

**INCIDENCE OF RTI/STI AMONG VADABALIJA
WOMEN OF CHEPALAUPPADA VILLAGE OF
VISAKHAPATNAM DISTRICT ANDHRAPRADESH**

Sri VirajaRani .J*

Abstract:

This is a community based study conducted among fisherwomen (Vadabaliya caste) in Chepaluppada village of Visakhapatnam. The aim of the study is to assess the incidence of RTI symptoms by syndromic approach among Vadabaliya married women. According to the present study, the incidence of RTI/STI's was 42.5 per cent based on the symptoms. Prevalence was observed high in above 30 years age group, literates, women living in joint families, non institutional deliveries, married before the age of 18 , with the history of abortions/stillbirths, tubectomy acceptors and those with unhygienic menstrual practices. Vaginal discharge was the most common complaint (42.4%), followed by lower abdominal pain (6.2%).

Key words: Reproductive tract infection, Vadabaliya women, syndromic approach, Sexually Transmitted Infection, Chepala Uppada

* Research assistant, centre for study of social Exclusion and Inclusive Policy, Andhra University, Visakhapatnam

Introduction

Reproductive tract infections (RTIs) including sexually transmitted infections (STIs) are recognized as public health problem and rank second as the cause of healthy life lost among women of reproductive age after maternal morbidity and mortality in developing countries (**National Guidelines on Prevention, Management and Control of Reproductive tract-infections 2006**). Globally, it is estimated that as many as 340 million people are affected by STDs other than HIV/AIDs occur each year, most of which are occurring in developing countries. India has a high incidence of STDs with an estimated annual incidence rate of 5 per cent or 40 million new cases a year(**NACCO,2000**). Reproductive tract infections (RTIs) affect the health and social well being of women, particularly those in the reproductive and economically most productive age groups, and their offsprings(**Rowley J, Berkley S.1998**). Some of the possible consequences of untreated RTI/STIs in women include postabortal and puerperal-sepsis, ectopic pregnancy, fetal and perinatal death, cervical cancer, infertility, chronic physical pain, emotional distress, and social rejection of women(**Garg S, et al 20002**), tubal infertility, still births, abortions, neonatal deaths, ectopic pregnancies, recurrent urinary tract infections, pain during coitus, menstrual irregularities, chronic pelvic pain and maternal death (**Greeda Selvarani (2000)**). Studies in women in developing countries have found RTIs rates ranging from 52% to 92%, and fewer than half the women recognized the conditions as abnormal (**Improving Reproductive Health in Developing Countries, 1997**). In Indian community based studies, the range of self-reported morbidity has been reported to vary from 39–84%. (**Bang RA, et al 1989 and Latha K, et al 1987**) The problem of morbidity and mortality in women due to reproductive tract infections is largely ignored and it is due to inadequate medical services. unsanitary living conditions, overcrowding, ignorance, low level of awareness regarding sexual and reproductive health, low female literacy, cultural factors and taboos, and poor genital and menstrual hygiene.

Vadabalija is one of the marine fishing communities found to live in Visakhapatnam of Andhra Pradesh. The community people are educationally economically and socially backward and who are different from general population with their own physical, socio economic and cultural environment. Due to high levels of poverty, ignorance, and life style they are highly vulnerable to various health problems. Though RTI/STIs are important from medical and public health point of view, very limited regional/community studies were conducted on this

problem in India specifically among fishing communities (castes) of Andhra Pradesh. With this back drop the present study has been carried out with the objective of assessing the incidence of RTI symptoms by syndromic approach and to investigate socio demographic factors associated with RTI prevalence among Vadabalija married women in the reproductive age group of 15-44 years old in a rural area of Visakhapatnam district of Andhra Pradesh. This empirical study was carried out by me as research assistant in UGC sponsored Centre for Study of Social Exclusion and Inclusive Policy at Andhra university, I acknowledge the UGC, New Delhi for giving me an opportunity to conduct this study.

