the consequences of these dynamic changes requires understanding of the various health effects. In the future these changes will have significant impact on women's health.

Methods: A cross-sectional study was conducted among 400 ever married women of reproductive age group (15-49 years) residing in the urban field practice area of NMCH&RC. Study subjects were interviewed about gynecological morbidities experienced in the recent past 6 months. Blood samples were collected and hemoglobin estimation was done.

Results: Out of the total 400 ever married women of reproductive age group (15-49 years), 153 women were found to have gynecological morbidity and the prevalence was found to be 38.3%. Statistically significant association was found among the prevalence of gynecological morbidity and variables like literacy status, occupation, age at marriage, age at menarche and type of family of respondents.

Conclusions: Due to the traditional and social constraints, socio-cultural factors of study participants, limit their access to the health care and social support services, thereby providing an environment conducive to acquiring and transmitting RTI/STIs.

Keywords: Reproductive age group, Self-reported, Gynecological morbidity

INTRODUCTION

India has made rapid progress in social, economy and health sectors since independence and simultaneous dramatic changes in lifestyle and social roles for women, mortality rates have shifted, resulting in a decreasing advantage for women. In the future these changes will have significant impact on women's health.

Women's health is not only a state of physical wellbeing but is an expression of the many roles she performs as a mother, care giver, wage earner and their interaction with the social and economic as well as cultural circumstances which influence her daily life.¹ Women's health is of utmost importance since her health has a bearing on the health of her family and in turn reflects the wellbeing of society that she lives in.²

A woman requires special attention while she passes through reproductive phase in her life because during this period, she becomes matured sexually and socially, marries, becomes pregnant and experiences childbirth. Moreover, she also maintains social and economic condition of her family. Unfortunately, women are often deprived of access to health care, literacy, information, skills and human rights.³

A WHO working group defined reproductive morbidity as “any morbidity or dysfunction of a reproductive tract or any morbidity which is a consequence of reproductive behavior including pregnancy, abortion, child birth or sexual behavior and may include those of a psychological nature.”⁴ Gynecological morbidity is direct, indirect and psychological morbidity of the reproductive system, including sexually transmitted diseases.⁵

Reproductive age group includes 15–49 years of age. In India, women of child bearing age constitute 22.2 per cent.⁶ National health programs in India focused on reproductive and child health, which deals with women aged 15-44 years.^{1,7} Ever married women are persons who have been married at least once in their lives although their current marital status may not be “married”.⁸ Common gynecological morbidities with prevalence are abnormal excessive vaginal discharge (32.77%), lower back ache (31.40%), lower abdominal pain (23.48%), menstrual disturbances (15.70%), and dysmenorrhea (9.45%).⁹

Objectives

- To study the prevalence of self-reported gynecological morbidity among ever married women of reproductive age group (15-49 years).
- To study the association between the prevalence of gynecological morbidity and its associated socio-demographic factors.

METHODS

A cross-sectional study was conducted among 400 ever married women of reproductive age group (15-49 years) residing in the urban field practice area of NMCH & RC, Raichur between the month of January 2015 to June 2016. A pilot study was done among 40 women in the study area to check for feasibility and designing of the proforma and necessary changes were made accordingly. The pilot study revealed prevalence of 33% in study setting, taking 33% as prevalence and using formula $n = \frac{4pq}{L^2}$ with 15% of allowable error, we got a sample size of 361. Sample size of 400 was finalized taking into consideration 10% as non-response rate. The study subjects were personally interviewed using pre-tested and semi-structured proforma about gynecological morbidities experienced in the recent past 6 months.

