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Research Article

Awareness regarding reproductive tract infections among married women in the rural area of Surendranagar

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ABSTRACT

Background: High levels of gynaecological morbidity, especially reproductive tract infections and sexually transmitted infections may turn out to be fatal if not treated properly. The objectives of this study were basic awareness about disease and association with socio-economic findings, awareness regarding disease occurrence and transmission, symptoms, complications of disease; HIV prevention.

Methods: Various community based studies carried out in the different regions world showed the prevalence of reproductive tract infections 36-84%. The sample size of study as per statistical calculation ($4pq/l^2$, where $p = 50$, $q = 100-p$ and $l = 10\%$ of p) came out to be 400. Method of sampling - Prior enlisting all villages of Surendranagar district, one village was selected randomly.

Results: Basic awareness about disease was 64.0%; 82.2% of women narrated symptoms. 42.00% of women had no idea regarding its complications. Knowledge regarding HIV prevention was 59.50%.

Conclusions: Effective strategies for the early diagnosis and treatment should be made.

Keywords: Awareness, Disease occurrence and transmission, HIV prevention

INTRODUCTION

High levels of gynaecological morbidity, especially reproductive tract infections and sexually transmitted infections may turn out to be fatal if not treated properly.¹

Reproductive tract infections generally seen as a silent epidemic can have severe consequences including infertility, ectopic pregnancy, chronic pelvic pain, miscarriage, neonatal blindness, increased risk of HIV infection and even death.²

Aims and objectives

To assess the awareness about Reproductive Tract Infections and its association with socio-economic details, to find out the knowledge regarding disease

occurrence and transmission, symptoms, complications and HIV prevention.

METHODS

Sample size

Various community based studies carried out in the different regions world showed the prevalence of reproductive tract infections 36-84%. Based on the prevalence derived from pilot study carried out among married women of reproductive age group in this area, the prevalence was found 50%; the sample size of study as per statistical calculation ($4pq/l^2$, where $p = 50$, $q = 100-p$ and $l = 10\%$ of p) came out to be 400.

Method of sampling

Prior enlisting all villages of Surendranagar district, one village was selected randomly. After random selection the village found was Khodu.

The houses in area were listed and a randomly selected house was taken as the first house to be surveyed.

RESULTS

Table 1 shows that basic awareness about disease was 64.0%. There was a significant association between age group and awareness ($\chi^2= 6.549$, D.F. = 2, P value = 0.037), A significant association found with educational status of women and awareness about the disease ($\chi^2= 6.549$, D.F. = 5, P value = 0.0417). A significant association with socio-economic class and awareness was also found ($\chi^2= 14.45$, D.F. = 4, P value = 0.006).

Table 1: Awareness regarding reproductive tract infections and its association with the socio-economic details amongst study group (N=400).

Socio-economic details	Frequency (N=400) (Percentage)	Awareness (Frequency)	
1. Age group			
15-24 yrs	145 (36.3%)	91	$\chi^2= 6.549$ D.F.= 2, P value = 0.0379
25-34 yrs	186 (46.5%)	138	
35-44 yrs	69 (17.2%)	27	
Total	400 (100%)	256 (64%)	
2. Education of women			
Illiterate	126 (31.5%)	51	$\chi^2= 6.549$ D.F.= 5 P value = 0.0417
Primary school	135 (33.8%)	94	
Secondary school	62 (15.4%)	47	
Higher secondary	38 (9.5%)	33	
Intermediate/ Diploma	9 (2.3%)	6	
Graduate and above	30 (7.5%)	25	
Total	400 (100%)	256 (64%)	
3. Socio-economic class			
Class I	24	20	$\chi^2= 14.45$ D.F.= 4 P value = 0.006
Class II	46	37	
Class III	62	52	
Class IV	118	93	
Class V	150	62	
Total	400 (100%)	256 (64%)	

Table 2 shows that not only the educational status of women but even I.Q. status is also associated with the awareness about the disease ($\chi^2 = 8.75$, d.f. = 1, P value = 0.003, statistically significant).

