Sexually Transmitted Diseases- Ten Years Experience In Benue State

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Abstract

INTRODUCTION

Inflection by a number of viruses, bacteria, fungi, protozoa or anthropods are transmitted through heterosexual or homosexual contact. These sexually transmitted infection (STD) can result in a wide variety of Clinical conditions. STDs rank among the most frequent infectious disease (1,2). The world Health organization in(1995) estimated the incidence of four selected curable sexually transmitted disease – gonorrhea, syphilis, Chlamydia and triclononiasis among adults age 15 – 49 at 333million of these , the vast,. majority (3) occurred in the developing world (3). 45% in south and South East Asia, 20% in sub-Saharan Africa and 11% in Latin America and the Caribbean countries (3).

Epidemiological data in the developing countries is not easy available.

STD are also the most international of all diseases affecting mankind and in the all countries they are of major social and public health importance (3,4,5). In Nigeria some workers, mostly from the Southern part of thee country did much work on these diseases 96,7) in the north central Nigeria information on STD is very scanty. This work will form a data base in the area. Benue State is located in the central of Nigeria. It has eighteen local government areas. Makurdi is the capital of the state with two other urban areas. Otukpo and Gboko. In Benue state beside malaria and gastrointestinal disease, STDs are the complaints for which adolescents and adults seek medical attention.

The present report is based on Clinical and laboratory findings on patients attending federal Medical Centre Makurdi, General hospital Otukpo, and a private Clinic at Makurdi from January 1999-Dec. 2008.

Human immune deficiency Virus (HIV) prevalence in the

area is high almost ten thousand (10,000) are attending HIV Clinics in the State, which is separate from STD Clinic. That work had already been published by the same author.

MATERIALS AND METHOD

All the patients who attended the STD Clinics of FMC – Mkd, general hospital Otukpo and a private clinic in Makurdi between January 1999 and Dec. 2008 were included in this study.

All the patients gave their full consent after proper counseling. And they were subjected to full physical examination after relevant histories had been taken.

Samples of urethral discharge in men and endocervial swab in women were taken using sterile cotton swabs. The smears were gram-strained and a culture plate inoculated. On

plates of chocolate and Thayer Martin (Oxoid) media. The plates were incubated at 37oc in a candle extinction jar for 24 to 48 hours. Neisseria gonorrhea was identified by the typical colonial appearance, reactions to gram stain, positive Oxidase test and sugar ternentatanin.

The antibiotic sensitivity of isolates was tested by the agar diffusion method on chocolates agar plates using Oxoid multidiscs with standard antibiotics concentration. Penicillinase production was detected by starch paper method of Odugbemi method (14). Candida was diagnosed by culture on chocolate agar and sahouraud agar or both and by microcospy of a saline-mount and gram-stained smear of material from vagina. Dank field microcopy was performed on genital ulcers. Diagnosis of Trichomonas was by direct microcopy. Lyphogranuloma venerum (LGV), genital herpes, chancroid and Molluscum contagiosum were diagnosed clinically. The veneral disease research laboratory (VDRL), and Trepanoma pallidum Haematiglutination (TPHA) were used to diagnose syphilis.

RESULTS

One thousand four hundred and forty eight (1,448) or 61.07%) males and nine hundred and twenty three (923or 38.93) females were seen in the Clinics at General out patients and Sexually Transmitted Diseases Clinics (STD). Treatment clinics (STI) during the ten years period at Otukpo general hospital, federal medical centre, Makurdi and Marian Clinic Makurdi.

This represents a male to female ratio of 2:1.

The peak age for men a was 31 - 40 years while that women was 21-30 years (tableI)

The non gonococcus infection and gonorrhea and chancroid were the three most common STDs seen in Benue State, each accounting for 38.86%, 9.50% and 9.07% respectively (tableII). Casual Sexual contact and commercial sex work (CSWs) were the sources of infection in 50.09% and 35.15%) respectively of the clients (table III).

Distribution of the STD by occupation showed that civil servants, drivers, and tertiary Schools Students accounted for 28.41%, 26.94% and 22.63% respectively. (Table IV).

Ninety seven percent (97%) of the neisseria gonorrhea isolated were penicillinase producing neisseria gonorrhea.