Systematic random sampling method was applied for selecting study subjects. Each house was taken as sample unit & numbering was done accordingly.

$$(\text{Sampling interval} = \frac{\text{Total No. of Houses}}{\text{Sample Size}} = \frac{3600}{400} = 9)$$

As the sampling interval is 9, number 5 was selected as single random number between 1 to 9 by the lottery method. 5th house was first sample unit to start with followed by every 9th house taken as sampling unit, 5+9=14th house, 5+2*9=23rd house and so on. If more than one eligible study subjects are present in a single house then only one was randomly selected by lottery method. Blood samples were collected and hemoglobin estimation was done in Urban Health Training Center (UHTC) using Sahli's haemoglobinometer to determine anemia status of study subjects.¹⁰ Study protocol was approved by the Institution's Ethical Committee. Data was entered in Microsoft Excel 2013 and analyzed using open-epi software. Chi square test was used where relevant to find association between gynecological morbidity and socio-demographic determinants.

RESULTS

Out of the total 400 ever married women of reproductive age group (15-49 years), 153 women were found to have gynecological morbidity and the prevalence was found to be 38.3%.

Table 1: Distribution of respondents according to gynecological morbidity.

Gynecological morbidity	No. of cases	Percentage (%)
Low back ache	208	52.0
Dysmenorrhoea	163	40.8
Lower abdominal pain	138	34.5
Burning micturition	123	30.8
Irregular menstruation	76	19.0
Foul smelling discharge	75	18.8
Genital ulcers or purities	59	14.8
Infertility	29	7.3
Others	9	2.3

Most commonly reported gynecological morbidity was low back ache (52%), followed by dysmenorrhoea (40.8%), lower abdominal pain (34.5%), burning micturition (30.8%) and irregular menstruation (19%). Foul smelling discharge, genital ulcers and infertility constituted 18.8%, 14.8% and 7.3% respectively. Least common gynecological morbidity was others (2.3%).

Out of total 400 respondents, 182 respondents (45.5%) were belonging to 21-30 years age group followed by 104 respondents (26.0%) belonging to more than 40 years age group and 82 respondents (20.5%) were belonging to 31-40 years age group. Least 32 (8%) of respondents were in

less than 20 years of age group. Out of 153 respondents, highest prevalence 38 (46.3%) of gynecological morbidity was reported among those aged between 31-40

years, and least prevalence 9 (28.1%) was reported among respondents aged less than 20 years.

Table 2: Association of socio-demographic factors with gynecological morbidity.

Socio-demographic factors	Gynecological morbidity			Chi square	P value
	Yes (%)	No (%)	Total (%)		
Age					
<20 years	9 (28.1)	23 (71.9)	32 (8)	3.98	0.26>0.05
21–30 years	69 (37.9)	113 (62.1)	182 (45.5)		
31–40 years	38 (46.3)	44 (53.7)	82 (20.5)		
>40 years	37 (35.6)	67 (64.4)	104 (26)		
Religion					
Hindu	69 (33.3)	138 (66.7)	207 (51.7)	4.43	0.11>0.05
Christian	13 (41.9)	18 (58.1)	31 (7.8)		
Muslim	71 (43.8)	91 (56.2)	162 (40.5)		
Literacy status					
Illiteracy	55 (45.8)	65 (54.2)	120 (30)	9.6	0.02<0.05 Significant
Primary & Middle	47 (43.1)	62 (56.9)	109 (27.3)		
Secondary & High sec.	42 (31.1)	93 (68.9)	135 (33.7)		
Graduate/above	9 (25)	27 (75)	36 (9)		
Occupation					
Agriculture	5 (62.5)	3 (37.5)	8 (2)	12.7	0.012<0.05 Significant
Milking	8 (57.1)	6 (42.9)	14 (3.5)		
Self-employed	26 (40.6)	38 (59.4)	64 (16)		
Service	3 (11.1)	24 (88.9)	27 (6.8)		
House wife	111 (38.3)	176 (61.3)	287 (71.8)		
Marital status					
Married	136 (39.3)	210 (60.7)	346 (86.5)	1.21	0.287>0.05
Separated	17 (31.5)	37 (68.5)	54 (13.5)		
Age at marriage					
<15 years	10 (43.5)	13 (56.5)	23 (5.8)	9.05	0.02<0.05 Significant
15-19 years	98 (43.8)	126 (56.2)	224 (56)		
20-24 years	42 (30.7)	95 (69.3)	137 (34.3)		
≥25 years	3 (18.8)	13 (81.2)	16 (4)		
Age at menarche					
8-10 years	8 (57.1)	6 (42.9)	14 (3.5)	20.52	0.00003<0.01 Highly significant
11-13 years	133 (42.8)	178 (57.2)	311 (77.8)		
14-16 years	12 (16)	63 (84)	75 (18.8)		
Type of family					
Nuclear	92 (36)	163 (64)	255 (63.8)	19.65	0.00005<0.01 Highly Significant
Joint	33 (31.4)	72 (68.6)	105 (26.3)		
3 Generation	28 (70)	12 (30)	40 (10)		
Socio-economic status					
Class I	17 (28.3)	43 (71.7)	60 (15)	6.05	0.19>0.05
Class II	43 (43.9)	55 (56.1)	98 (24.5)		
Class III	52 (42.3)	71 (57.7)	123 (30.8)		
Class IV	34 (33)	69 (67)	103 (25.8)		
Class V	7 (43.7)	9 (56.3)	16 (4)		
Anemia					
Present	43 (35)	80 (65)	123 (30.8)	0.81	0.367>0.05
Absent	110 (39.7)	167 (60.3)	277 (69.3)		

