VAGINAL DISCHARGE;
SYNDROMIC MANAGEMENT AMONG INTERNALLY DISPLACED WOMEN LIVING IN CAMPS AT LARKANA

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ABSTRACT... Objective: To observe the results of syndromic management in women living in IDPs camps complaining of chronic vaginal discharge. **Design:** Descriptive study. **Setting:** Medical Camps at Larkana set by Chandka Medical College Hospital for Internally Displaced Persons (IDPs) due to floods. **Period:** 1st September 2010 to 31st December 2010. **Material and Methods:** Total 200 symptomatic patients aged from 20 to 50 years suffering from chronic vaginal discharge having history of more than 6 months duration were included in the study. Asymptomatic as well as pregnant women and patients with abnormal cervix and having abnormal growth on cervix were excluded from the study. A detailed history and examination (including speculum and vaginal) was done and a proforma was filled. All these patients were given empirical treatment recommended by WHO as syndromic management consisting of stat doses of antifungal along with antibiotics, where no laboratory tests are required before treatment. **Results:** Next to vaginal discharge which was main symptom in all patients, the other symptoms like dusparunia, dysuria, itching ,lower abdomen pain and low backache was reported 9%, 16%, 20%, 24% and 31% respectively. Also 8% patients reported post coital bleeding. All patients were married and the mean age of the patients was 28+0.2 years and 15% of them were over 40 years. Mean parity was 4±1.Vaginal infection improved in 65% of the patients excellently with a first line single course of antibiotic and percentage raised up to 88% with second course. 19(9.5%) patients couldn't be followed as they left that camp and 5(2.5%) patients who did not improve with two courses of antibiotics had big cervical erosions, referred to nearby tertiary care hospital for further management. **Conclusions:** IDPs live in poor conditions in camps without basic facilities and where it is difficult to perform bedside tests like microscopy, Potassium Hydroxide, wet mount films and tests for Sexually transmitted diseases like Chlamydia and gonorrhea are not available, syndromic management there is a rational way of treating cases of chronic vaginal discharge to get quicker response in such desperate women.

Key words: Internally displaced persons (IDPs), Sexually Transmitted Infections (STIs), Syndromic management.

INTRODUCTION

Internally displaced person are those persons displaced from their home or place of habitual residence and cannot return owing to a well-founded fear of persecution because of race, religion, nationality, political opinion or membership of a particular social group; or due to war and civil conflict or natural disaster, they do not leave their country of origin[1].

Women are particularly susceptible in conflicting affected settings to increased risk for sexual violence, leading to further morbidity including psychological trauma, unwanted or complications in pregnancy, sexually transmitted infections (STIs), and HIV infection. Basic health services to appropriately respond to the needs of women during crises are often challenged, disrupted, or unavailable. As a result, women's health can be severely diminished during dispute, with disease and transmission further exacerbated both during and after the trouble[2].

Bacterial vaginosis, Trichomoniasis, Candidiasis and cervicitis due to Chlamydia, Gonococcal infections are common causes of vaginal discharge among these women and that makes about 20-25% of women attending the health care centers[3]. Sexually transmitted infection (STIs) is a recognized cause of adult morbidity worldwide and Infection rates are mainly high among exposed groups, such as internally displaced persons (IDPs) and refugees[4].

As many developing countries, hospitals work devoid of special equipment and skilled staff needed for establishing the diagnosis of STIs. To cope up this problem, a syndrome-based approach to the management of STI patients was introduced in 1991 by

World Health Organization(WHO) and endorsed in a large number of countries of the under developed world[5].

The syndromic management approach is based on the detection of consistent groups of symptoms based on history and detection of signs on examination (syndromes), and the provision of treatment covering the most serious, organisms responsible for fabricating a syndrome. It also involves advice on sexual behaviour, condom usaging ,partner notification and treatment and follow up[6].

Single dose of Tinidazole and Fluconazole and Metronidazole in multiple doses with Clotrimazole have been used in accordingly as first line therapy for vaginal discharge as per guidelines and Quinolones and Macrolide antibiotics are added to above drugs if there are signs of cervicitis on examination and patients too present with mucoprulent discharge[3].

Among IDPs to perform culture is difficult, costly and lingering process and also there may be chance of loosing patients for follow up. Syndromic management is the cheap way of treating women with vaginal discharge on empirical basis living in IDPs camps. WHO guidelines for syndromic management is increasingly used by not only by public and private hospitals but also by different health agencies based in Pakistan for the remedy of STIs of displaced persons[7].

This feasibility study is conducted in camps of displaced people with the aim for the provision of accessible, acceptable and effective services for the control of vaginal discharge and to assess the appropriateness in STIs in such desperate women.

