

## Impact of Socio-Cultural Factors Contributing to the Spread of HIV/AIDS in Sudan A Case Study of Dar Al Salaam Displaced Camp, Omdurman, Sudan

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### Abstract

AIDS has become geopolitical diseases that threaten people, and became preoccupied with scientific research in this matter. The study aims at exploring socio-cultural factors that may impact the spread of HIV/AIDS among the displaced in Dar a salaam camp in Omdurman – Sudan. The study was conducted among a randomly selected sample of 450 respondents (aged between 18 - 65 years) resident at the camp, who include various tribes, religious and ethnic groups and gender. A quantitative approach technique is used to collect data and Statistical package for the Social Sciences (SPSS version 18) for Data entry and analysis. The study shows that 79.3 percent of respondents heard about the disease (AIDS), but only 13.8 percent are aware of the modes of transmission. 67.6 percent do not know where to have test for HIV/AIDS, with only 6 percent who actually had the test for various reasons. However 50 percent prefer to keep the infection of relative secret for fear of stigma and discrimination. The study indicated that there is clear adherence to socio-cultural practices that may contribute to the spread of HIV/AIDS including polygamy, piercing, widow inheritance, cross marriage, circumcision in groups, *Fisadah*, *Hijamah*, etc. Consequently, the study makes recommendations in the areas of policies, and behavior change, Increase testing centers and integrated with reproductive health centers and primary health care units, because of the fear of stigma. Increase the number of units and psychological counseling staff.

**Key words:** Socio-Cultural Factors and HIV/AIDS

Socio-Cultural practices and HIV/AIDS in Sudan

### Introduction:

Sudan is the third country in HIV infections number, behind Pakistan and Iran with infection rate of 0.24%. Statistics from different sources in Sudan revealed very high awareness rates, as well as its spread mechanisms. The number has risen continually, from only two infections in 1986 to 100,000, most of them foreigner and also indicating under detection, under-reporting, and surveillance difficulties among groups at high risk, ( Federal Ministry of Health/Sudan report, 2019). Major mode of transmission was Heterosexual, about 97% of all reported HIV/AIDS cases, 90% of them were in reproductive age, (UNAIDS report, 2019).

Sudan HIV prevalence rate was 1.4%, among persons aged 15-46 amounting to 0.67%. Prevalence among commercial sex workers and prostitutes amounted to 4.4%, among homosexuals 6.3%, among youth 2.3% and among vendors and tea sellers 1%. The infected persons receiving medical treatment were 8,000. an estimated number of newly infected about 4,700 and deaths reached 2,600 persons, (Sudan national AIDS programm/WHO & UNAIDS reports 2019).

There were 37.9 million people globally; living with HIV (end of 2018), but 79% of them knew their status. 24.5 million Received antiretroviral treatment by the end of June 2019. 770000died from AIDS related diseases, (end of 2018).

### 1. Country background:

Total population was (in thousands) 39 154 according to the population census (2008) report, with an annual growth rate 2.827% (1999-2008). Sudan had 597 tribes that speak over 400 different languages and dialects split into two major Ethnic groups: Arabs of the largely Muslim Northern Sudan versus the largely Christian and

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animist Nilote Southern Sudan of the south. These two groups consist of hundreds of smaller ethnic and tribal divisions, and in the latter case, language groups.

However, Sudan split into two countries in July 2011- the Republic of South Sudan and the Republic of Sudan-after the south voted for independence in a referendum stipulated by a peace agreement reached between the two parts of the country years earlier. Now, the Sudan is the second largest country in Africa, with an area of 1,882,000 Square Kilometers, and a population of 33,419,625 People as estimated in early 2011. It now shares land borders-totaling 6,780 km- with seven other states, including more than 2000 km. of borders with the Republic of South Sudan. The people of the post-referendum-Sudan descend from a mixture of many ethnicities and groups; most notable are (Arabs/African Hamites), and 96.7% of the population is Muslim, according to statistics released immediately after the independence of South Sudan. Age structure is 0-14 years 43.2%: 15-65 years 53.4%: 65 years and over 3.4 %. Median age is 59 years, (58 years for men and 61 for women). Population growth rate is 2.8% per year. Rate of urbanization: 32.9%. Population in urban areas represents 49% of total population.

Environment and the richness of resources such as oil, gold, silver, cobalt, and other minerals, it remains one of the poorest countries in the world. Droughts, famine, civil strife in the southern part of the country and Darfur, have caused large numbers of its population to be displaced inside and over the common borders with its neighbors.