Methodology

The present study was conducted on Vadabalija women aged in between 15-45 years of rural areas of Visakhapatnam. A total of 200 ever-married women were selected at random from Chepala Uppada village of Bheemili mandal located at a distance of 25 km away from the city of Visakhapatnam, on the basis of purposive sampling. All the women who had married in the age group of 15-44 years old were interviewed through domiciliary visits. The currently married women from selected households were interviewed by administering the schedule specially designed for women to gather the information on demographic profile and details relating to awareness, knowledge and presence of any symptoms of RTIs/STIs in three months preceding the survey. Currently married women were asked about their awareness of RTIs/STIs, and if they were aware, they were further questioned about the source of information and mode of transmission of the diseases. The prevalence of reproductive tract infection and sexually transmitted tract infections are identified based on the symptoms. All the respondents were asked about symptoms of RTIs/STIs and were also asked whether they had any of them. In case of the presence of at least one symptom, they were further asked whether they sought treatment for such problem and if they had sought treatment, details regarding the source of treatment also recorded. The issue of RTIs/STIs is quite sensitive. An intensive training to the investigators was given and collected this sensitive information and it was carefully edited before data entry analysis. The syndromes related to women such as vaginal discharge, genital ulcer diseases, lower abdominal pain based on syndromic approach as recommended by the National AIDS

Control Organization (NACO) for case management at the primary health care level (NACO 1998)

Data was coded, entered and analyzed using SPSS (version 11.0) package. Analyzed data was explained in tabular form with frequency distribution of different variables .

Results

Awareness of RTI/STI among the respondents reflects that only 27.0 per cent of women had heard about RTI/STI from different sources (Table:1). Television and community meetings are the best source of knowledge for RTIs/STIs. About 22.7 percent women get knowledge from television while Community meeting contributes 21.1 percent RTIs/STIs information in study population. School teachers contribute only 0.8 percent RTIs/STIs information. Doctor and health workers are also source of information about RTIs/STIs in the study area. The information of RTIs/STIs from doctors is 15.6 per cent and health worker is 17.2 per cent.

Table: 1 Percent of women aware of RTI/STI by source of information

Knowledge	Frequency	Per cent
Aware of RTI/STI		
Yes	54	27.0
No	96	48.0
Don't know	50	25.0
Aware of RTI/STI by source*		
Radio	4	3.1
TV	29	22.7
Posters/wall writings	5	3.9
Doctor	20	15.6
Health worker	22	17.2
School teacher	1	0.8
Community meeting	27	21.1
Friends/relatives	18	14.1
Newspapers/books	2	1.6

*Multiple responses

There are different modes of transmissions of RTIs/STIs. Such modes are responsible for its transmission. About 21.6 percent of women knew that RTIs/STIs could be transmitted through sexual route, particularly extramarital relations (Table:2). Around 11.5 percent of women knew that transmission must be through husband. Lack of personal hygiene is also contributes to RTIs/STIs transmission among women (5.5 per cent). Sizeable percent (61.4 per cent) women do not have knowledge about different modes of transmission of RTIs/STIs. However, it is to be noted here that only 21.5 per cent of women stated that RTI/STI is curable, while 77.5 of women do not know about the curability of the infection.

Table:2 Percent of women having knowledge about mode of transmission of RTI/STI and curability

Knowledge	Frequency	Per cent
Aware of mode of transmission*		
Extra marital relations	51	21.6
Lack of personal hygiene	13	5.5
Through husband	27	11.5
Don't know	145	61.4
Knowledge about curability(N=200)		

*Multiple Responses

Among the 85 respondents who reported, 40 had one symptom, 14 had two symptoms, 17 had three symptoms, and 14 had four symptoms. It was found that Vaginal discharge was the most common complaint (42.4 per cent), followed by lower abdominal pain (6.2 per cent). 5.6 per cent of women had genital ulcer (Table :3). All the women complaining of lower abdominal pain also had history of vaginal discharge. Other common symptoms include among the women who reported abnormal vaginal discharge, wetness or stains are observed in the under cloths among

91.2 per cent of women and they told that the colour of discharge was white (60.3 per cent) and mixed type (27.9) i.e. both red and white discharge together. Further they told that the discharge is sticky and mucid (75.0), purulent(14.7 per cent), curdish (8.8 per cent) and forthy(1.5 per cent). 5.9 per cent of women had their discharge was foul smelling. Among the other symptoms associated with RTI/STD, vulva itching was most common symptom as told by 18.6 per cent of women. Other common symptoms included pain during sexual intercourse (10.2 per cent), backache (10.0 per cent) burning urination (4.0 per cent) and inguinal swelling (4.0 per cent)).

