

## AN ASSESSMENT OF HIGH RISK SEXUAL BEHAVIOUR AND HIV TRANSMISSION AMONG MIGRANT OIL WORKERS IN THE NIGER DELTA AREA OF NIGERIA.

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### ABSTRACT

**Background:** A cross-sectional behavioural survey undertaken amongst migrant oil-workers of an oil exploration outfit operating in the Niger – Delta of Nigeria with the aim of assessing the interplay of migrancy, high-risk sexual behaviour and HIV transmission.

**Method:** A total of 300 randomly selected migrant oil workers were assessed using structured questionnaires to evaluate key high – risk sexual behavioral parameters such as multiplicity of sexual partners, bisexuality (closet homosexuality), high grade sexual behaviour and lesbianism. Sampling period was two months with a control cohort of 200.

**Result:** The prevalence of high risk sexual behaviour (HRSB) amongst the migrant oil workers was found to be 7.7% while low-risk sexual behaviour (LRSB) was 92.3%. There was no record of HRSB in the control group. We did not also encounter any lesbian sexual orientation in this study. The distribution of HRSB amongst the migrant oil workers showed that the commonest variety was bisexuality (closet homosexuality) with 10(43.5%) followed by high-risk sexual behaviour 7(30.4%), while the least common was multiplicity of sexual partners with 6 (26.1%). Furthermore, majority of these individuals 19 (82.6%) were above the age of 35 years. The index of condom-use and acceptance was high. Here 14 (60.9%) found condom –use convenient while 13 (56.5%) regularly used the condom.

**Conclusion:** This study confirms the existence of HRSB among migrant oil workers in the Niger delta. It is therefore advisable to focus interventionist and prevention programmes on this group which appear to be pivotal in the transmission and spread of HIV/AIDS in this environment.

**Key words:** High-risk, Sexual profile, Migrant oil-workers, Niger-Delta

### INTRODUCTION.

Ever since the onset of the HIV/AIDS pandemic in the 1980s and its report amongst homosexuals in the United States of America<sup>1-4</sup> a lot of interest have been directed at the impact of sexually-related attitudes and behaviour in the spread of HIV/AIDS<sup>5-7</sup>. In no where else has this factor been highlighted than in sub-Sahara Africa, where two thirds of all HIV infections and people living with HIV/AIDS are located. The current national prevalence rate is 5.0% while that of Rivers state is 6.6%. It has also been shown that the predominant mode of transmission in this environment is through the heterosexual route which accounts for about 80% of all infections.<sup>1,3,8</sup> Admittedly, other forms of

high-risk sexual activities such as homosexuality and to a lesser extent lesbianism, all play significant roles in HIV transmission in the developed world while there is a paucity of data on these phenomena in this environment.

In this regard, it has also been reported that one of the major driving forces of the massive hetero-sexual transmission pattern in this environment is the contribution by the migrant work force which includes oil-workers, long-distance commercial drivers and commercial sex workers<sup>9</sup>. In the past, a number of studies have been directed at health-care related risk behaviours among hospital worker<sup>4,10</sup>, commercial drivers<sup>11-13</sup>, teenage girls<sup>14</sup> and commercial sex workers<sup>15</sup> while there appears to be little or no attention directed at the oil – workers especially in the Niger-Delta, who are economically empowered to impact on the velocity or dynamics of HIV/AIDS in this sub-region.

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This study therefore has been designed to evaluate the high-risk sexual behaviour (HRSB) of these migrant oil-workers<sup>16</sup> with a view to highlighting the factors within this cohort, which contribute to the spread of HIV/AIDS in this environment. It is also hoped that the data from this survey would assist in forming the basis for expert interventionist programmes and workplans that are necessary for the control of the spread of the pandemic in Nigeria and sub-Saharan Africa.

## MATERIALS AND METHOD.

The subjects utilized in this survey were migrant oil-workers of an Oil/Gas exploration company based in the Niger Delta with headquarters in Port Harcourt and with branches in Lagos and oil-rig locations in AG and MA (AG and MA are Pseudo-names, used here for need of anonymity). A total of 300 migrant workers and 200 non-migrant workers (control workers) were assessed using structured questionnaires designed to conform with the company's public relations policy. The mode of the survey was to evaluate the following HRSB amongst the oil-workers in relation to age and condom-use:

- (a) Multiple sexual partnerships (MSP): Individuals who regularly engage in sexual intercourse with more than one partner of the same or opposite Sex.
- (b) Homosexuality: Men who engage in sexual intercourse with other men. There are two main sub-types – "Stand alone" and "closet" homosexuality. The former are men who solely have sex with other men while the latter group are men who have sex with male partners and at the same time engage in sexual intercourse with their spouses (wives or girlfriends).
- (c) Bisexuality: Individuals who engage in sexual intercourse with both male and female partners. "Closet" homosexuals also fall under this category.
- (d). Lesbianism: females who engage in sexual intercourse with other females.
- (e). High risk sexual partnerships (HRSP): Individual who engages in both multiplicity of sexual partners and any of the other sexual orientations of homosexuality, bisexuality and lesbianism.
- (f). Low-risk sexual behaviour (LRSB) Individuals who are not engaged in any of the above abnormal sexual behaviours.
- (g). High-risk sexual behaviour (HRSB): Individuals engaged in any of the above high risk sexual behaviours.