Continued conflict between the central government and opposition forces in the Sudan regions of Darfur, Blue Nile, South Kordufan and Eastern Sudan have oftentimes reflected grave socio-political divide across the country and forced the allocation of considerable portion of the national budget to security purposes, depriving socio-cultural development of the vital investment it needs. This state of affairs exacerbated the struggle over natural resources and perpetuated the socio-economic disenfranchisement of the local communities.

The significant disparities between urban and rural areas have contributed to an increasingly urban informal sector which accounts for more than 60% of the Sudan gross domestic product. This fact encouraged rural-urban migration, which coupled with the influx of refugees and displaced persons as result of instability, contributed to the increased population movement.

## **2. Statement of the problem**

The factors driving HIV/AIDS epidemic in Sudan have been identified as war and the resulting population movements that included internally displaced persons, refugees, and military personnel. Sudan's long borders with nine African countries some of which have high HIV prevalence rates; the economic crisis and urbanization with remarkable rural-urban migration. All these conditions interact to provide an enabling environment for high risk sexual behaviours and rapid spread of HIV infection.

## **3. Research importance**

The AIDS epidemic in Sudan, according to the Middle East and North Africa (MENA) synthesis report, is concentrated in the Southern part of the country. Years of civil war and limited epidemiological data in Sudan makes it rather difficult for a proper assessment of the nature and dynamics of the epidemic.

And according to the epidemiological and behavioural review on the HIV situation in Sudan (August, 2009), the overall HIV prevalence is estimated at 1.1% (0.67% in the North) while it is expected to gradually increase up to 2.2% in 2015 (1.2% for North). Data from the estimation and projection for this reporting period for the North Sudan showed that in 2009, total number of adults and children living with HIV is about 122,216; AIDS orphans (ages 0-17) currently living with HIV/AIDS (27,888); total deaths, 6,301 (4,771 adults and 1,530 children). Number of new HIV infections 23,766 (21,416 adults; 2,351 children). Need for anti-retroviral treatment (ART) - adult aged (15+) 18,423, children 2,981, while mothers needing PMTCT is estimated at 6,715.

## **4. Research Questions**

1. Why are HIV/AIDS cases still high in Sudan while awareness is also high compared with other African countries in the region?
2. What are the socio-cultural behaviors and practices that may increased the spread of HIV infection?

## **5. Research Objectives**

### **5:1: General Objectives**

- a) In general, the main objectives of this study were to add a new valuable data set to the field of HIV/AIDS in Sudan and to enhance methodology on the research on HIV/AIDS socio-cultural and factors.

b) To evaluate the displaced sample knowledge and attitudes towards HIV/AIDS and to improve vulnerable population attitudes and practices towards HIV/AIDS.

### 5:2: Specific Objectives

Specifically the research intends to:-

- 1- Estimate the level of knowledge of HIV/AIDS among the studied population.
- 2- Find out why HIV/AIDS cases were still high in Sudan compared to some African countries in the region.
- 3- Identified the different socio-cultural factors that may contribute to the spread of HIV/AIDS in Sudan, included religious traditions, values, beliefs, practices, risky sexual behaviors and personal experiences.
- 4- Proposed some recommendations that may help in filling the information gap and developed the IEC/advocacy strategies in the area of HIV/AIDS.

### 6. Research Hypothesis

6:1: Nonsexual cultural practices that do not fit the age distribution pattern of AIDS, and may expose individuals to HIV include practices resulting in exposure to infected blood.

6:2: Information and awareness messages are confused, with unclear language or phrasing and no respect to the local cultures.

6:3: Low level of education leads to low level of awareness & knowledge.

6:4: There is further reason to believe that religious traditions and perceptions may be linked to stigma.

### 7. Methodology

#### 7:1: Study Design

Observational study design used cross sectional data.

#### 7:2: Characteristics of the Survey Population

Dar Al Salaam camp is located in (Jabarounah) western Omdurman, housing a displaced population (as a result of civil war, drought, and economic situation), of about 40,235 persons resident in this camp. The majority were nomads from different tribes (mainly from South and West of Sudan) Fullata, Bargo, Hawsa, Fur, Nuba, Dinka, Shuluk, Rawashdah, Jawamaah, Hassaniyah, Silehab, Rezegat, and Baggara. They are Muslims, Christians or followers of other believes.