Figure 1

Table I Distribution of the Patience seen by age and Sex

AGE(YEARS)	NO OF MALES	NO OF FEMALE	TOTAL%
AGE(YEARS)	NO OF MALES	NO OF FEMALE	TOTAL%
0-10	4-0.175%	20.08%	60.25%
0-10	4-0.175%	20.08%	60.25%
11-20	120 5 06	80 3 37	2008.43
11-20	120 5.06	80 3 37	2008.43
21-30	420 17.71	38016.03	80033.74
21-30	420 17.71	38016.03	80033.74
31-40	712 30.03	2209.28	93239.31
31-40	712 30.03	2209.28	93239.31
41-50	120 5.06	2008.44	32013.50
41-50	120 5.06	2008.44	32013 50
Above 50	72 3.04	41 1.73	113 4.77
Above 50	72 3.04	41 1.73	113 4.77
Total 1448	61.075%	92338.93%	2371 100%
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Figure 2

Table 2 TYPES OF STDS SEEN

Diagnosis	Males	Females	Total	(%)
Non-Gonococcal	350	100	450	38.86%
urethitis(NGU)				
Gonorrhoria	100	10	110	9.50
Chancroid	80	85	105	9.07%
Lymphogranulomavenerum	50	39	89	7.69%
Candidiasis	30	55	85	7.34%
Syphilis	45	18	63	5.44%
Herpesgenitalis	30	29	59	5.095
Condyloma accumulate	15	37	52	4.5%
Trichomoniasis	8	21	29	2.5%
Molluscumcontagiosum	10	8	18	1.55%
Mixed infection	15	3	18	1.55%
Venerophobia	30	50	80	6.91%
Total	763	395	1158	100%

Figure 3

Table 3 Sources of infection

Sources	NO. of Patients	%
Casual or unknown contacts	580	50.09%
CSWs (commercial sex workers)	407	35.15%
Spouse	88	7.60%
Regular partners, but not spouse	80	6.90%
Never had sexual contact	3	0.26%
Total	1158	100%

Figure 4

Table. 4 Distribution by Occupation

Occupation	NO. of patients	%	
1 civil service	329	28.41	
driving	312	26.94	
Tertiary school	262	22.63	
farming	92	7.94	
Secondary school	64	5.53	
Police force	50	4.32	
House wives	49	4.23	
total	1158	100%	

DISCUSSION

One thousand nine hundred and thirty two (1932 or 81.485) of the patients in this study were aged 11 and 40years. This study were agrees with the Jos figure (92%) but in disagreement with Zaria, Ibadan and Lagos figure (61%, 51%, and 40% respectively.

This difference was probably because most of our patients were civil servants and Students. The age group 11- 40 years is the sexually active age group, thus are more at risk of

acquiring STDs .

They are also assumed to have higher level of awareness.

Sixty three (63 or 9.07%) of the clients were serologically reactive for syphilis. Ilorin reported 12% of syphilis cases, but Sogbetum reported 2.5% syphilis cases in Ibadan.

Gonorrhea was more frequent among males (8.64%) than in female (0.86%) attending the Clinics. This agrees with the reports from Jos, Zaria, and Ilorin (14, 15). The low incidence among female is because female are often symptomless and act as carriers.

Eighty (80-or 6.91%) of the patients presented with venerophobia. We observed that these group of patients engage in self medications and had history of been seen by many Doctors and non doctors before presenting to us.

Self medications and indiscriminate use of antibiotic increase the resistance of the bacteria to antibiotics. Illustrations of the negative effect of socio cultural factors such as polygamy practice of male dominance in marriage etc. affect the distribution of the Diseases.

Non specific genital infection is the commonest condition encountered, being responsible for 38. 86% of the cases. This agrees with studies from Jos, Zaria, Ibadan, and Lagos (12, 13, 14, and 15). Of the genital ulcerations, chancriod was most frequently encountered 9.02%. Chancroid is associated with hard sexual intercourse and unhygienic condition. There two factors are common features in this environment. In Jos and Lagos they recorded syphilis and herpes genitalis as the commonest of the genital ulcers 3.4 % and 6% respectively.

It was also observed that some patients use laboratory results as a shopping list for drugs instead of being used as a guide by Doctors for proper prescription.

