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Choice of Treatment of Sexually Transmitted Infections among Males in Rural Areas of South-South, Nigeria

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Abstract

Sexually transmitted infection is an infection acquired during sexual intercourse (oral, vaginal, and anal), especially when having unprotected sex. This infection is easily spread in the rural areas where protective device is not patronized. Sexually transmitted infection (STI) is spread when the man or the woman involves in multiple sex partners and without putting on protective device. This study is aim to investigate the Choice of Treatment of Sexually Transmitted Infection Among Male in Rural Areas of South-South, Nigeria. This is a cross-sectional study involving 260 males with ages between 18 to 47 years. Each participant had one questionnaire to fill appropriately and independently after instructions were given to them by the researchers. The study lasted for three months. Statistical analysis of data was done using SPSS version 25. P value < 0.05 was considered significant for data. The results of the findings revealed that 7.70% were within 18-22 years, 15.40% were within 23-37 years, 11.50% were within 28-32 years, 15.40% were within 33-37 years, 19.20% were within 38-42 years, and 30.80% were within 43-47 years. The results also shows that 46.20% of the participants had primary level of education, 30.80% had secondary education while 23.10% had tertiary education. The study revealed that 69.20% of the participants had awareness about STI while 30.80% have no awareness. Again, 73.10% of the participants have no knowledge about STI. The research revealed that 73.10% of the participants have multiple girlfriends and 76.90% of them do not use protective device. The findings also revealed that 69.20% of the participants contacted STI and 96.20% preferred herbal medicine as their choice of treatment.

Keywords: Choice, Treatment, Sexually, Transmitted, Infection, Male

I. Introduction

Sexually transmitted infections are infections caused by bacteria, viruses and parasites that are transferred mainly via sexual contact, be it vaginal, anal, oral or in some instances via non-sexual means, i.e. by means of blood or blood products. Mother-to-child transmission of e.g. chlamydia, gonorrhoea, syphilis, hepatitis B and HIV can also occur during pregnancy and childbirth (WHO, 2016).A large number of factors, including socio-economic and gender inequalities as well as preventative program failure and inaccessibility to adequate health services have contributed to the epidemic of classic STIs (Altin and Coetzee, 2005)Sexually transmitted infections (STIs) constitute a huge health and economic burden for developing countries:75–85% of the estimated 340 million annual new cases of curable STIs occur in these countries, and STIs account for 17% economic losses because of ill health. Interventions that may decrease the incidence and prevalence of STIs are primary prevention (information, education and communication campaigns, condom promotion, use of safe microbicides, and vaccines), screening and case finding among vulnerable groups (Mayaud and Mabey 2004). More than 340 million new cases of curable sexually transmitted infections occur worldwide every year and there are more than 30 bacterial, viral and parasitic pathogens which are sexually transmissible, Treponema pallidum (syphilis), Neisseria gonorrhoeae, Chlamydia trachomatis and Trichomonas vaginalis are responsible for most of the sexually transmitted infections (STIs) (WHO, 2007). South and Southeast Asia have the highest rates of STIs, followed by sub-Saharan Africa, Latin American and the Caribbean (World Health Organization, 2007). Also, viral sexually transmitted infections most frequently consist of the human immunodeficiency virus (HIV), human herpes viruses, human papilloma and hepatitis B viruses (WHO, 2007).

The high incidence of STDs in Nigeria, has been attributed to factors such as poverty, polygyny, absence of nationwide network of clinics, early age of sexual debut, lack of awareness, dense commercial sex networks and poor gender empowerment (UNDP 2006; Ogunbanjo 1989; http://www.NigeriaHIVinfo.com. 2006). Following some of the factors highlighted (poverty and lack of access to modern health facility), many people in Nigeria, especially those living in the rural communities (constituting 75-80% of the Nigerian population), rely on traditional medical practitioners (TMPs) for the treatment of STDs and other ailments (Catterall 1980; Sofowora 1993). The common STDs treated are gonorrhoea, syphilis, urethritis, vaginal candidiosis and Chlamydia (Catterall 1980; Bakare 2005). Relying on TMPs for the treatment of STDs is also particularly due to

the social stigma associated with the disease and people do not discuss the issue of STDs publicly, but prefer to consult TMPs who are common in every village and city and who are regarded as part of their culture (Ajibesin, *et al.* 2011). The TMPs use medicinal plants for treatment and are considered as experts in the knowledge of plants(Ajibesin, *et al.* 2011)