#### 7:3: Sample design and size:

Provisionally the sample was selected on the basis of the following simple random sampling equation:

$$n^* = \frac{t^2 pq}{d^2}$$

### 9. Data collection

A quantitative approach technique is used to collect information through structured questionnaire and the review and analysis of available data from reports, publications and documents. Field survey was conducted by designing questionnaire to collect data and information, interviewing individuals and groups and gleaning life history from simple randomly selected sample 450 participants, male and female, age range from (18 to 65 years), from Dar Al Salaam Camp in Omdurman.

#### 9:1: Plan for Data Analysis and Interpretation

To ensure data collection quality, the field work supervisor reviewed the submitted questionnaire daily and reviewed any errors or inconsistency. The data entry stage started immediately after data collection was finished. The data entry took place at the Population Studies Centre of Gezira University. The data entry and analysis were performed using (SPSS). To ensure the quality of the process of data entry, double data entry is performed, with 99% accuracy.

Data analysis involves descriptive statistics as well as inferential statistics. Simple tabulation, frequencies and Chi-square test were used to test the differences between different variables.

All statistical tests were two-sided; and a level of  $P < 0.05$  was used to indicate statistical significance. Statistical analyses were performed using the SPSS (Version 18.0) software.

#### 9:2: Ethical Considerations

The principles of voluntary participation, informed consent, and confidentiality were strictly observed to protect the rights of research participants.

9:2:1: The required approval or permissions were obtained for field work from official authorities and departments to avoid violations.

9:2:2: Respondents' willingness to answer the questions was ensured.

9:2:3: Use of insensitive words or phrases during interviews was avoided.

9:2:4: Personal biases and opinions avoided (being fair).

9:2:5: Findings kept anonymous (respondents were told that research results will be anonymous).

9:2:6: Accurate presentation into the appropriate context of what was observed and told.

**Results of the Study:**

**1. Age distribution of the respondents according to gender**

The result showed that most of respondents are in their middle age with means age of (29.38) years, as the majority (85.8%) is within the age group 18 to 39, (43.3% were males and 42.5% were females), followed by the age group 40 and older, representing only 14.2% of the sample (5.8% males and 8.4% females).

Since chi-square was 50.701, df was 39 and p.value was 0.099 that means there were no relationship between respondent's age and their gender.

Table (1) Age distribution of the respondents according to gender

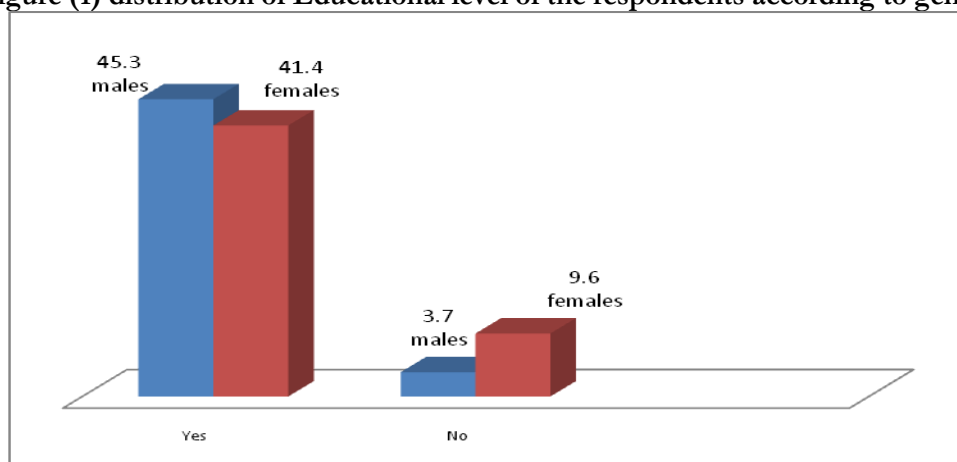
Age Group:	Male%	Female%	Total%	P.Value
18-28	28.9	28.7	57.6	0.099
29-39	14.4	13.8	28.2	
40-50	4.0	7.1	11.1	
51+	1.8	1.3	3.1	
Total			100	

Source: Own construction from survey data

**2. Educational level of the respondents according to gender**

The result showed that most of the respondents were literate, where 86.7% attended school, (45.3% were males and 41.4% were females), and 13.3% were illiterate (3.7% males and 9.6% females). It was clear that the majority of the study population have completed some level of education. Since chi-square was 11.959, df. = 1; and the p.value was 0.001 that means the relationship between the respondent's education and gender was highly significant.