Table: 3 Symptoms of women with RTI/STD

Symptoms(Sydromic approach)	Frequency	Per cent
Vaginal discharge	75	42.4
Lower abdominal pain	11	6.2
Genital ulcer	10	5.6
Other symptoms		
Backache	16	9.0
Vulva itching	33	18.6
Burning urination	7	4.0

Among the women who reported the problem, 38.8 percent women have received RTIs/STIs treatment from either government or private hospital(Table: 4). Total of 57.6 per cent of women have received treatment from government health facility. Around 42.4 per cent of women have sought treatment from private hospital.

Table: 4 Percent of women sought treatment for symptoms of RTI/STI

Sought treatment (N=85)	Frequency	Per cent
Yes	33	38.8
No	52	61.2
Sources of treatment (N=33)		
Government health facility	19	57.6
Private hospital	14	42.4

Socio-economic Characteristics of Women with RTIs/STIs

It is clear that RTIs/STIs incidence is high in the study population. A total of 200 women were interviewed and 85 (42.5 per cent) of them were reported symptoms of RTIS. The trend in relation to age showed maximum prevalence in the above 30 year old age group (54.1 per cent) followed by 26-30 years age group (45.8 per cent) and it shows that high incidence with an increase in the age group (Table: 5). Regarding educational status, the incidence of RTI/STI was found to be higher in literate women (45.7 per cent) as compared to illiterate women (40.8 per cent). Of the 19 women (9.5 per cent) who were working as coolies, 13 (68.4 per cent) of them had one or more RTIs. Housewives who constituted 155 (77.5 per cent) of the study sample had less prevalence of RTIs (37.4 per cent). The prevalence of RTI/STI was found to be higher in women living in Joint families (44.6 per cent) as compared to nuclear families. The prevalence of RTI was far less in women who had one child (39.3 per cent). A higher prevalence (66.7 per cent) was found among women who had 4 children. It showed prevalence was increased with increasing number of live births. Further, higher prevalence of RTI/STI was found among women whose delivery was conducted at home. 171 (85.5 per cent) of the study group (sample) was married before the age of 18 years. The incidence of RTI were higher (42.7 per cent) in women who were married at an age below 18 years as compared to 41.2 per cent in women who got married at an age above 18 years. The women with one child have less (39.3 per cent) possibility of RTI/STI. Overall 38 women had history of abortions/stillbirths. The women who had experience of pregnancy wastages or history of abortions are more likely to report RTIs/STIs. There are 47.5 percent of women reported RTIs/STIs who had abortions/pregnancy wastages. A rather high percentage (64.0 per cent) of the women studied were using contraceptives at the time of the survey and 57 (44.5 per cent) women had RTI. The incidence of RTI/STI was found to be highest in those women who were using cloth (43.9 per cent) and least in those using sanitary napkins (14.3 per cent).

Table:5 Table: Socio-economic Characteristics of women who had RTIs/STIs

Socio demographic and	Total	RTI cases
-----------------------	-------	-----------

reproductive health variable	surveyed	No	incidence(%)
Age group			
≤20	32	12	37.5
21-25	83	31	37.3
26-30	48	22	45.8
>30	37	20	54.1
Women's education			
illiterate	130	53	40.8
Literate	70	52	45.7
Occupation of women			
Housewife	155	58	37.4
Coolie	19	13	68.4
Fish trading	13	7	53.8
others	13	7	53.8
Type of family			
Nuclear	144	60	41.7
Joint	56	25	44.6
No.of live births			
1	61	24	39.3
2	82	33	40.2
3	42	18	42.9
Place of delivery			
Home	85	37	43.5
Institutional	115	48	41.7
Age at marriage			
≤18yrs	171	73	42.7
>18yrs	29	12	41.4
History of abortion/stillbirths			
Yes	38	18	47.4
No	162	67	41.4
Family planning methods			
User	128	57	44.5
Non user	72	28	38.9
Menstrual hygiene			
Soiled cloth	4	1	25.0
Washed cloth	189	83	43.9
sanitary napkin	7	1	14.3

