Original Article

REPRODUCTIVE AND SEXUAL TRACT INFECTIONS AMONG MARRIED FEMALE YOUTH IN AN URBAN SLUM OF MUMBAI

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ABSTRACT

Introduction: The issues faced by the youth (15 – 24 years) today like illiteracy, unemployment, high risky behavior can result in adverse economic, social and political consequences. Young women face additional problems, like malnutrition, anemia. They are forced into early marriage and child bearing. Hence, this study was carried out to study the Sexual & Reproductive Tract Infections among the Married Female Youth, in an Urban Slum of Mumbai.

Methodology: Married Female Youth in the age group 15 – 24 who attended the Out Patient Department at the Urban Health Centre, Shivaji Nagar during the period from October to December 2011 were included in the study (n= 192). Women were enquired about their socioeconomic status, including their age at marriage, age at 1st childbirth, number of children, spacing between children and history of Reproductive Tract Infection/ Sexually Transmitted Infection with the help of pretested, preformed, semi structured interview questionnaire.

Results: It was found that women were married early (mean = 16.90, S.D=2.37) & even had their 1st child at an earlier age (mean 18.43, S.D=1.94).

Factors, such as early age at marriage (p= 0.059), early age at 1st childbirth (p = 0.038), & less spacing between children (p = 0.0316) was seen to have an influence on the Reproductive health of the women.

Keywords: Reproductive Tract Infection, Sexually Tract Infection, Urban Health Centre, Youth

INTRODUCTION

One fifth of the population in India (18.4%) is youth between the ages 15 – 24 years, according to the 2011 Census[1]. They represent the country's future and shape subsequent generations. The Youth undergo a period of development when biological, physical, cognitive, and social traits mature from childhood to adulthood. During this stage, the challenges that youth face and the decisions they make can have a tremendous impact on the quality and length of their lives. Many important life events and health-damaging behaviors start during the youth years. As a result, youth is a time of both risk and opportunity. Common problems faced by this group are illiteracy, unemployment, practice of high risk behavior etc[2]. Young women face additional problems, like malnutrition, anemia. Social pressures force young women into early marriage and child bearing[2]. Hence this study was carried out to assess the various aspects &

study factors associated with reproductive & sexual tract infections in the young women.

OBJECTIVES

- To study the socio demographic profile of the married female youth attending the Urban Health Centre.
- To know the prevalence of symptomatic reproductive tract infection.
- To find the practices related to marriage & child bearing among them.

METHODOLOGY

A cross sectional study was carried out at the Urban Health Centre, Govandi, affiliated to the Department of Preventive & Social Medicine, T.N. Medical College, Mumbai. There were total of 4895 patients attending the Urban Health Centre during the period October to December 2011. Out of which 495 were young females between the age group 15 – 24 & 220 were married among them. 28 females did not agree to participate in the study. So, the total sample for this study was 192.Consent was taken from all the women.

Data was collected with the help of a Pretested, preformed, semi structured interview schedule by the author & Post graduate residents in the department. Details regarding their age, socioeconomic status, educational , family & marital status including the number of children & the spacing between them were all enquired into. Women were also enquired about their history of daily bath & change of clothes especially during their menstrual cycle to assess for hygiene. The women were also asked if they suffered from any of the symptoms of the Reproductive Tract Infection (RTI). Screening was based on only questionnaire following the syndromic approach.

Data was analyzed using the SPSS package version 15. Analysis was done using the Pearson Chi Square Test for trend & Logistic Regression. Enter method was used for Logistic Regression, thus all variables were assessed at the same time.

The variables included in the Logistic Regression were Education, type of family, number of family members, socioeconomic status, age at marriage, age at childbirth. The reference group for each of these variables were higher secondary & above, extended family, family members> 10, lower socioeconomic status, age at marriage > 18 years and age at childbirth > 20 years, respectively. All the variables were included as categorical variable.

Results

Women interviewed were 192 during the study period. 57.3% (110) of the women belonged to the age group 22 – 24 years with the mean age of the women being 21.51 years(S.D = 2.237) (Table 1). 65.6% (126) of the women had education level up to Secondary. (Table 1)

According to the type of family distribution, 41.1 % (79) women belonged to Nuclear family (Table 1). The number of family members were less than 5 in 44.8% (86) of the women interviewed.(Table 1).

58.9 % (113) of the women belonged to the Poor socioeconomic status according to Kuppuswamy Classification[9] (Table 1).