Previous study by Green (1992) revealed that majority of people in sub-Sahara Africa believed that traditional STI cures, are more effective than modern cures. A number of ethnobotanical surveys conducted in other developing countries such as Bangladesh, India, Central America, Zambia and Zimbabwe confirm the traditional use of plants for the treatment of STIs (Cáceres *et al*., 1995; Ndubani and Höjer, 1999; Kambizi and Afolayan, 2001; Jain *et al*., 2004; Hossan *et al.,* 2010). In most of these ethnobotanical studies the information on the plants used for treating STIs came from traditional healers and very few rural dwellers or lay people were consulted for their knowledge.Previous studies conducted in South and Southeast Asia revealed that a high percentage of people rely primarily on traditional healers and medicinal plants for the treatment of various STIs(De Wet *et al*, 2012). In Bangladesh 10 plant species were recorded to be used to treat syphilis and gonorrhoea (Hossan *et al*., 2010) and in the state of Rajasthan, India, 11 plants species are used for the cure of sexual diseases (Jain et al., 2004). Ethnobotanical studies done on STIs in sub-Sahara Africa revealed that the Rwandese people are using 25 different plant species for the treatment of gonorrhoea (Van Puyvelde *et al*., 1983) and in Zambia and Zimbabwe 19 and 15 plant species respectively are being used against various STIs (Ndubani and Höjer, 1999; Kambizi and Afolayan, 2001).

II. Materials and Method

A cross-sectional study was carried out among males in the rural areas of South-South, Nigeria, and lasted for a period of three months (from March to May, 2022). A total of 260 males within the age 18 to 47 years were recruited for the study. The participants were recruited from the six states that make up South-South Geopolitical zones. A well-structured questionnaire was administered to the participants and each participant had one questionnaire to fill appropriately and independently after instructions were given to them by the researchers. Statistical analysis of data was done using SPSS version 25. P value < 0.05 was considered significant for data.

III. Results

The results ofage distribution of the respondents indicated that 20(7.70%) were within 18-22 years, 40(15.40%) were within 23-37 years, 30(11.50%) were within 28-32 years, 40(15.40%) were within 33-37 years, 50(19.20%) were within 38-42 years, and 80(30.80%) were within 43-47 years (Table 1). The results of educational distribution of respondents shows that 120(46.20%) had primary level of education, 80(30.80%) had secondary level of education while 60(23.10%) had tertiary level of education (Table 2). The occupational distribution of participants revealed that 120(46.20%) were farmers, 80(30.80%) were business class, 40(15.40%) civil servants, while 20(7.70%) were students(Table 3). The marital status of respondents shows that 70(26.90%) were married while 190(73.10%) were singles (Table 4). Awareness of participants about STI revealed that 180(69.20%) said they are aware while 80(30.80%) said no (Table 5). Level of knowledge about STI among respondents shows that 70(26.90%) agreed that they have knowledge while 190(73.10%) no. The findings revealed that 190(73.10%) of the participants have multiple girlfriends (Table 6) and 200(76.90%) of them do not use condom during sex (Table 7). Again, 180(69.20%) of the participants have contacted STI. Participants on their choice of treatment shows that, 10(3.80%) preferred the use of hospital drug while 250(96.20%) preferred herbal remedies (Table 8).

Table 1: Age Distribution of Respondents

Age Group	Frequency	Percentage %)
18-22 years	20	7.7
23-27 years	40	15.4
28-32 years	30	11.5
33-37 years	40	15.4
38-42 years	50	19.2
43-47 years	80	30.8
Total	**260**	**100.0**

Table 2: Educational Distribution of Respondents

Educational Status	Frequency	Percentage
PRIMARY	120	46.1
SECONDARY	80	30.8
TERTIARY	60	23.1
Total	260	100.0

Table 3: Occupational Distribution of Respondents

Occupation	Frequency	Percent (%)
Farming	120	46.2
Business	80	30.8
Civil servant	40	15.4
Student	20	7.7
Total	260	100.0

Table 4: Marital Status of participants

Marital Status	Frequency	Percent
Married	70	26.9
Single	190	73.1
Total	260	100.0

Table 5: Awareness of STI

Awareness	Frequency	Percent (%)
YES	180	69.2
NO	80	30.8
Total	260	100.0

Table 6: Response on Having Multiple Girlfriend

Having Multiple Girlfriend	Frequency	Percentage (%)
YES	190	73.1
NO	70	26.9
Total	260	100.0

Table 7: Use of condom during sex

Response	Frequency	Percent (%)
YES	60	23.1
NO	200	76.9
Total	260	100.0

Table 8: Choice ofTreatment

Response	Frequency	Percent (%)
Use of hospital drug	10	3.8
Herbal	250	96.2
Total	260	100.0