MATERIAL AND METHODS

This descriptive study was conducted in a medical camp for internally displaced persons(IDPs) at larkana organized by Chandka Medical College Shaheed Mohtarma Benazir Bhutto Medical University from 1st September 2010 to 31st December 2010. A total of 200 patients with the age range from 20 to 50 years were recruited having complain of vaginal discharge for more than six months. Asymptomatic and pregnant population was excluded. Detailed history was taken. In the medical camp a small examination room was set where per speculum examination done under good light first then bimanual pelvic examination was also done. History and examination findings were noted on pre designed proforma.

Syndromic management of vaginal discharge(STIs) does not involve any laboratory investigation and is considered as best approach to treat. As per guidelines of World Health Organization all 200 patients were empirically treated with single dose of each antibiotic and antifungal consisting of tablets Macrolide antibiotic(Azithromycin) one gram, tablets Secnidazole two grams and Capsule fluconazole 150mg given orally in stat dose in their first course. All spouses were also given single dose of 2 grams Secnidazole tablets. Patients were called for follow up after one week and were reviewed. Those women who did not feel relief were given second dose of antibiotics according to guideline of WHO for syndromic management and this time drugs comprising Quinolones 250mg twice a day and Metronidazole 400mg twice daily for fourteen days. Additionally Clotrimazole vaginal cream for one week given to patients symptomatic for fungal infection. In case of those patients who had no lull of symptoms, they were referred to tertiary care hospital for cervical smear and further management. Data analysis done with help of SPSS soft ware (version 10.0). Frequency and percentage computed for categorical variables like age, parity, presentation and side effects. Mean and standard deviation computed for quantitative variable age.

RESULTS

The camp population was about 4500 IDPs and among them 20% population was of female. 200 women were selected as they had the history of vaginal discharge since six or more than six months. All women were married and having complain of vaginal discharge. Many patients had not only vaginal discharge but also other symptoms like dysparunia, dysuria, lower abdomen pain, low backache, itching and post coital bleeding further described in table I.

Mean age of patients were 28±0.2 and mean parity was 4±2.1. About 68% patients reported having mucoprulent discharge while 32% had symptoms and signs in favour

Table-I. Presentation of patients (n=200)

Complaint	%age of patients
Vaginal discharge	100%
Low backache	31%
Lowe abdomen pain	24%
Itching	20%
Dysuria	16%
Dysparunia	09%
Post coital bleeding	08%

of vulvovaginal candidiasis. Bacterial vaginosis was the commonest diagnosis in 48% of patients presenting with copious thin watery discharge with fishy odour. At first follow up visit 65% of patients responded in a positive way for having liberation of symptoms. A total of 88% got benefit from syndromic management at the end of second dose treatment as 35% people of total need to give additional drugs as they did not feel relief of symptom at their first follow up see table no II. Total 9.5% patients could not be followed as they had left that IDPs camp and we need to refer 2.5 % patients to our tertiary care hospital as they showed no relief of symptoms because of resistant cervical erosions. Adverse effects observed after consumption of drugs given to them and are summarized in Table III. Anorexia was the main compliant made by patients followed by nausea and metallic taste. Majority of the patients tolerated these drugs well. Only two patients had severe type of adverse effects but they came for follow up.

DISCUSSION

The world is continuously facing the burden of refugees or internally displaced people (IDPs), with their accompanying disappointments of all kinds wreaked to these peoples. The volume of these people are mostly made up of IDPs live in desolated poverty, the level of knowledge about sexual and reproductive health rights amongst the displaced populations is low. The low level of awareness may be ascribed to their liability to various illnesses as sexually transmitted infections (STIs), including HIV, also stretch quickly among displaced populations[8].

Table-II. Response of patients on syndromic management

Total patients	Symptoms	%age of patients taking first dose	%age of patients who responded after 2nd dose
200 (100%)	Vaginal discharge	65% (130)	88% (176)
62 (31%)	Low back ache	61%	79%
48 (24%)	Lower abdomen pain	77%	86%
40 (20%)	Itching	82%	99%

Table-III. Side effects of drugs

Severity	Side effects	%age of patients
Mild	Anorexia	20%
	Metalic Taste	18%
	Nausea	15%
Moderate	Minimal vomiting	07%
	Headache	05%
	Epigastric	02%
Severe	discomfort	01%
	Abdominal	02%
	cramps	0.5%
	Severe vomiting	01%
	Skin rash/pruritis	
	Stomatitis	

Lack of awareness knowledge on various STIs including HIV/AIDS is reported. The level of attentiveness is affected by the “care free” attitudes of the IDPs who are stressed by hard conditions of marginalization. Syndromic treatment supremely represents a trouble-free, realistic treatment tactic for resource-poor settings[9]. The immediate treatment also avoids further transmission and complications that can occur. It is also a cost-effective way to slow the spread of HIV[10].