Figure (1) distribution of Educational level of the respondents according to gender



Source: Own construction from survey data

**3. Distribution of the respondents Level of Schooling according to gender**

The result showed that high percentage 37.4% completed primary school, (females 19.8%, and male 17.6%), while the percentage of those who completed secondary school was 2.9%; (males 2.2% and females only 0.7%), ( The stage at which girls start work). High secondary school graduates were 18.2%, ( about 17.8% males

while females were 0.4%), which indicates that a number of students dropped out of school. 9.6% finished some level of khalwah education (*teach kids Islamic issues, "Qur'an & sunna"*); (2.2% were male and 7.4% were females). 8.7% were of higher education, (5.6% males while 3.1% were females). 47.6% of the respondents spent between one to eight years of education in khalwah and/or primary school, and 39.8% of the respondents spent between 9 to 16 years of education attending high secondary school and/or university or institute. Since chi-square was 39.481, df was 5 and p.value was .000 that means the relationship between the respondent's level of schooling and gender is highly significant.

**Table (2) Distribution of the respondents Level of Schooling according to gender**

Level of schooling	Male%	Female%	Total%	P.Value
Khalwah (Quranic school)	2.2	7.4	9.6	0.000
primary	17.6	19.8	37.4	
secondary	2.2	0.7	2.9	
high secondary	17.8	0.4	18.2	
university	5.6	3.1	8.7	
not applicable	3.7	9.6	13.3	
<b>Total</b>	<b>49.2</b>	<b>41.0</b>	<b>100</b>	

*Source: Own construction from survey data*

#### 4. Occupational distribution of study respondents according to gender

It should be noted that the house wife was the predominant occupation within the sampled group, with 38.7%, females while 0.3% were unemployed males; followed by those involved in some kind of private business representing 17.3% of whom 14.9% were males while females were only 2.4%; followed by students at 14.7%, with 9.8% males and 4.9% females; then informal business with 10.7%, with males representing 8.7% while females were only 2.0%; followed by labour representing 5.6%, with 4.7% males while females were 0.9%; followed by employees at 4.0%, with 2.4% males and 1.6 % females; professionals amount to 3.4%, with 2.7% males and 0.7% females; followed by workers in the uniformed forces, technicians and farmers amounting to 3.1%, 1.8% and 0.9% respectively. All of later were males. Since chi-square was 280.107, df was 9 and p. was .000 that means the relationship between respondents' occupation and their gender was highly significant.

**Table (3) Occupational distribution of study respondent according to gender**

Occupational:	Male%	Female%	Total%	P.Value
Housewife	0.3	38.4	38.7	0.000
Student	9.8	4.9	14.7	
Private Business	14.9	2.4	17.3	
Informal business	8.7	2.0	10.7	
Worker	4.7	0.9	5.6	
Employee	2.4	1.6	4.0	
Professional	2.7	0.7	3.3	
Uniformed forces	3.1	0.0	3.1	
Technician	1.8	0.0	1.8	
farmer	0.9	0.0	0.9	
<b>Total</b>			<b>100</b>	

*Source: Own construction from survey data*

A cross tabulation between respondents' main work and chance of getting HIV/AIDS undertaken. Those who said they have no risk at all were; housewives (26%), private business (12.7%), students (8%), informal business (6.4%), workers (3.6%), employees (2%), uniformed forces (1.8%), professionals (1.6%), and (0.9%) for each of the farmers and technicians.

Respondents who said they were at a high risk of getting HIV/AIDS were as follows: housewife (2.2%), private business (1.6%), students (1.3%), professionals (0.7%), workers (0.4%), and employee (0.2%). Since chi-square was 24.765, df. = 18, and p.value was 0.132 that means the relationship between respondent's work and knowledge about HIV/AIDS transmission is not significant.

## 5. Socio-cultural or traditional practices prevalence in the camp

The Polygamy was at top of the socio-cultural practices prevalence in the camp among different tribes amounting to 97.6%; followed by Piercing at 95.6%; Widow inheritance at 92.7%; Cross marriage at 88%; Male circumcision at 86.4% and is conducted in groups unless family has money to go to a private doctor. Hijamah (*sucking or drawing out blood from different places in the body, mainly neck and back, using a cups to vacuum and gathering the blood, then scratch the skin, draw out the blood*) this process amounts to 72.9%, while Fisada (*scratch the skin near the veins and let the blood flow out*) stands at 35.6%. Female Genital Mutilation is practiced among 21.8% mainly within the Muslims' tribes, and Tattoo came at the bottom of the risky socio-cultural practices with 10.7%. According to these results and high percentages of risky societal and cultural practices, these people still believed that the virus could not be transmitted through these traditional practices.