Table 2: IQ score of women in association with awareness of reproductive tract infections (By clinical interview taken by a qualified psychiatrist).

IQ score	Basic awareness yes (Frequency)	Basic awareness no (Frequency)
< 90	117	88
≥ 90	139	56
Total	256	144
$\chi^2 = 8.75$, d.f. = 1, P value = 0.003, statistically significant		

Table 3 shows that knowledge regarding disease occurrence and transmission among study population was only 35.50%; 8.5% replied about lack of personal hygiene, followed by 6.0% women who told infection was the main reason. 5.3% about sexual intercourse followed by 4.0% of women who gave the reason that multiple sexual partners as the main culprit for the same.

Table 3: Knowledge regarding disease occurrence and transmission amongst study group (N=400).

Knowledge regarding disease occurrence and transmission	Frequency	%
No idea	258	64.5
Lack of personal hygiene	34	8.5
Sexual intercourse	21	5.3
Infections	24	6.0
Multiple sexual partners	16	4.0
Multiple responses		
Lack of personal hygiene, infections	22	5.5
Lack of personal hygiene, sexual intercourse	14	3.5
Lack of personal hygiene, infections, sexual intercourse	8	2.0
Lack of personal hygiene, infections, sexual intercourse, multiple sexual partners	3	0.8

Table 4 shows that out of 400 women; knowledge about symptoms 17.8% having no idea; 15.8% women gave low backache was the main symptom; 11.5% narrated vaginal discharge, 10.5% of women reported itching in the private part. 5.8% of women reported lower abdominal pain; 5.3% of women gave burning micturition. 3.0% of women reported dyspareunia whereas only 1.0% of women reported genital ulcerations.

Table 5 shows that regarding HIV prevention and transmission among study population was 59.50%. 21.5% reported that usage of condoms was the possible way of prevention of HIV followed by 11.75% told treatment of cases and their partners, 8.50% of women narrated monogamous relationships, 8% about usage of sterile

needle was the way of prevention and transmission of HIV.

Table 4: Knowledge regarding complications of reproductive tract infections amongst study group (N=400).

Knowledge regarding complications of reproductive tract infections	Frequency	%
No idea	168	42.00
Cancer	31	7.75
Abortion	23	5.75
Pre-term labor	14	3.50
Premature rupture of membrane	8	2.00
Dysmenorrhoea	43	10.75
Irregularity of menses	22	5.50
Dyspareunia	18	4.50
Infertility	32	8.00
Others	18	4.50
Multiple responses		
Cancer, abortion	11	2.75
Cancer, abortion, premature rupture of membrane	08	2.00
Pre-term labour dysmenorrhoea, dyspareunia, infertility	04	1.00

Table 5: Knowledge regarding HIV prevention among study group (N=400).

Knowledge regarding HIV prevention	Frequency	%
No idea	162	40.50
Usage of condoms	86	21.50
Monogamous relationship	34	8.50
Sterile needle usage	32	8.00
Treatment of case and partner	47	11.75
Multiple responses		
Usage of condoms, monogamous relationship	22	5.50
Usage of condoms, monogamous relationships, treatment of case and partner	13	3.25
Usage of condoms, monogamous relationships, sterile needle, treatment of case and partner	4	1.00

Table 6 shows 75.3% of women reported that treatment was needed for the cure out of them about 24.7% of women reported that treatment should not be taken for reproductive tract infections because of social (60%) and personal reasons (87%).

Table 6: Knowledge regarding treatment necessity for reproductive tract infections amongst married women of study group (N=400).

Knowledge regarding treatment necessity	Frequency	Percentage
Yes	301	75.3
To whom		
Doctor	176	44.0
Nurse	38	9.5
Health workers	64	16.0
Chemist	10	2.5
Self	6	1.5
Others	7	1.8
No	99	24.7
Reasons		
Social reasons	64	16.0
Personal reasons	35	8.7

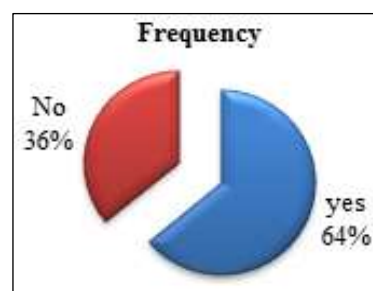


Figure 1: Awareness of disease among reproductive age group of women in the rural area of Surendranagar district (N=400).