207 (51.7%) respondents were Hindus followed by 162 (40.5%) respondents were Muslims and least 31 (7.8%) respondents were Christians. Highest prevalence 71 (43.8%) of gynecological morbidity was found among Muslims followed by 13 (41.9%) among Christians and least prevalence 69 (33.3%) was reported among Hindus.

Most of respondents 135 (33.7%) were belonging to literacy status of secondary and high secondary schooling followed by 120 (30%) respondents were illiterates, 109 (27.3%) respondents literacy status was primary and middle schooling and least 36 (9.0%) of respondents were having literacy status of graduates and above. Highest prevalence 55 (45.8%) of gynecological morbidity was found among illiterates, least prevalence 9 (25.0%) was found among respondents with literacy status graduates and above. The current study showed as there is increase in literacy status of respondents there is decrease in prevalence of gynecological morbidity and this association between gynecological morbidity among respondents and literacy status was found to be statistically significant.

Out of 153 respondents with gynecological morbidity, highest prevalence 5 (62.5%) was reported among respondents who were involved in agriculture, least prevalence 3 (11.1%) was reported among respondents who were in service sector. The difference between prevalence of gynecological morbidity and occupation of respondents was found to be statistically significant.

Out of 153 respondents, the prevalence of gynecological morbidity was more among married women 39.3% (136) as compared to separated women 31.5% (17).

Highest prevalence 98 (43.8%) of gynecological morbidity was found among respondents married between 15-19 years of age, least prevalence 3 (18.8%) was found among respondents married above 25 years. The prevalence of gynecological morbidity among respondents increased with decrease in the age at marriage and this difference was found to be statistically significant.

Highest prevalence 28 (70%) of gynecological morbidity was found among the respondents coming from three generation family, followed by 92 (36%) from nuclear family and least prevalence 33 (31.4%) was reported among respondents from joint family. The prevalence of gynecological morbidities was high among women from three generation family when compared to nuclear and joint family and this difference in the type of families was found to be statistically highly significant.

Highest prevalence 43 (43.9%) of gynecological morbidity was found among respondents belonging to class II, least prevalence 17 (28.3%) was reported among respondents belonging to class I. However this difference was not supported statistically.

Out of 153 respondents with gynecological morbidity, prevalence was more among non-anemic women 110 (39.7%) as compared to anemic women 43 (35.0%), however this difference between anemic statuses of respondents was statistically not significant.

In the present study statistically significant association was found between prevalence of gynecological morbidity and socio-demographic variables such as literacy status, occupation, age at marriage, age at menarche and type of family. There was no association between prevalence of gynecological morbidity and socio-demographic variables like age distribution, religion, marital status, socio-economic status and anemia status.