Table 1: Distribution of study subjects according to their Demogrphic Profile

	Patients (%)
Age	
15 – 18	13 (6.8)
19 – 21	69 (35.9)
22 – 24	110 (57.3)
Education	
Primary & Below	44 (22.9)
Secondary	126 (65.6)
Higher Secondary & above	22 (11.5)
Type of family	
Nuclear	79 (41.1)
Joint	54 (28.1)
Extended	59 (30.7)
No. of family members	
<5	86 (44.8)
5 – 10	67 (34.9)
>10	39 (20.3)
Socioeconomic Status	
Lower Middle	57 (29.7)
Upper Lower	113 (58.9)
Lower	22 (11.5)
Age at marriage	
<15	26 (13.5)
15 – 18	100 (52.1)
>18	66 (34.4)
Age at 1st Childbirth	
15 – 18	57 (36.77)
18 – 20	44 (28.39)
>20	54 (34.84)

The women were married at an early age with 52.1% (100) of women being married between the age group 15 – 18 years and 13.5% (26) of them being married even before 15 years of age. The mean age of marriage of these females was 16. 90 years (S.D = 2.37) (Table 1).

The age at first childbirth was also early with 29.7% (57) delivering their first child between the age group 15 – 18 years. The mean age at first childbirth was 18.43 years (S.D= 1.94) (Table 1). 69.03% (107) had <= 2 children and the spacing between 2 children in 58.70% (91) women was <= 3years 19.27% (37) of these women did not have any children.

Table 2: Distribution of RTI / STI Symptoms* & Their Treatment Seeking Behavior

	Patients (%)
RTI/STI Symptoms	
Genital Ulcers	14 (7.3)
Burning Micturation	33 (17.2)
Itching in vulva	49 (25.5)
Pain in abdomen	56 (29.2)
Backache	109 (56.8)
White discharge	126 (65.6)
Treatment Taken	
Yes	66 (61.11)
No	42 (38.89)

* Multiple Responses

Table 3: Factors associated with RTI in the study group. (n=192)

Variables	Reproductive Tract Infection		Chi Square	P value
	Yes	No		
Age				
15 – 18	9 (69.23)	4 (30.76)	0.1135*	0.7362
19 – 21	34(49.27)	35 (50.72)		
22 – 24	65 (59.09)	45 (40.90)		
Education				
Primary & below	31 (70.45)	13 (29.54)	8.651*	0.0033
Secondary	70 (55.55)	56 (44.44)		
Higher Sec	7 (31.81)	15 (68.18)		
Socio EconomicStatus				
Lower Middle	37 (64.91)	20 (35.08)	1.579*	0.2089
Upper Lower	59 (52.21)	54 (47.78)		
Lower	12 (54.54)	10 (45.45)		
Type of family				
Nuclear	51 (64.55)	28 (35.44)	1.362*	0.2432
Joint	24 (44.44)	30 (55.55)		
Extended	33 (55.93)	26 (44.06)		
No. of family members				
<5	52 (60. 46)	34 (39.53)	0.4544*	0.5003
5 – 10	34 (50.74)	33 (49.25)		
> 10	22 (56.41)	17 (43.58)		
Age at marriage				
< 15 years	18 (69.23)	8 (30.76)	7.589*	0.0059
15 – 18	62 (62)	38 (38)		
> 18 years	28 (42.42)	38 (57.57)		
Age at 1st childbirth				
15 – 18	37 (64.91)	20 (35.08)	6.501*	0.038
18 – 20	24 (54.44)	20 (45.45)		
> 20 years	22 (40.74)	32 (59.25)		
No. of children				
< = 2	57 (52.29)	50 (47.70)	0.01069	0.917
> 2	26 (54.16)	22 (45.83)		
Spacing between children				
< = 3 years	66 (72.52)	25 (27.47)	4.623	0.0316
> 3years	5 (35.71)	8 (57.14)		
Hygiene				
Bad	67 (56.30)	52 (43.69)	0.0003	0.985
Good	41 (56.16)	32 (43.83)		
Abortion				
Yes	14 (12.96)	10 (11.90)	0.048	0.8259
No	94 (87.04)	74 (88.10)		

*Chi Square for linear trend.

The women were enquired about their reproductive health & 56.3% (108) had history of any of the symptoms of Reproductive Tract Infection with maximum of them having white discharge, Backache & pain in abdomen (Table 2). For this question, there were multiple responses from the females. Out of all those who had the infection, only 61.11 % (66) had taken any form of treatment. Others 38.89% (42) had not taken any treatment (Table 2).

Various factors associated with Reproductive Tract Infection/ Sexually Transmitted Infection (RTI/STI) were analyzed and it was seen that education of the women had a significant relation with the presence of Reproductive Tract Infection/ Sexually Transmitted Infection (RTI/STI). Those women with Primary & lesser education had more chances of getting infected with Reproductive Tract Infection/ Sexually Transmitted Infection (p= 0.0033). The other socio demographic factors like age, socioeconomic status, type of family & no. of family members did not show any statistical significance with the presence of Reproductive Tract Infection/ Sexually Transmitted Infection (RTI/STI).

Women who got married even before the age of 15 years had more prevalence of Reproductive Tract Infection/ Sexually Transmitted Infection 18 (69.23%) and this was seen to be statistically significant (p= 0.0059).