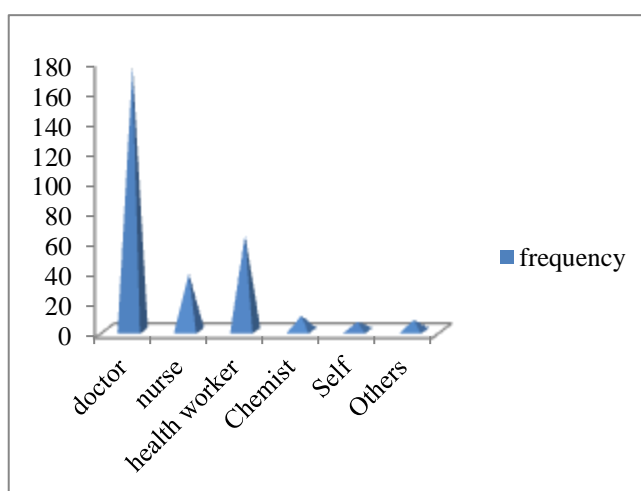


Figure 2: Knowledge of women regarding treatment accessibility for reproductive tract infections.

DISCUSSION

Basic awareness was 64.0%; similar studies conducted in Nigeria, rural West Bengal and Kenya were 77.2%, 57% and 96% respectively.³⁻⁵ In rural Bangladesh was 12%.⁶ Regarding disease occurrence and transmission 8.5% of women reported lack of personal hygiene could be cause. A study in Lima Peru; sexual contact, lack of personal hygiene and exposure to the contaminated environment were causes.⁷ A study conducted in Lagos toilet as contracting mode, sexual intercourse and poor hygiene.³ In rural Bangladesh; common causes narrated were sexual intercourse, infections and multiple sexual partners.⁶ A study conducted in Karachi; melting bone, consuming food with perceived hot composition, poor personal hygiene and procedures like dilatation and curettage and induced abortions were the reasons.⁸

Regarding symptoms, (15.8%) reported backache followed by vaginal discharge, itching, lower abdominal pain, burning micturition, dyspareunia and genital ulcerations. A study conducted in Lagos, Nigeria in which 57.7% of women reported vaginal discharge followed by vulval itching and lower abdominal pain.³ Majority of women narrated dysmenorrhoea as a complication of disease followed by infertility, dyspareunia, premature rupture of membrane. A study in Lagos, Nigeria; 57.5% of women reported infertility followed by cervical cancer, heavy menses, ectopic pregnancy, chronic pelvic pain, still birth.³ Knowledge regarding HIV prevention; 21.50% of women reported usage of condoms as the way of prevention followed by treatment of case and partner, monogamous relationships and sterile needle usage. 96% of women were aware of HIV in Western Kenya.⁵

Knowledge regarding treatment necessity, 75.3% of women said that treatment should be taken. 44% of women told that treatment should be taken from doctor followed by health workers, nurse, chemist, self-treatment and others like faith healers, homemade remedies etc (16.0%, 9.5%, 2.5%, 1.8%, 1.5%). A study conducted in Uganda; 60% of women reported that treatment should be taken from faith healers.¹⁰

CONCLUSIONS

Basic awareness about disease was 64.0%. 82.2% of women narrated one or the other symptom, 42.00% of women had no idea regarding its complications. Knowledge regarding HIV prevention was 59.50%. Knowledge about treatment necessity, 75.3% of women narrated that treatment was necessary. Social stigma and personal reasons were obstacles to seeking medical help.

Recommendations

In view of the result from this study it can be said that we need to have effective strategies for the early diagnosis and treatment of reproductive tract infections and for their prevention, through information education and

behavioral change. It can go a long way in controlling the spread of HIV, AIDS also and in reducing reproductive morbidity.

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Conflict of interest: None declared

Ethical approval: The study was approved by the institutional ethics committee

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