In our study we used single dose treatment consisting of macrolide antibiotic capsule Azithromycin 1gram along with tablets Secnidazole 2 gram and single capsule of Fluconazole 150mg and found it very useful and easy way to treat symptoms complex. We observed effectiveness about 65% with first dose and this drug

regimen has also been used in other studies where success rate was even up to 56%[3,11] and also has been proven positively in a randomized controlled trial in Africa where they had concluded that single dose regimen of Tinidazole with Fluconazole is as effective as multiple doses of Metronidazole therapy[12]. Use of single dose(1gram) Azithromicin as part of first line therapy of syndromic management has been favoured as superior drug by studies done in China, India and Pakistan, where comparative trials done while using the other two drugs in the treatment of cervico-vaginal discharges[3,13,14]. This solitary dose blend allows superior conformity, entire treatment at the first visit thus averting the stretch of sexually transmitted disease and HIV as already discussed above[10]. This can allow controlled or pragmatic therapy for both partners leading to almost cure in all cases and low reversion rate and instantaneous total management avoids secondary impediments because cheaper extensively[12].

Taking into account, those women who had not been taking proper antibiotics and they had complain of post coital bleeding as well as fragile cervix and bleeding to touch on examination, of our recruited those 35% of total patients need to give second dose of antibiotics including Metronidazole with Quinolone or doxycycline for fourteen days as because of expectant involvement of multiple organisms causing vaginal discharge especially to have coverage on two prominent and commonest cervical infections as Chlamydia and Gonorrhea. After using second dose cure rate 65 to 88% that not only correlates with local but also international studies are of same consensus where success rate touched to 96% in their cases[15,16]. In a study done at Laos where single drug as presumptive therapy only Azithromycin with out Tinidazole and Fluconazole was given at regular intervals but author did not find significant decrease in cervical infection just reduction up to 13%[17]. Another study favoring use of combined agents with multiple doses in resistant cases showed cure rate up to 87% and also reduces the risk associated with chronic vaginal discharge as consequences like chronic pelvic pain, infertility, tubo-ovarian abscess and ectopic pregnancy as well[18]. In our patients anorexia and metallic taste were the main side effects ,but it did not result in discontinuation of treatment. Apart from vaginal discharge other complaints made by patients as dysuria, dysparunia, pruritis and pain syndrome were also the symptoms deserving empirical syndromic management and corroborating other studies done in Pakistan[19,20]. Belonging to religious country ,it was difficult to ask about multiple partners of patient themselves and their spouses but we found few women(2.5% only) having cervical erosions not responding to syndromic management, then they were referred to tertiary care hospital for further investigation and treatment.

The World Health Organization (WHO) estimates about 340 million new cases of curable STIs occurring each year mostly in the reproductive age group women,[21] but very sad side of implementing syndromic management is lack of knowledge about the correct diagnosis and treatment of STIs. Only 10% Health care providers could correctly cite the recommended treatment for gonorrhoea, syphilis and vaginal discharge,[22] and due to global shortage of trained treatment providers, use of non-formal personnel is deemed essential for health care resource-limited settings after training them about syndromic management[23].

A systematic approach to the control of infectious diseases is a key component of compassionate response, and is crucial to protect the health of emergency affected displaced persons. This requires co-operation among agencies working at local, national and international levels and may require mass treatment to get control over such diseases

CONCLUSION

Conditions of poverty, powerlessness and social instability after displacement due natural disaster predispose to the spread of many diseases like sexually transmitted infections and other communicable diseases and women are most affected in such assorted conditions. Treating women presenting with vaginal discharge based on the WHO guidelines (with out laboratory examination) syndromic management leads to more than 70% resolution of symptoms within one to two weeks. It is cost effective, easily available and ensures directly observed therapy in resource poor settings. As many people are not aware that their abnormal symptoms grounds STIs. Improper

understanding always results in poor treatment compliance, likely re-infection due to meager partner notification. Although syndromic management symbolizes important alternative for treatment, but still more work needs to be done in expanding different approaches for useful management of genital tract infections in individuals and populations. Establishment of these comprehensive reproductive health services as early as possible following the emergency phase of a crisis; ensuring a regular supplies in the face of insufficient logistics systems; and weighing up targeted effectiveness is in fact a big challenge and realizing these hurdles, mass treatment of STIs has always been proposed as a varied approach.

REFERENCES

1. United Nations High Commissioner for Refugees (UNHCR). 2006. Refugees by the Numbers. Geneva: UNHCR.PMI

2. Kim AA et al. **HIV Infection among internally displaced women and women residing in river populations along the Congo river, Democratic Republic of Congo.** AIDS Behav 2009.DOI 10.1007/s10461-009-9536-z.

3. Sabir S, Hassan L. **Outcome of syndromic management in cases of chronic vaginal discharge.** JPMI 2010;24:(32)234- 238.