The practice of reporting normal skin flora staphylococcus aureus only misinform clinicians and also encourage patient to buy inappropriate and most often dangerous drugs.

We conclude by suggesting that more should be done on health education of the people, the danger of self medications and use of antibiotics. Safe sex and abstinence from sex before marriage should be encourage in the community.

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References

1. Sexually transmitted diseases current and future dimensions of the problem in third word In; Germain, A Holmes K. K, Piot, p. and wasserheit, J. N (eds), Reproductive tract. . Infections plenum press, New York, pp. 35-58.

2. Bugingo, G. Ntilivamunda, A. Nzaramba, D, Van De perre, p, Ndikuyeze, A, Munyantore, s, mutwewingabo, A and Bizimungu, c. (1988) Etude sur seropositive liee a I infection au virus dimmunodficience humanine au Rwanda. Revve medicale Rwandaise 20, 37-42.

3. Carpels, G, fisette, K. Limbana, V, Vandeum, A, vandenbulcke, W. and portaels, F. (19950) Drug resistant tuberculosis in sub-saharen Africa; an estimation of incidence and cost for the year 2000.Tubercle and lung Disease 76, 480-486. Belsey, M. A. (1976)The epidemiology of infertility; a review with particular reference to subsaharan Africa. Bulletin of the world Health organization 54, 319-341.

4. Benslimane, A, and sekhat, S.(1994) HIVs and ALDs in North Africa. In; Essex, M, Mboup, S,Kanki, p.j. and kalengayi, MR. (eds), ALDSin Africa. Raven press, New York, pp. 603-611.

5. Bergstrom, s. (19900) Genital infections and reproductive health; infertility and morbidity of mother and child in developing countries. Scandinavian journal of infectious Diseases 69 (suppl.) 99 - 105.

6. Betts, C.and Zacarias, F.(1994) Regional assessment of STD. trends in Latin America and the Caribbean. Sexually transmit ion Dieses 21 (suppl.), S108

7. Brawn, T. sittitrali W vanichseni,s.and Thisyakorn,u.(19940) Therecent epidemiology of HIV and ALDS in Thailand AIDS 8 (Suppl 2) s131-s141
8. Btunham R. C. and Ronald, A.R. (1991) Epidemiology of sexually transmitted diseases in developing countries, in; Wasserheit, J.N. Aral, S.O and Holmes, k.k.(eds),Era. American society for microbiology, Washington, DC, pro 61 20

pp.61-80. 9. Brunham, R.C.and Embree, JE.Cates, W, Farley, T.M.M. and Rowe, P.J.(1985) worldwide patterns of infertility; is Africa different? Lancet 2, 596-598.

10. Crofts, N. Ballard, J,chetwynd, J,Dickson, N, lindberg, W. and Watson, c. (1994) Involving the communities; ALDS in Australia and New Zealand. ALDS 8 (Suppl. 2), s45-s53. 11. D'Costa, L.J. Plummer, F.A. Bowmer, I. Fransen, L.Piot, p, Ronald A.R. and Nsanze,H.(1985) Prosttitutes are a major reservoir of sexually transmitted diseases in Nairobi, Kenya. Sexually transmitted diseases 12,64-67.

12. De, cock, k.m. soro, b, kouliblay, i. m. and lucas, s. b. (1992)Tuberculosis and HIV infectin in sub-saharan Africa. Journal of the American medical Association 268,1581-1587.

13. De schrijver, A and meheus, A (1990)Epidemiology of sexually transmitted diseases;

14. The global picture. Bullentin of the world Health organization 68,639-654.

15. 8Duncan, M.E. Roggen ,E. Tibaux, G, Pelzer, A, Mehari, L, and piot, p. (1994) seroepidemiological studies of Haemophilus ducrey infection in Ethiopian woman sexually Transmitted Diseases 21, 280-288.

16. Gayle, Heyward, w.L. and Nzila, N, (1994) HIVs and ALDS in centrel Afrca. In; Essex, m, mboup, S, kanki, p.j. and kalengayi, m R. (eds), Aids in Africa Raven press, New york, pp 667.

