



A study to assess the functioning of designated sexually transmitted infection /reproductive tract infection clinics in district Gwalior (M.P.)

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Abstract

Introduction: Reproductive tract infection (RTI) is a common but neglected health problem affecting health and social well being of women, particularly those in the reproductive and economically most productive age groups, and their off springs. Reproductive Tract Infections (RTI) and Sexually Transmitted Infections (STIs) present a huge burden of disease and adversely impact reproductive health of people. About 60 to 80 million couples worldwide suffer from infertility and childlessness, often as a result of tubal blockage caused by untreated or inadequately treated STIs.

Materials and Methods: The study was done in the DSRCs of the District Gwalior of the Madhya Pradesh.

Study Design: Prospective cross sectional study

Study Population: All the patients attending STI clinic during study period of one year.

Sample Size: 300 patients attending Designated STI/RTIs clinics at JAH and Morar Hospital.

Sampling: Simple random sampling was done to complete the required sample size of 300.

Result: As per the study findings 30.3% of the women belong to the age group of 26-30 yrs, 26.6% in the age group of 21-25 yrs. 97% of the participants were female and only 3% were male participants. 76% of the study participants were Hindu, followed by Muslim (20.3%) and Christian (3.7%) respectively. 44% of the participants were illiterate followed by 25.7% participants educated up to the level of middle and primary school (16.3%) respectively.

Conclusion: After establishment of the DSRCs there has been improvement in the service delivery regarding STI/RTI. People are coming to health facilities to use these services, but still there is great scope of improvement for even better service deliveries.

Keywords: RTIs (Reproductive Tract Infections) and STIs (Sexually Transmitted Infections). DSRC (designated STI and RTI clinics)

Introduction

Reproductive tract infection (RTI) is a common but neglected health problem affecting health and social well being of women, particularly those in the reproductive and economically most productive age groups, and their off springs [1, 2, 3]. Reproductive Tract Infections (RTI) and Sexually Transmitted Infections (STIs) present a huge burden of disease and adversely impact reproductive health of people. As per recent STI prevalence study of one by NACO in the year 2003, over 6 percent of adult population in the country suffers from STIs and most regions of country show relatively high levels [4]. These infections often go undiagnosed and untreated, and when left untreated, they lead to complications such as Infertility; Ectopic pregnancy and Cervical cancer [4]. Untreated lower RTI ascends and frequently leads to pelvic inflammatory disease (PID), chronic pelvic pain, tuboovarian abscess and ectopic pregnancy. All these contribute to infertility. It has been observed that up to 10-40% of women with untreated gonococcal or chlamydial infection develop symptomatic PID and up to one quarter of those with PID become infertile [5]; About 60 to 80 million couples worldwide suffer from infertility and childlessness, often as a result of tubal blockage caused by untreated or inadequately treated STIs [6].

In developing countries, both the incidence and prevalence of RTIs/STIs are very high, they rank second as the cause of

healthy life lost among women of reproductive age group, after maternal morbidity and mortality. In men, sexually transmitted infections combined with HIV infection account for nearly 15 percent of all healthy life lost in the same age group. These infections pose a significant potential drain on public health system resources and contribute substantially to the patterns of major health care expenditure at the household level [4].

WHO has identified syndromic approach for identifying and managing cases with RTIs/STIs which provide health workers with a tool to improve the diagnostic process. Syndromic management identifies consistent group of symptoms and easily recognized signs and provides guidelines for treatment that deals with majority of organisms responsible for producing each syndrome such as vaginal discharge, genital ulcer and pain in lower abdomen including pelvic inflammatory disease [7].

Material and Methods

Study Setting

The study was done in the DSRCs of the District Gwalior of the Madhya Pradesh. According to 2011 census, total population of the district was 16,32,109 of which male population constitute was 53% and female 47%. The present study was conducted in Designated STI/RTI Clinics of district Gwalior. There are two DSRCs in the Gwalior district, STI

clinic of J.A. Group of Hospitals, a tertiary care hospital of Gwalior (M.P.) & STI clinic at District Hospital, Morar, Gwalior.

Study Design: Prospective cross sectional study

Study Period: One year (From October'13 to September'14)

Study Population: All the patients attending STI clinic during study period of one year.

Sample Size: 300 patients attending Designated STI/RTIs clinics at JAH and Morar Hospital.

Sampling: Simple random sampling was done to complete the required sample size of 300. 150 respondents were selected from both STI/RTI clinic (JAH and Morar Hospital). Every alternate day visit was made to STI/RTI clinic to collect the required information from subjects, till 150 respondents were selected from each of the STI/RTIs clinics.