4. Integrated Regional Information Network. Sudan: Trying to Stem the Spread of HIV/AIDS;http://www.irinnews.org/report.asp?ReportID=48921&SelectRegion=East_Africa&SelectCountry=SUDAN, last accessed: Sept 19, 2005, Sept 6, 2005.

5. World Health Organization. **Management of patients with sexually transmitted diseases.** WHO Technical Report Series No. 810 1991 Geneva: World Health Organization.

6. **Guidelines for management of sexually transmitted infections. Geneva, Switzerland: World Health Organization 2003.** Available at:http://whqlibdoc.who.int/publications/ 2003/9241546263.pdf.

7. Rahimtoola M, Hussain H, Khowaja SN, Khan AJ. **Sexually transmitted infections treatment and care available to high risk populations in Pakistan.** JLGBT Health Res 2008; 4:103-10

8. **Protecting the future: A guide to incorporating HIV prevention and care in refugee settings.** 2001 International Rescue Committee.

9. Dadian MJ. **Syndromic management, promoting effective STD diagnoses in resource poor settings.** Aids captions 1996; 3(1): 9-13

10. Behets, F. M. T. F., J. R. Rasolofomanana, et al. **Evidence-based treatment guidelines for sexually transmitted infections developed with and for female sex workers.** Tropical Medicine & International Health 2003; 8(3): 251-258.

11. Kore S, Pandole A, Kulkami S, Puthuraya S, Kamat S, Ambiya VR, et al. **Syndromic management of vaginal discharge our experience.** Bombay Hosp J 2003; 45:108-11.

12. Pepin J, Sobela F, Khonde N, Agyarko-Poku T, Diakité S, Deslandes S, et al. **The syndromic management of vaginal discharge using single dose treatments: a randomized controlled trial in West Africa.** Bull World Health Organ 2006;84: 729-38.

13. Yin YP, Wu Z, Lin C, Guan J, Wen Y, Li L, et al. **Syndromic and laboratory diagnosis of sexually transmitted infection: a comparative study in China.** Int J STD AIDS 2008;19:381–4.

14. Sharma JB, Mittal S, Raina U, Chanana C. **Comparative efficacy of two regimens in syndromic management of lower genital infections.** Arch Gynecol Obstet 2006; 273:232-5.

15. Gilani S. **Syndromic management of Pelvic Inflammatory Disease** J. Med. Sci. Peshawar 2010; 18(1): 8-10.

16. Malhotra M, Sharma JB, Batra S, Arora R,Sharma S. **Ciprofloxacin-tinidazole combination, fluconazole-azithromicin-secnidazole-kit and doxycycline-metronidazole combination therapy in syndromic management of pelvic inflammatory disease: a prospective randomized controlled trial.** Indian Journal of Medical Sciences 2003; 75(12):549-55.

17. O'Farrell, N. Oula, R, et al. **Periodic presumptive treatment for cervical infections in service women in 3 border provinces of Laos.** Sexually Transmitted Diseases. 2006; 33(9): 558-564.

18. La Ruche G, Lorougnon F, Digbeu N. **Therapeutic algorithms for the management of sexually transmitted diseases at the peripheral level in Côte**

d'Ivoire: Assessment of efficacy and cost. Bulletin of the World Health Organization1995 73(3): 305-313.

19. Mahmood MA, Saniotis A. **Use of syndromic management algorithm for Sexually Transmitted Infections and Reproductive Tract Infections management in community settings in Karachi** JPMA 2011; 61:453-457.

20. National AIDS Control Program, Summary - STI prevalence study in Pakistan 2000-2001. (Online) (Cited 2011 April 10). Available from URL: http://www.nacp.gov.pk/wp-content/uploads/2007/04/summary-sti-prevalence-study-in-Pakistan-2000.pdf.

21. World Health Organisation. **Global prevalence and incidence of selected curable sexually transmitted diseases.** Epidemiological Bulletin: overview and estimates 1998. Geneva: World Health Organization.

22. Saeed KM , Unemo M, ZamanS, Lundborg CS. **Knowledge, attitudes and practices regarding human immunodeficiency virus/acquired immune deficiency syndrome and sexually transmitted infections among health care providers in Lahore,** Pakistan J Ayub Med Coll Abbottabad 2009;21(4):1-6.

23. Shah SA, Kristensen S, Memon MA, White HL and Vermund SH. **Syndromic management training for non-formal care providers in pakistan improves quality of care for sexually transmitted diseases std care: a randomized clinical trial.** Southeast Asian J Trop Med Public Health 2007; 38(4):737-748.

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DESIGN IS NOT JUST WHAT IT LOOKS LIKE AND FEELS LIKE. DESIGN IS HOW IT WORKS.

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