**Table (4) Socio-cultural or traditional practices that may contribute to the spread of HIV/AIDS**

practice	Yes%	No%	Total%
Fissadah	35.6	64.4	100
Hijamah	27.9	27.1	100
Tattoo	10.7	89.3	100
Male circumcision	86.4	13.6	100
Female circumcision	21.8	78.2	100
piercing	95.6	4.4	100
polygamy	97.6	2.4	100
Cross marriage	88	12	100
Widow inheritance	92.7	7.3	100

Source: Own construction from survey data

## 6: Heard of HIV/AIDS

97.3% of the respondents have heard of HIV/AIDS, while only 2.7% know nothing about it. Ahfad University for women, CAFA, CARE, Doctors without borders, and other local and international organizations have been launching awareness programs about different issues including HIV/AIDS. All these efforts produced such a high level of knowledge. But hearing of HIV/AIDS does not mean effective knowledge, as will be apparent from the next table results.

**Table (5) Distribution of the study respondents who heard of HIV/AIDS**

Response	Male%	Female%	Total%
Yes	48.2	49.1	97.3
No	0.9	1.8	2.7
<b>Total</b>	<b>49.1</b>	<b>50.9</b>	<b>100%</b>

Source: Own construction from survey data

## 7: Knowledge of respondents about HIV/AIDS:

This part presents information about awareness of HIV, knowledge of how it is spread and how it can be prevented, and misconceptions about the modes of transmission and prevention, in addition to the respondent's assessment of their personal risk of contracting HIV.

### 7:1 Respondent's Knowledge about the modes of HIV/AIDS Transmission

The results shows that only 13.8% of the respondents are aware of the four modes of HIV/AIDS transmission- 1) sexual intercourse, 2) blood transfusion, 3) from mother- to- child, 4) and through sharp objects (needles, razor blade, knives, others), while 6.9% do not know anything about the mode of transmission. 3.3% of the respondents knew the four modes of transmission plus one of the following wrong modes- through bugs and mosquito's bites, or toilet or witchcraft, or hugs.

19.6% knew the four modes of transmission plus two wrong modes from the above. 3.8% knew the four modes of transmission plus three wrong modes of transmission. 0.4% knew the four modes plus four wrong modes of transmission. 1.1% knew only three of the four modes of transmission. 9.0% knew three modes of transmission plus one wrong mode, 4.1% knew three of the four modes plus two wrong modes; 1.3% knew three modes of transmission but added more three wrong ones. 6.1% knew three modes plus four wrong modes. 4.2% knew only two modes of transmission, 1.1% knew two modes plus one wrong ones; 0.9% knew only one mode (sexual intercourse) and 0.4% of respondents knew one mode of transmission plus one wrong mode. This result clearly shows the misunderstanding of the modes of transmission, which means that the level of misconception about transmission of HIV through mosquitoes and bugs bites, sharing toilet, kisses, hugs, and witchcraft is still high among displaced people in Sudan.

### 7:2 this section represents the distribution of respondents who knew that a person can avoid getting the virus that cause AIDS.

The results showed that only 2.2% of the respondents knew that a person can avoid HIV/AIDS transmission by: 1) staying with one faithful uninfected partner, 2) use of condoms, 3) abstaining from sex, 4) delay sex practices, 5) reduce sex partners, 6) avoid sex with those who have more than one partner, 7) avoid sharing sharp objects, 8) and undergo HIV testing. But in addition to those means, they hold the misconception that the transmission can be avoided by praying to god with Duaa (*asking God to protect them from HIV/AIDS*) and traditional healers' treatments.

5.8% of respondents knew the above eight protective methods plus one unprotected method- mentioned above. 13.1% knew seven methods of protection plus, two unprotected methods- 6.7% knew seven methods of protection plus one unprotected mode. 1.6% knew seven methods of protection, 0.9% knew six protective methods plus two unprotected ones. 1.4% knew six methods of protection plus one unprotected way. 0.7% knew six methods of protection. 17.2% knew five methods of protections plus one unprotected method. 0.9% knew five methods of protections. 1.8% knew four methods of protections plus two unprotected methods. 1.1% knew four methods plus one of the unprotected methods. 0.9% knew three methods of protection plus unprotected methods 0.7% knew only two protective methods plus unprotected methods.