Discussion

Around 27% of the women in the study village do not have knowledge of different modes RTIs/STIs transmission and not heard about RTIs/STIs. The incidence of RTIs/STIs is also observed very high among fisher women. A rather high prevalence of RTI (42.5 per cent) in married females of age 15-44 years was reported in our study. This is similar to the incidence reported by **Kannan et. al.**, (2007) in rural areas of Salem(44.6 per cent) district of Tamil Nadu and higher than the prevalence reported by **Nandan et. al.**,(2002). in rural Agra (34 per cent) and in slum(21.6% Palai et al 1994) and **rural areas (17.7% Thakur et al 2002))of Chandigarh**. The prevalence of RTIs in our study is lower as compared to a similar study conducted in a rural area of Himachal Pradesh (51.9% Savitah Sharma and Gupta 2009) and in a rural area of Haryana (70% Agarwal et al 1999). Higher prevalence of RTI among women may be due to poverty, illiteracy, lack of awareness, role of life style and poor hygiene.

Among women identified with RTI/STI majority were in the age group of above 30 years. Similar findings were reported by **Nandan et .al.**,(2002) where more than two-third symptom positive women were less than 34 years of age, which may be attributed to higher sexual activity in this age group. While **Rathor et al.**(2003) reported a maximum prevalence of 44.7% in the age group 40-44 years. **Bhawna Pant et al (2008)**reported maximum prevalence of 46% in aged 25-29 years..

The prevalence of RTI/STI was found to be higher (68.4%) among women who were working as coolies(laborer) in agricultural fields. A similar observation was made in a study conducted by Savita Shrama(2009) in rural area of Himachala Pradesh. Regarding educational status 45.7% of women were identified with RTI/STI were literates.

Higher prevalence of RTI (42.7%) in women who were married at an age below 18 years indicates that early sex and pregnancy are unhealthful for girls in every way, lengthening the span of years over which they have children and increasing the risk of infections. this is similar to the prevalence reported by **Bhawna Pant et al (2008)**in rural area of Merut(4.9%)

The present study reveals that Abnormal Vaginal discharge, self reported by the women was the most commonly observed symptom constituting 42.4% followed by lower abdominal pain (6.2%). and genital ulcer(5.6%). In a study done in Rural Haryana, (**Acharaya et al**

2006)Vaginal discharge was reported by 64.2%, and in a study done in Agra it was 54.4%(Nandan et al 2001). In another study , conducted by Kannan et al (2007)in Salem, Tamil Nadu, the complaints of Vaginal discharge was described as presenting complaint in 32.5% of respondents. Similar findings were reported by Parashar et al (2006)in a community based study in Shimla city where vaginal discharge was reported by 36.3% of women. Variations in proportion of symptoms may be factors like high-risk behavior, accessibility of health facility, treatment seeking behavior etc.

In this study, the prevalence of RTIs was high in those women who were using permanent methods(44.5%). Similar findings were reported by Bhawna Pant et al (2008) in rural area of Merut where prevalence of RTI was 42.7% in women who had adopted sterilization.

The prevalence of RTI/STI was found to be higher in women living in Joint families.(44.6%) as compared to nuclear families. which is similar to study carried out in urban slums of Tirupati, Andhrapradesh where the prevalence RTI was 31.4% in Joint families(SriDevi and swarnalatha 2007). In another study , conducted by Bhawna Pant et al (2008) in rural area of Merut , prevalence of RTI was 41.9% in women belonging to Joint families.

Conclusion

This study created an awareness regarding high vulnerability of women in rural area of Visakhapatnam through participatory Action research approach(PAR). Knowledge about the symptoms of RTI/STI was not adequate among women. The most common reported symptom of RTI/STI is Vaginal discharge. knowledge about the ways of preventing diseases was also inadequate. Such a high frequency of RTI/STI requires suitable diagnostic and treatment facilities. There is also need to conduct further studies to assess various behavioral and socio demographic factors, predisposing these women to the risk of RTIs and STDs. Initiation of more awareness programmes by academicians and researchers on reproductive health and STI/RTI(sexually transmitted diseases) among rural illiterate women definitely give ample scope for reduction of sexually transmitted diseases and HIV/AIDs, apart from the health department of government.