Criteria for selection of sample

Inclusion Criteria: The study includes all the patients;

- Attending STI clinic at the time of data collection.
- Who will give consent to participate.

Exclusion Criteria

The study excludes the patients who are;

- Not available at the time of data collection.
- Not willing to participate.

Data Collection

Primary Data about the respondents was collected by using a pre-designed and pre tested questionnaire. The questionnaire was containing questions addressing the detailed history, demographical data, and clinical features, knowledge of STIs. The secondary data about the functioning of the DSRCs was collected by physical verification of the DSRCs and interview with counselor.

Data Analysis

Analysis was done by tabulations of data with frequency distribution by percentage and proportions and applying statistics wherever necessary, using the software Epi-info 3.5.1

Informed Consent

Informed consent was obtained from the subjects after explaining the purpose, nature and procedure of the study. Respondents were assured about the confidentiality and also given the choice to withdraw from the study.

Methodology

The study was carried out in the two DSRCs of Gwalior District, from October'13 to September'14. The study participants were the patients visiting to the DSRCs for any purpose. All the study participants who visited DSRCs at the OPD timings (from 8:30 am to 1:30 pm) were selected and informed consent was taken from each of them. From participants who gave consent, the required information was

collected using the pre designed and pretested questionnaire.

The secondary data was collected by physical verification of the DSRCs about the Appropriate signage, Availability of consumables (eg. Drugs, Diagnostic kits, condoms etc.), Equipments and instruments, Staff position etc. For collecting secondary data, written permission was granted by the Nodal Officer of DSRCs.

Health care personnel considered in the study

- Government Doctor
- Private Doctor
- Chemist
- Traditional healers.
- Quack

Case: A person is said to be a case of RTI with the presence of one of the following syndromes.

- Vaginal discharge
- Genital ulcer
- Inguinal bubo
- Lower abdominal pain
- Genital skin conditions

Results

Present study shows Age wise distribution of the respondents in table 1. Table 2 shows Sexwise distribution of the study population. Table 3 showing Religion wise Distribution of the study participant. Table 4 Shows Distribution of the respondents according to their literacy status. Table 5 Distribution of the respondents according to their marital status Table 6 showing that appropriate signage for STI/RTI facility was present at STI clinic, Male and Female OPD at DSRC JAH Hospital and Morar Hospital. Regarding equipments all the instruments and Examination table with bed sheets and drapes were available at both the DSRCs. All the consumables (STI/RTI color coded kits, TPHA Kits and condom) were also available at both places except RPR kit, which was not available at DSRC, JAH.D. Medical officer, STI/RTIs counselor available in STI/RTIs clinic in JAH Hospital as well as Morar Hospital-Lab technician available only in STI/RTIs clinic in Morar Hospital. Staff nurse was not available in STI/RTIs clinic in JAH Hospital as well as Morar Hospital. E. Trained medical officer and counselor available in STI/RTIs clinic in JAH Hospital as well Morar Hospital. Trained technician available in STI/RTIs clinic in JAH Hospital as well as Morar Hospital. F. STI/RTIs patient wise cards not available in STI/RTIs clinic in JAH Hospital as well as Morar Hospital. STI/RTIs register and counselor register available in STI/RTIs clinic in JAH Hospital as well Morar Hospital. Trained technician available in STI/RTIs clinic in JAH Hospital as well as Morar Hospital and monthly summary reporting in STI/RTIs clinic in JAH Hospital as well as Morar Hospital I. Infection control measure like hand washing practices, gloves and use of sterilized reusable instruments present in STI/RTIs clinic in JAH Hospital as well as Morar Hospital and monthly summary reporting in STI/RTIs clinic in JAH Hospital as well as Morar Hospital

Table 1: Age wise distribution of the respondents

S. No.	Age group	Frequency	Percent
1.	15-20yrs	16	5.4
2.	21-25yrs	80	26.6
3.	26-30yrs	91	30.3
4.	31-35yrs	42	14
5.	36-40yrs	28	9.3
6.	41-45yrs	24	8
7.	46-49yrs	19	6.4
	Total	300	100

Table 2: Sex distribution of the study population

S. No.	Sex	Frequency	Percent
1.	Female	291	97
2.	Male	9	3
	Total	300	100

Table 3: Religion wise distribution of the study participant

S. No.	Religion	Frequency	Percent
1.	Hindu	228	76
2.	Muslim	61	20.3
3.	Christian	11	3.7
	Total	300	100

Table 4: Distribution of the respondents according to their literacy status

S. No.	Education	Frequency	Percent
1.	Illiterates	132	44
2.	Primary	49	16.3
3.	Middle	77	25.7
4.	Higher secondary	36	12
5.	Graduate & above	6	2
	Total	300	100