B. AGE: The HRSB was also assessed in relation to those below and above 35 years of age.

C. CONDOM-USE. Characteristics of condom use evaluated were those of: convenience, non – convenience, regularity and irregularity of condom use.

## MODE OF SAMPLING

The questionnaire was in two sections. The first section was completed by all the subjects who were randomly selected. The second section was completed by subjects who engaged in high risk life style. They were evaluated in relation to their sexual orientations and attitude to condom use.

## RESULTS.

A total of 300 migrant and 200 non-migrant (control group) oil-workers were consecutively sampled in four (4) Locations: Lagos, Port Harcourt and two oil-rig installations (OB and MA). The high-risk sexual parameters assessed were: multiple sex partnerships, homosexuality, bisexuality, lesbianism, high-risk sexual partnerships and non-condom- Use. The results show that 23 (7.66%) of the migrant oil-workers engaged in HRSB while 277 (92.33%) practiced low-risk sexual behaviour. There was no record of high-risk sexual behaviour among the control group as shown by Table 1:

Table 2 shows the distribution of HRSB amongst the sub-group of the migrant oil-workers engaged in high risk sexual activities. Here, the commonest form of HRSB was bisexuality with 10 (43.5%). They were all males and were also all married. Thus these individuals who are married engaged in sexual relations with both female and male consorts hence they practiced "closet" homosexuality.

The next most common HRSB was high-risk sexual partnerships with 7 (30.4%), closely followed by multiplicity of sexual partnerships with 6(26.1%). We did not record any "stand-alone" homosexual or lesbian sexual orientation in this survey.

The data in Table 3 depicts the age profile of the subjects engaged in HRSB. Here, majority 19(82.6%) of these individuals were aged 35 and above while 4(17.4%) were below 35 years.

Finally Table 4 illustrates the relationship of condom use and HRSB amongst migrant oil-workers in which the data shows that majority 14 (60.9%) find condom use convenient especially amongst the HRSP individuals with 7(30.4%) and least amongst MSP subjects with 1(4.4%) in comparison with 9(39.1%) who did not find it convenient. Furthermore, the regularity of condom use was also high 13(56.5%) particularly amongst the bisexuals/HRSP with 5(21.7%) a piece and least amongst the MSP subjects with 3(13.0%).

**Table 1: Background Characteristics and Sexual Orientation of Oil-Workers.**

Sexual Behaviour	Migrant Oil		Non-Migrant		
	Workers		Oil-Workers		
	Frequency	%	Frequency	%	
High risk sexual behaviour	23	7.7	0	0.0	
Low-risk sexual behaviour	277	92.3	200	100.0	
Gender	Ma	300	100.0	120	60.0
	Female	0	0.0	80	40.0
Status	Married	300	100.0	200	100.0
<b>Total</b>	<b>300</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>	

**Table 2: Distribution of High-Risk Sexual Behaviour Amongst Migrant Oil-Workers.**

Sexual behaviour	No.	%
1. Bisexuality (Closet homosexuality)	10	43.5
2 High-risk sexual partnerships	7	30.4
3. Multiple sexual partnerships only	6	26.1
<b>TOTAL</b>	<b>23</b>	<b>100.0</b>

**Table 3: Age Profile and High-Risk Sexual Behaviour of Migrant Oil-Workers.**

Sexual orientation	Age Groups					
	Below 35 Years		35 Years and Above		Total	
	Frequency	%	frequency	%	Frequency	%
1. Bisexuality	2	8.7	8	34.8	10	43.5
2. High-risk sexual partnership	2	8.7	5	21.7	7	30.4
3. Multiple sex Partnerships	0	0	6	26.1	6	26.1
<b>TOTAL</b>	<b>17.4</b>	<b>19</b>	<b>82.6</b>	<b>23</b>	<b>100.0</b>	