17. Goeman, j, meheus, A and piot p. (1991) Epidemiologle des maladies sexuelement transmissible dans les pays en development a l'ere du SIDA. Annales de la societe Belge de medicine Tropicale 71.81-113.

18. Goh, c,l, (1987) chancroid –a review Annals of the Academy of medicine 16, 680-682.

19. Grosskurth, H, Mosha, F, Todd, j, mwijarubi, E, Klokke, A. senkoro, K, mayaud , P, Changalucha, j, Nicoll, A, kagina G, Newell, j, mugeye, k, D, and Hayes, R. (1990) Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tranzania ; randomized controlled trial, lancet 346. 530-536.

20. Hira, S.K, Bhat G,J, chikamata DM. Nkowane, B,

Tembo G. PL, and meheus, A.(1990) Syphilis intervention in pregnancy Zambian demonstration project.

Genitoourinary medicine66, 159-164.

21. Jain, K.M. john T J. and keusch, G.

T.(19940)Epidemiology of HIVand ALDS in india.ALDS 8(SUPPL. 2), S61-S75

22. Joesoef, M R. Knapp j.s. idjadi A linnan, m, Barakbah Y. Kamboji, A, O 'Hanley, p, and moran, jj. (1994)

Kamboji, A, O 'Hanley, p, and moran, jj. (1994) Antimicrobial susceptibilities of neisseria gonorrhoeae strains isolatd in surabaya, indonesia. Antimcrobial Agents and chemotherapy 38, 2530-2533.

23. Joseph, M.R. wiknjosatro G Norojono, w,sumampouw,H, Linnan, m, Hansell, m,j. Hillis, S.E. and lewis, j, (1996) coinfection with Chlamydia and gonorrhea amongst woman with bacterial vaginosis. International journal of STD, and ALDS 7, 61-64.

24. Osoba A. O. sexually transmitted disease in tropical Africa. A review of the present situation. Br. J. venereal disease 1981; 57;89-94.

25. Latif A. S. sexually transmitted diseases in clinic patients in Salisbury. Zinbabwe. Brit, j. vener dis. 1981,57; 181-183.

26. Bello c.s. s. Elegba O.Y. Dada j.D. sexually transmitted diseases in northern Nigeria; five years experience in a university teaching hospital.brit j. vener dis. 1983, 59, 202-5. 27. Orjioke c. j. G. sexually transmitted diseases and the Nigeria urban Elite. Nig. Journal of medicine, 1990, 9, 121-123.

28. Rotimi v.o. Eko F. C.Gonococcal ophthalnia neonatorum. Nig.Med, pract. 1992, 23 5/6; 78-82.

29. Osoba A. O. Venereal diseases among pregnant women

in ibadan, Nigeria W.African med. J. 1973,

30. Segbetum A. O. Alausa k. o. Osoba A. O. sexually transmitted diseases in Ibadan, Nigeria. Brit j. vener dis. 1977, 53; 155-60.

31. Rotimi v.o. somorin A O. Sexually transmitted diseases in Lagos.Br. j. vener. Dis 1980, 56; 54-6.

32. Odugbenmi T. Onile B A. Adetoro O. O, Ayorinde o. and Alausa o. k. sexually transmitted diseases; A 19 month clinic experience at the Ilorin University teaching Hospital.Nigeria. med. Pract. 1986, 11(4) 95-98.

33. Adler m. w. diagnostic treatment and reporting criteria for non specific genital infections in sexually transmitted disease clinics in England and wales I. diagnosis. Birt. J. vener. Dis 1978, 54, 422-437.

34. .Adler m. w. Diagnostic treatment and reporting criteria for non specific genital infections in sexually transmitted disease clinics in England and wales I.. Diagnosis Brit. J. vener. Dis .1986,62; 428-432.

35. Catteral R. Diagnosis of gonorrhoea in women Brit. J. vener. Dis. 1980, 46; 122.

36. Barlows D,Naylar k. Philips I. and Barrow j. diagnosis of Gonorrhoea in women. Brit. J. vener. Dis. 1976, 52; 326-328.

37. Odubgemi T. O. Hafiz S. mcEntergart M. G; penicllinase producing Neisseria gonrrhoae; detection by starch paper technicgues. Br. Med. J. 1977, 11; 500.

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