IV. Discussion

Sexually transmitted infection is an infection acquired during sexual intercourse (oral, vaginal, and anal), especially when having unprotected sex. This infection is easily spread in the rural areas where protective device is not patronized. Sexually transmitted infection (STI) is spread when the man or the woman involves in multiple sex partners and without putting on protective device. The study revealed that majority of the participants (30.8%) were within 43-47 years. The participants that falls within these age group are still active sexually and this could determine their active involvement in sexual intercourse.The results of the educational distribution of respondents shows that 46.20% had primary level of education, 80(30.80%) had secondary education while 60(23.10%) had tertiary education. This educational level is crucial because it will reveal their level of awareness and knowledge about sexually transmitted infections (STI) and most of the participants had primary level of education. In Africa, most people that lives in the rural areas are stop at primary level of

education and to some extent secondary level and this could affect their level of understanding. Also, the findings revealed that majority of the participant's occupation were farmers(46.20%), and traders(30.80%), while few of them were civil servants(15.40%), and students (7.70%). Several of the participants are farmers and traders and this could be traced to their primary level of education they acquired. The study shows that most of the participants were single (73.10%) and 26.90% were married. Being single could also lure them to participate in uncontrolled and unprotected sex. It is important that marriage at times act as check and balances on individual and thus, could curtail some extra-marital affairs and as such save people from contacting STI.The study revealed that several of the participants are aware of STI, however, 73.10% of them do not have knowledge about the said STI. This shows that the participants are aware that STI exist but do not know the degree of complications they may have when they contacted this infection.

Again, the study revealed that73.10% of the participants have multiple girlfriends. These multiple girlfriends practiced by the participants could be due to the fact that majority of them were single and this prompted them to engaged in uncontrolled relationship. Having multiple sexual partners is a serious risk factor in contacting STI. Despite the multiple girlfriends being practiced by the participants, most of them (76.90%) do not put on condom during sex and this becomes channel of contacting STI and as such, putting themselves and their sexual partner's lives in jeopardy. Again, 69.20% of the participants said they have previously contacted STI and this is attributed to the fact that most the participants keep multiple girlfriends and again do not put on protective device during sexual intercourse with their female partner or male partner (homosexuals). Also, 96.20% of them intend to treat the STI they contacted and treatment were done at different centres (3.80% of them preferred treatment at the health centre, 3.80% preferred treatment at the chemist store, while 92.30% preferred treatment at the herbal centre). However, majority of the participants (96.20%) preferred herbal medicine as their treatment choice. This choice of treatment by the participants could be due to the fact that herbal medicine is accessible, available, affordableand also proximity of treatment centre. This researched revealed that majority of the people who live in the rural areas depend of herbal medicine for treatment of various ailment including STI. This study agreed with previous studies by Gbaranor *et al*, (2021b)that revealed that, most people in the rural areas and some in the urban areas depends on herbal medicine each time they have medical issues, WHO, whose report, revealed that 60% of the world's populations depend on herbal and traditional medicine, and 85% of the world's developing countries use traditional medicine in caring for diseases (Shuaib, M. *et al,* 2023). The study revealed the reasons given by the participants to choose their treatment choice as availability 15.40%, accessibility 23.10%, and 61.50% said it is cheaper. Again, the study shows that 96.20% of the participants do not treat their female counterpart after taking the herbal treatment and this may continue the spread of STI. This attitude of not treating their girlfriends alongside could be due to the fact that majority of the people preferred herbal home for consultation and therefore could not get the needed information concerning how to prevent and treat the said ailment. The study also shows that most of the participant after treating themselves went back to have sex with their girlfriends which were not treated alongside their boyfriends. After herbal treatment of STI, most of the participants have complications such as difficulty in passing urine (38.50%), painful urination (34.60%),passing bloody urine(3.80%), and swelling of the lower abdomen (23.10%).

V. Conclusion

Sexual transmitted infection is a preventable infection that is spread through contact. Majority of the participants were single, had primary level of education. Also, most of the participants had multiple sexual partners, do not use protective device and preferred herbal treatment centre for the treatment of STI. The study revealed that, the participant's choice of treatment for STI was herbal medicine and many of them had various degree of complications.