Table 5: Distribution of the respondents according to their marital status

S. No.	Marital status	Frequency	Percent
1.	Married	277	92.3
2.	Separated	02	0.70
3.	Widowed	12	04.00
4.	Unmarried	09	03.00
	Total	300	100.00

Table 6: Functioning of designated Sti/Rti clinic

S. No.	Service quality indicator	JAH Hospital	Morar Hospital
A.	Appropriate sign for STI/RTI providing facility	Available	Not available
1.	STI clinic	Yes	Yes
2.	Male OPD	Yes	Yes
3.	Female OPD	Yes	Yes
B	Equipments		
1.	Examination bed with bed sheets and drapes	Yes	Yes
2.	Lighting for examination	Yes	Yes
3.	Instruments (eg. Speculum, proctoscope etc.)	Yes	Yes
4.	Computer, printer	Yes	Yes
C	Consumables		
1.	STI/RTI color coded kits	Yes	Yes
2.	RPR kits	No	Yes
3.	TPHA kits		
4.	Condom availability	Yes	Yes
D	Separate staff		
1.	Medical officer	Yes	Yes
2.	STI/RTI counselor	Yes	Yes

3.	Lab. Technician	No	Yes
4.	Staff nurse	No	No
E	Training status of staff of DSRC		
1.	Medical officers	Yes	Yes
2.	Counselor	Yes	Yes
3.	Lab. Technician	No	Yes
4.	Staff nurse	No	No
F	Documentation status of DSRC		
1.	STI/RTI patient wise cards	No	No
2.	STI/RTI patient register	Yes	Yes
3.	STI/RTI counselor register	Yes	Yes
4.	Monthly summary reports	Yes	Yes
G	Infection control measures		
1.	Hand washing practices	Yes	Yes
2.	Use of gloves	Yes	Yes
3.	Use of sterilized reusable instruments	Yes	Yes

Discussion

As per the study findings 56.9% of the respondents were in the age group 21-30 yrs. The findings are similar to the previous studies conducted by Shilpee choudhary *et al.* and Saifur Rahman *et al.*, who found that 62% and 58.5% of the respondents were in the age group of 20-30 years respectively. 97% of the respondents were female. Neerja Jindal *et al.* and Shilpee Choudhary *et al.* also show the similar findings in their previous studies. Regarding religion 76% of the respondents were hindu. The findings of the study were similar to the previous studies conducted by Rantnaprabha *et al.*, Shailendra K.B. Hegde *et al.* and Pandit D *et al.* in ¹⁸ which shows that of the respondents, 73% and 85% and 81% of the women were Hindus in respective studies. As per the study findings 44% of the respondents were illiterate. Among the literate, 40% of the respondents had studies up to middle. The study finding were similar to the previous studies conducted by Study done by Pandit D *et al.* in urban slums of Mumbai and Study done by ISEC in Bangalore slum, also found that 52.7% and 49% of the women were illiterate. Study done by Hegde S *et al.*, shows that 42,3% of the respondents had completed primary education and Pandit D *et al.* in urban slums of Mumbai, shows that 38.2% were educated up to higher secondary. Shilpee Choudhary *et al.*, J.S. Thakur *et al.* and J.K. Kosambia *et al.* found that 47%, 50% and 41% of the respondents were illiterate and the no. of STI symptomatic were maximum (44%) in the illiterate group. Regarding marital status 92.3% of the respondents were married. The findings of the study were similar to the previous studies conducted by Neerja Jindal *et al.*, Saifur Rahman *et al.* and Shilpee choudhary *et al.* found that 93.6%, 93.7% and 60% the women were married at the time of data collection.

Recommendations

After establishment of the DSRCs there has been improvement in the service delivery regarding STI/RTI. People are coming to health facilities to use these services, but still there is great scope of improvement for even better service deliveries. There are few recommendations based on the study findings:

These Recommendations are

- Awareness about all the aspects of STI/RTI needs to be

improved. Especially awareness regarding the cause, transmission and prevention of STI/RTI should be improved with the help of link worker and IEC activities.

- Treatment for STI/RTI at the earliest is a very important measure to control the situation. To improve that health education session should be held at community level and in schools about importance of timely and complete treatment.
- Separate counselor should be appointed for all Designated STI/RTI Clinics and ICTC. Their work should not be overlapped with ICTC.
- All the staff of Designated STI/RTI Clinics should be trained and re-orientation should be done regularly about the updates.
- There should be regular and uninterrupted supply of the consumables especially Drug kits and RPR kits and buffer stock should be maintained at every district.

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