In all, it is clear that there is a misconceptions among respondents, 32% of the respondents believe that by praying to God they will be immune and protected from getting the HIV virus and kept safe. 17.8% believes in both traditional healer's treatments and praying to God for protection.

### 7:3 Knowledge about practices posing a high risk of getting infected with HIV.

Cross tabulation between school levels and possibility of getting HIV/AIDS indicates that those who think they were at high risk as follows; primary school (2.9%), high school (2.0%), university (0.9%), khalwah (0.7%), secondary school (0.0%), while respondents who did not attend any school or any type of education are (0.2%). Those whom believed that they were at low risk or no risk at all as follows: (1.3%) khalwah, (10%) primary school. (10%) high school, (1.1%) secondary school, (3.3%) university. Who said they have no risk at all were of university education (4.4%), high school (16.2%), secondary school (1.8%), primary school (22.2%), and (9.1%) never attended school and think they were safe. Since chi-square is 14.614, and df. Was 10 and p.value is 0.147, that means the relationship between respondents believes about the possibility of getting HIV/AIDS and the level of education is independent.

### 7:4 Knowledge about the possibility of a healthy looking person may be infected with HIV

The level of knowledge about the occupation period of infections and whether respondents can differentiate between HIV positive and AIDS patient and other diseases symptoms. 34.7% said a person with HIV can look healthy. 34.4% said he/she cannot look healthy. 30.9% do not know how he/she looks.

**Table (6) A healthy looking person can be infected with the HIV**

Healthy looking	Percentage
Yes	34.7
No	34.4
I do not know	30.9
<b>Total</b>	<b>100</b>

Source: Own construction from survey data

### 7:5 Knowledge about respondents ever been tested for HIV/AIDS

The results showed that whether the respondent had ever been tested. 6% of respondents said yes and 3.6% of them received the result. 2.7% asked for it, while 1.8% was required to have it and 1.2% offered to them and they accepted. This very low percentage indicates that the respondents don't know where they can get HIV test. This will appear in the next section.

**Table (7) Distribution of the respondents ever been tested for HIV/AIDS**

Ever been tested	Percentage
<b>Yes</b>	<b>6</b>
Whom they received the result	3.6
Asked for the test	2.7
Required to have test	1.8
Offered and I accepted to have test	1.2
<b>Not applicable</b>	<b>94</b>
<b>Total</b>	<b>100</b>

*Source: Own construction from survey data*

### 8. The respondent's reasons of having HIV Test

The attitudes of respondents towards why they would like to have a test or wouldn't. 46.4% would like to have a test to know if they were infected. 10% would like to have it to reduce the fear and anxiety. Followed by those whom they needed the test for marriage purposes at 2.9%; and 1% required the test for the purpose of employment.

**Table (8) Distribution of respondents about the reasons of having HIV test**

The main reason	Percentage
To reduce fear & anxiety	10.0
Required for employment	1.0
Required for marriage purposes	2.9
To know my status	46.4
Not Applicable	39.7
<b>Total</b>	<b>100</b>

*Source: Own construction from survey data*

### 8:1: The attitudes towards not having HIV Test

The result shows that 22.4% of respondents feel it is not necessary. 9.1% are afraid of knowing the result. 6% don't want to know if they were infected or not, and 3.3% can't afford the cost of test (compared to their economic situation).

**Table (9) The distribution of no desire to have HIV Test**

The main reason	percentage
I feel it is not necessary	22.4
Fear & anxiety	9.1
I don't want to know my status	6.0
I cannot afford its cost	3.3
<b>Total</b>	<b>40.8</b>

*Source: Own construction from survey data*

### 8:2 Knowledge about where to get an HIV test



67.6%, majority of respondents, do not know where they can get HIV/AIDS test, while 32.4% know where they can have the test.

**Table (10) Distribution of knowledge about where respondents can have the HIV test**

Respond	percentage
Yes I know	32.4
No I don't know	67.6
<b>Total</b>	<b>100</b>

Source: Own construction from survey data

#### 9: Rate of chances getting HIV/AIDS according to education level

63.6% of the total number believed they are not at risk at all. Of these, 54.5% attended school. 29.7% of the total believed they are at low risk; 25.8% of them attended school. 6.7% of the total believed that they are in danger or high risk, 6.4% of them attended school. Since chi-square = 2.846, df. is 2 and p. value = 0.241 that means there relationship between the respondents beliefs about chances of getting HIV/AIDS and their education is independent.