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Ethical Approval

While carrying out this study, we tried to consider all ethical issues

References

[1.] Altini L, Coetzee D. Syndromic management of sexually transmitted infections. CME. 2005 [cited];23(2):62-6. Available from: http://www.ajol.info/index.php/ cme/article/viewFile/44035/27549
[2.] Available from: http://www.NigeriaHIVinfo.com. The HIV/AIDS situation in Nigeria. [Last accessed on 2006].
[3.] Bakare RA. Sexually transmitted infections in Nigeria. Annals Ibadan Postgrad Med 2005;3:48-51.
[4.] Cáceres, A., Menéndez, H., Menéndez, E., Cohobón, E., Samayoa, B.E., Jauregui, E., Peralta, E., Carrillo, G., 1995. Antigonorrhoeal activity of plants used in Guatemala for the treatment of sexually transmitted diseases. Journal of Ethnopharmacology 48, 85–88
[5.] Catterall, RD. Sexually transmitted diseases in Nigeria. Br J Vener Dis 1980;56:194-6.
[6.] Gbaranor K. B., Ovili-Odili B. Z., Okpara E. P. Tamuno-Opubo A., Victor P. D., Orupabo C. D., Tee P. G., AlasiaO. M., ,Sapira-Ordu L Nonju I. I., Nwosu G. N (2021b). Effect of Hydroalcohol Extract of *Englerinadrummondii Balle ex Polhill & Wiens* (Mistletoe)
[7.] Green, E.C., 1992. Sexually transmitted disease, ethnomedicine and health policy in Africa. Social Science & Medicine 35, 121–130
[8.] H. De Wet, V.N. Nzama, S.F. Van Vuuren(2012). Medicinal plants used for the treatment of sexually transmitted infections by lay people in northern Maputaland, KwaZulu–Natal Province, South Africa. South African Journal of Botany 78 (2012) 12–20
[9.] Hossan, S., Hanif, A., Agarwala, B., Sarwar, S., Karim, M., Taufiq-Ur-Rahman, M., Jahan, R., Rahmatullah, M., 2010. Traditional use of medicinal plants in Bangladesh to treat urinary tract infections and sexually transmitted diseases. Ethnobotany Research and Applications 8, 61–64.
[10.] Jain, A., Katewa, S.S., Chaudhary, B.L., Galav, P., 2004. Folk herbal medicines used in birth control and sexual diseases by tribal's of southern Rajasthan, India. Journal of Ethnopharmacology 90, 171–177
[11.] Kambizi, L., Afolayan, A.J., 2001. An ethnobotanical study of plants used for the treatment of sexually transmitted diseases (njovhere) in Guruve District, Zimbabwe. Journal of Ethnopharmacology 77, 5–9.
[12.] Kola‘ K. Ajibesin, Danladi N. Bala, Uwemedimo F. Umoh (2011). The use of medicinal plants to treat sexually transmitted diseases in Nigeria: Ethnomedicinal survey of Niger Delta Region. International Journal of Green Pharmacy.
[13.] M. Shuaiba, F. Hussainb, A. Raufc, F. Janc , M. Rommand, R. Parvezc,e, A. Zebc, S. Alic, S. Abidullahc, S. Bahadurf, A. A. Shahg, N. Azamh, S. Dilbari, K. Begumj, H. Khank, S. Sajjadl I. Muhammadj and N.A. Shahl (2023).Traditional knowledge about medicinal plant in the remote areas of Wari Tehsil, Dir Upper, Pakistan. *Brazilian Journal of Biology*. vol. 83, e246803
[14.] Mayaud P., Mabey D. (2004). Approaches to the control of sexually transmitted infections in developing countries: old problems and modern challenges; Sex Transm Infect 80:174–182. doi: 10.1136/sti.004101

[15.] Ndubani, P., Höjer, B., 1999. Traditional healers and the treatment of sexually transmitted illnesses in rural Zambia. Journal of Ethnopharmacology 67, 15–25.
[16.] Ogunbanjo BO. Sexually transmitted diseases in Nigeria. A review of the present situation. West Afr J Med 1989;8:42-9.
[17.] Sofowora A. Medicinal plants and traditional medicine in Africa. Nigeria: Spectrum Books Ltd; 1993.
[18.] United Nations Development Programme (UNDP). Niger Delta Human Development Programme. Nigeria: UNDP, Garki, Abuja; 2006.
[19.] Van Puyvelde, L., Geiser, I., Rwangabo, P.-C., Sebikali, B., 1983. Rwandese herbal remedies used against gonorroea. Journal of Ethnopharmacology 8, 279–286
[20.] WHO (2016). Sexually Transmitted Infections Factsheet. Available from: http://www.who.int/mediacentre/factsheets/fs110/en/. Accessed 29 September 2016.
[21.] World Health Organization (2017). World health statistics: monitoring health for the SDGs, sustainable development goals. World Health Organization.
[22.] World Health Organization, (2007). Global Strategy for the Prevention and Control of Sexually Transmitted Infections: 2006–2015. WHO, Geneva.