References

- Acharya A K. Yadav, N.Baridalyne, 2006, Reproductive Tract Infections/Sexually Transmitted Infections in Rural Haryana: Experiences from the Family Health Awareness Campaign, Indian Journal of community medicine ,31(4)PP.274-276
- Agarwal AK, Kumar R, Gupta V, Sharma M, 1999, Community based study of reproductive tract infections among ever married women of reproductive age in a rural area of Haryana, India. J Commun Dis ,31:pp. 223–8.
- Bang RA, Bang AT, Baitule M, Choudhary T, Sarmukaddam S, Tale O,1989, High prevalence of gynaecological diseases in rural Indian women. Lancet ;1pp.85–8.
- Bhawna Pant, JV Singh, M Bhatnagar, SK Garg, H Chopra, SK Bajpai,2008, Social Correlates in Reproductive Tract Infections among Married Women in Rural Area of Meerut. Indian Journal of Community Medicine.,33(1)Pp.52-53
- Garg S, Sharma N, Bhalla P, Sahay R, Saha R, Raina U, et al, 200., Reproductive morbidity in an Indian urban slum: Need for health action, Sex Transm Infect ,78, pp.68–9.
- Greeda Selvarani, 2000, An Intervention Programme for Reproductive Tract Infections among Women in a Selected Area in Rural Tamil Nadu, India, South East Asian Studies Manual, pp.121-123.
- Improving Reproductive Health in Developing Countries,1997,A summary of findings from the National Research Council of the U.S. National Academy of Sciences, 9, National Academy Press
- Kannan. C,TN atmaraman, Abdul Nayeems, SSangeetha, RSudha, K Ponsuganth, K.Murugan, 2007, Prevalence of Reproductive Tract infections Among Recently married Women in Veerapandi Panchyat Union of Salem District, Tamil Nadu, Indian Journal of Community Medicine, Vol 32(2)Pp:144-145
- Latha K, Kanani SJ, Maitra N, Bhattacharya RV,1997, Prevalence of clinically detectable gynaecological morbidity in India: Results of four community based studies. Family Welfare ;43, pp. 8–16.
- Nandan D, Gupta YP, Krishnan V, Sharma A, Misra SK, 2001, Reproductive tract infections in women of reproductive age group in Sitapur/Shahajanpur District of Uttar Pradesh. Indian J Public health, 45,pp. 8-13.

- Nandan D, Misra SK, Sharma A, Jain M, 2002, Estimation of prevalence of RTIs/STDs among women of reproductive age group in District. Agra , Indian J Community Med ;27, pp.110–3.
- National AIDS Control Organization (NACO), Country scenario 1997-98, Ministry of health and family welfare: New Delhi
- National Guidelines on Prevention, Management and Control of Reproductive tract- Infections including Sexually Transmitted Infections, 2006, National AIDS Control Organization, MOHFW, Govt. of India.
- NATIONAL AIDS CONTROL ORGANISATION ,2000, Ministry of Health and Family Welfare, Government of India, Specialist’s Training and Reference Module.
- Palai P, Pillay V, Singh A,1994, Prevalence of vaginal discharge in an urban slum of Chandigarh. Med Gazette ,138 pp.431–2
- Parashar A, Gupta BP, Bhardwaj AK, Sharin R, 2006, Prevalence of RTIs among women of reproductive age group in Shimla city.,Indian J Community Med 31, pp.15-7
- Rathor M, Swami SS, Gupta BL, Sen V, Vyas BL, Bhargava A, et al,2003, Community based study of self reported morbidity of reproductive tract among women of reproductive age in rural area of Rajasthan, Indian J Commun Med ,28,117-21.
- Rowley J, Berkley S.,1998, Sexually Transmitted Disease. In, Murray CJL, Lopez AD, eds. Health dimensions of sex and reproduction : The global burden of sexually transmitted disease, HIV, maternal conditions, perinatal disorders, and congenital anomalies. Cambridge : Harward University Press.
- Savita Shrama and BP Gupta, 2009, The prevalence of Reproductive Tract Infections and Sexually Transmitted Diseases among Married women in the Reproductive Age Group in Rural Area, Indian Journal of Community Medicine,34(1)Pp.62-64
- SriDevi. B and N.Swarnalatha,2007, Prevalence of RTI/STI among Reproductive age women (15-49 years) in urban slums of Tirupathi toen Andhra Pradesh, Health and Polualtion- Perspectives and Issues 30(1)pp.56-70
- Thakur JS, Swami HM, Bhatia SPS,2002, Efficacy of syndromic approachin management of reproductive tract infections and associated difficulties in a rural area of Chandigarh, Indian JCommunity Med ;27pp.10–3