Those women who had their first child between 15 – 18 years of age had higher rate of infection 37 (64.91%) with a statistical significance level (p= 0.0108).

Women who had more children (>2) had more infection 26 (54.16%) as compared to those with less children (<=2) , but there is no statistical significance between them (p= 0.917).

Spacing between children had a significant relation with presence of Reproductive Tract Infection/ Sexually Transmitted Infection (p=0.0316) . Those women who had the spacing between children as < = 3 years had the rate of infection to be more (66) (72.52%) as compared to those who had more than 3 years of spacing between children(5) (35.71%).

Out of those women who had ever done abortion, 12.96% (14) had Reproductive Tract Infection. But the relation was not statistically significant.

56.3% (67) of women who had Reproductive Tract Infection had bad menstrual hygiene, but the relation was not statistically significant. (Table.3)

Logistic Regression was applied using the ENTER Method. All the variables were assessed at the same time. According to the Logistic Regression, it was seen in this study that those females who were educated up to primary or below had more chance of getting Reproductive Tract Infection/ Sexually Transmitted Infection (p= 0.002) after adjusting for all the other variables.

Women who were married at an earlier age i.e at < 15 years of age are at a higher risk of getting infected (p= 0.03), after adjusting for all the other variables.

Table 4: Logistic regression of Reproductive tract Infection with associated factors

	pvalue	OR (95% CI)
Age 19-21years	0.038	0.19 (0.04 - 0.91)
Education		
Primary & below	0.002	51.09 (4.19 - 623.35)
Secondary	0.029	11.88 (1.29 - 109.43)
Higher secondary & above	0.005	
Type of family		
Nuclear	0.930	0.94 (0.22 - 4.03)
Joint	0.404	0.57 (0.15 - 2.15)
Extended	0.626	
No of family members		
< 5	0.968	0.97 (0.18 - 5.05)
5 to 10	0.904	1.10 (0.25 - 4.86)
>10	0.980	
Socioeconomic status		
Lower Middle	0.762	0.77 (0.14 - 4.23)
Upper Lower	0.039	0.22 (0.05 - 0.93)
Lower	0.032	
Hygiene	0.836	1.12 (0.38 - 3.33)
Abortion	0.924	0.93 (0.22 - 3.98)
Age at marriage		
< 15	0.030	7.14 (1.21 - 42.24)
15 - 18	0.906	1.07 (0.33 - 3.45)
> 18	0.062	
Age at childbirth		
15 - 18	0.096	3.51 (0.80 - 15.42)
18 - 20	0.081	4.27 (0.83 - 21.85)
> 20	0.174	
No. of children	0.006	0.12 (0.03 - 0.55)
Spacing between children	0.006	0.56 (0.37 - 0.84)
Constant	0.187	11.84

Spacing between 2 children if < = 3years had more chance of getting infected (p= 0.006) (Table.4), after adjusting for all the other variables.

Validity of the model is assessed with Hosmer Lemslow and found to be good (p= 0.517) with R^2 value as 0.349 (Cox and Snell).

DISCUSSION

Prevalence of RTI/STI in this study was (108) 56.3%, which is comparable to other studies[3,4,5]. The prevalence of RTI in the study was 64.55% in nuclear families and 44.44% in joint families as seen in study done by Manisha Rathore et. al.[6]. RTI was seen more in age group between 15 - 18 (69.23%). Reproductive Tract infection was also seen more among those who had their education level of Primary or below (70.45%) as seen in study done by B. Sri devi et. al.[3].Also more common among those who were married at age less than 18 as seen in study done by A. Parasher et. al.[8]. It was seen more in those who had their 1st child even before 20 years of age as seen in studies done by B. Sri Devi et al & Savita Sharma et. al.[3,7]. Spacing between 2 children also was a factor influencing RTI. No. of children also has an influence on the prevalence of RTI in contrast to study carried by B Sri Devi et. al.[3]. Menstrual hygiene (56.30%) and history of abortion (12.96%) had no influence on Reproductive tract infection in this study. Out of those who had infection only 61.11% (66) had taken any form of treatment.

CONCLUSIONS

Observed prevalence of Reproductive Tract Infection/ Sexually Transmitted Infection in present study is 56.3 % among married female youth. Women < 18 years of age were mostly affected. Age at marriage , age at childbirth and less interval between childbirth have shown significant influence on prevalence of Reproductive Tract Infection/ Sexually Transmitted Infection. Age, socio economic status , type of family, No. of family members, no. of children, history of abortion or hygiene have not shown statistically significant influence on Reproductive Tract Infection/ Sexually Transmitted Infection.

RECOMMENDATIONS

Awareness regarding ill-health effects of early marriage & early child bearing should be given wide publicity in the study area. Spacing between children should be emphasised. Health education & promotion of hygienic practices & appropriate treatment seeking behaviour should form the key strategies towards safe guarding their health. Detailed community based study to be carried out.

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