**Table 4: Characteristics of Condom-Use and High-Risk Sexual Behaviour Amongst Migrant Oil-Workers.**

	Condom-use characteristic							
	Convenient		Not Convenient		Regularly used		Irregularly used	
	Freq	%	Freq.	%	Freq.	%	Freq.	%
1. Bisexuality (n=10)	6	26.1	4	17.4	5	21.7	5	21.7
2. High-risk sexual partnership (n=7)	7	30.4	0	0.0	5	21.7	2	8.7
3. Multiple Sex Partnership (n=6)	1	4.4	5	21.7	3	13.0	3	13.0
<b>TOTAL</b>	<b>14</b>	<b>60.9</b>	<b>9</b>	<b>39.1</b>	<b>13</b>	<b>56.5</b>	<b>10</b>	<b>43.5</b>

## DISCUSSION

The prime position of high – risk sexual behaviour in the epidemiology of the current HIV/AIDS pandemic was signaled by the initial report of this disease among homosexuals a few decades ago. The importance of this phenomenon has been highlighted further in sub-Saharan Africa where the heterosexual mode of HIV transmission is dominant.

The results from this behavioral survey amongst migrant oil-workers show that the prevalence of HRSB was 7.66% while that of Low-risk sexual behaviour was 92.33%. We however did not record any HRSB among the control group of non-migrant oil workers. This finding underscores the fact that migrant workers such as oil workers play a pivotal role in the increased prevalence and transmission of HIV/AIDS in this environment in much the same way as long-distance commercial drivers and commercial sex workers.<sup>9</sup>

We also found that the distribution of HRSB amongst the migrant oil-workers showed that the commonest sexual orientation was bisexuality or “Closet Homosexuality” with 43.9% followed by High risk sexual partnerships (30.4%) and lastly multiple sexual partnership (26.1%). This finding is noteworthy and denotes the existence especially among the migrant oil workers in the Niger Delta of such potential HIV/AIDS behavioural trigger-factors as homosexuality, bisexuality and multiple sex partners which have been reported to play a leading role in the transmission and spread of HIV/AIDS.<sup>10-13</sup>

The above result is underlined further by the subsequent finding in this study that majority 19(82.61%) of individuals involved in these high-risk sexual behaviour are those above 35 years of age. These individuals within the context of the migrant workforce of the oil industry are those who are economically empowered with stable and lucrative jobs to engage in high-risk sexual behaviour such as patronage of commercial sex workers, teenage girls and homosexuality especially when they are absent from their spouses for long periods of time during offshore/rig duties or cross – postings abroad. This finding is similar to the Ilorin study by Araoye et al who also reported that high risk-sexual behaviour was common among commercial/truck drivers of comparable age.<sup>13</sup>

The predominance of “closet homosexuality” or bisexuality over multiple sex partnership could be referable to an “elitist” tendency in which individuals who are highly placed in the socio-economic ladder adopt certain attitudes and life styles, howbeit alien or exotic, probably as a symbol of high social or class status. This is even more so as these oil workers constitute a major segment of the most remunerated sector of the oil –driven mono-economy of the Niger Delta and Nigeria.

This study did not reveal any lesbian behaviour. This could be attributed to the small percentage of female oil-workers entered into this study which may be reflective of the equally small representation of females in the migrant workforce of the oil industry.

Furthermore, the females in this environment are disempowered (financially and culturally) hence they possess little or no "sex choice.". However, low key lesbianism has been muted amongst some group of women of high social class. More importantly, it is a known fact that men drive the HIV/AIDS epidemic, thus, in the cultural milieu of this environment, men are expected to be generally unfaithful to their spouses, to have multiple sex partners and wives, and to practise wife inheritance (inheriting the dead brother's wife). They are also expected to exhibit the "macho-phenomenon" of the African man, which is expressed in low condom acceptance. 6,7,17

The other important finding of this study is in relation to condom-use/acceptance. In general, most 14(60.9%) of those engaged in HRSB found condom-use to be convenient as against those 9(39.1%) who found it to be inconvenient. However, condom acceptance underlined by regularity of usage was relatively high 13(56.5%) particularly among bisexuals/HRSP individuals with 5(21.7%) respectively and least amongst MSP individuals with 3(13.0%). This may be attributed to the high educational background and increased awareness of HIV/AIDS amongst the oil-workers.

One major limitation of this study was our constraint in limiting the structure/format of the questionnaire to conform with the public relations policy of the company, which prohibits in-depth probing of their employees sexual history and lifestyle. The other constraint was the somewhat small size of the sample population. It may be desirable to replicate this study utilizing a larger sample size in order to authenticate the findings of this work.

In conclusion, this study confirms that HRSB such as bisexuality(Closet homosexuality) does exist in the oil industry in the Niger – Delta. Thus it is advisable to focus on this subgroup whose behaviour and empowerment constitute potential triggers for the spread of HIV/AIDS in our environment.

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