DISCUSSION

The prevalence of gynecological morbidity was found to be 38.3% of women in the age group between 15-49 years. This finding is almost in line with many other studies done in India. Similar findings 36.85% was obtained in a study conducted by Abraham et al in Thiruvananthapuram, Kerala in the year 2012 and 35.6% was obtained in a study conducted by Devi et al in Tirupati town of Andhra Pradesh.^{11,12} In our study the most common symptoms were low back ache (52%) and dysmenorrhoea (40.8%) similar findings were observed by Das and Shah, where most common gynecological problems were menstrual problems (21-32%) and RTI (27%).¹³

Among 153 respondents with gynecological morbidity, highest prevalence 46.3% was seen among women aged 31-40 years, and least prevalence 28.1% was seen among those aged below 20 years. The association of gynecological morbidity with age distribution of ever married women of reproductive age group was not found to be statistically significant. Study conducted by Verma et al in Pooth Khurd village and Darya Ganj, urban locality in central Delhi in the year 2013 and Bote et al in Mumbai city of Maharashtra in the year 2008 also reported statistically insignificant association between gynecological morbidity and age.^{14,15} In this study highest prevalence 43.8% of gynecological morbidity was reported among Muslims followed by 41.9% among Christians and least prevalence 33.3% was reported among Hindus similar findings were also reported in studies conducted by Abraham et al in Thiruvananthapuram, Kerala in the year 2012 and Aparajita et al in Kolkata in the year 2008.^{11,16}

We found that highest prevalence 45.8% of gynecological morbidity was found among illiterates and least prevalence 25% was found among respondents with literacy status graduates and above. Association between gynecological morbidity among respondents and literacy status was found to be statistically significant. Similar findings were reported by Verma et al and Aparajita et al.^{14,16} In this study, highest prevalence 62.5% was

reported among respondents who were involved in agriculture and least prevalence 11.1% was reported among respondents who were in service. Study conducted by Aparajita et al and Devi et al also reported same findings.^{16,12} Prevalence of gynecological morbidity was more among married women 39.3% as compared to separated women 31.5%. Highest prevalence 43.8% was found among respondents married between 15-19 years of age and least among those with age at marriage above 25 years 18.8%. Highest prevalence 57.1% was reported among respondent who attained menarche in the age group between 8-10 years followed by 42.8% among respondents who attained menarche at age group between 11-13 years and least prevalence 16% was reported among respondents who attained menarche at age group between 14-16 years. High prevalence of 70% was found among the respondents coming from three generation family, followed by 36% from nuclear family and least prevalence 31.4% was reported among respondents from joint family. These findings are almost in line with many other studies done in India.

Highest prevalence 43.9% of gynecological morbidity was found among respondents belonging to class II followed by 43.7% among class V, 42.3% among class III, 33.0% among class IV and least prevalence 28.3% was reported among respondents belonging to class I, as the socio-economic status increased the prevalence of gynecological morbidity decreased, however this difference was not supported statistically. Similar finding was reported by Gosalia et al.¹⁷ Out of 153 respondents with gynecological morbidity, highest prevalence was found among non- anemic women 39.7% as compared to anemic women 35%, however this difference between anemic statuses of respondents was statistically not significant.

CONCLUSION

The present study was conducted at urban field practice area of Navodaya Medical College, Raichur which is a slum area and is densely populated and majority of them belongs to labor class. In the present study statistically significant association was found between prevalence of gynecological morbidity and socio-demographic variables such as literacy status, occupation, age at marriage, age at menarche and type of family. Due to their traditional and social constraints, socio-cultural factors limit their access to the health care and social support services, thereby providing an environment conducive to acquiring and transmitting RTI/STIs. The high prevalence of morbidity among Indian women is due to their poverty, illiteracy, lack of awareness, powerlessness, low social status, malnutrition, infection and underutilization of the existing health care services.

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