**Table (11) Distribution of respondents chances of getting HIV/AIDS according to their education**

Chance rate	Percentage	Attended school%	Not Attended school%
High risk	6.7	6.4	0.3
Low risk	29.7	25.8	3.9
No risk at all	63.6	54.5	9.1
<b>Total</b>	<b>100</b>	<b>86.7</b>	<b>13.3</b>

Source: Own construction from survey data

#### 10: The level of stigma and discrimination

Stigma and discrimination are the two major problems facing people living with HIV/AIDS in Sudan. Due to the fear of discrimination, individuals living with HIV/AIDS may be less inclined to live freely, openly acknowledging their HIV status. This can lead to under-reporting the epidemic and to resistance to the use of voluntary counseling and test.

#### 11: The respondent's attitudes and behaviours towards people with HIV/AIDS

**11:1** when asked respondents whether they would be willing to eat with somebody who has HIV, 50.7% of them said yes, while 43.8% said no and 5.6% said they do not know.

**11:2** the attitudes of students towards a co-student infected with HIV but not sick. 56.7% of respondents reported that an infected student should be allowed to go to the school with them, while 36.9% said no, and 6.4% said they do not know.

**11:3** 50.4% of the respondents accepted HIV positive teachers to continue teaching in their schools, while 41.2% said no and 8.4% said they do not know.

**11:4** 62.2% of respondents reported that they will not buy anything from a shopkeeper who is infected with the virus. 32% said yes they will buy from HIV positive shopkeepers, and 5.8% said they do not know.

**11:5** The percentage of the respondent's attitudes towards their colleague at work places if he/she has HIV. 47.1% said yes they will continue working with a colleague who is infected while 41.1% said no, and 11.8% said they do not know.

**11:6** The result of how the respondents behave if a family member has HIV/AIDS. 50% said no it shouldn't remain secret. 42.9% said it should be kept secret, and 7.1% they do not know.

**11:7** If respondent's relative has HIV/AIDS would he/she be willing to take care of him/her? 69.6% said yes, 24.9% said no, while 5.6% they do not know.

#### 12. The respondent's beliefs about health care that should be given to the people with HIV/AIDS.

66.9% believed that people with HIV/AIDS should be given more health care than others infected with other diseases. 16.2% believed they should have equal care, and 11.3% said they should have less care, while 5.6% said they do not know.

## **Conclusions**

The challenge of addressing the rising threat of the spread of HIV/AIDS in Muslim countries/societies is significant. The most effective method of controlling the spread of HIV/AIDS is public health education and changing behaviors. Political, financial, and social barriers have often kept the most effective prevention and treatment strategies from reaching groups at the highest risk.

### **The study showed that:-**

- 1- Population movements in Sudan contribute to the sexual mixing of various groups and may be related to the spread of AIDS. There were unprotected sex practices with partner whose HIV status is unknown. Multiple sex partner increases the risk of exposure to HIV/AIDS, especially among young people in the camp. Some females go downtown looking for work and they practiced sex with individuals from cities. The reasons for this included lack of sexual satisfaction with a regular partner or / and sickness.
  - 2- Commercial sex is practiced in and outside the camp. In the camp connected with alcohol drinking. As witnesses said, there were three days of continued drinking ceremonies, Thursday, Friday and Saturday and of course prostitution included. Outside the camp, sex is practiced with wealthier men, old or young doesn't matter. Some girls enter the prostitution for reasons related to poverty and lack of education.
  - 3- Lack of health care facilities and HIV/AIDS clinics remains the most important problem in Sudan.
  - 4- Inaccessibility of services often due to:-
    - a) Lack of awareness of whether the service were available or not.
    - b) If available, it is inaccessible, because of distance.
    - c) Or they cannot afford the cost of test or other factors.
  - 5- People whom infected may also be reluctant to adopt behaviour that might signal their HIV- positive status to others. For example, a married HIVpositive man may not use a condom to have sex with his wife. Many people do not want to get tested for fear of their community finding out.
  - 6- Lack of knowledge and misconceptions about HIV/AIDS. It appeared that, still many people unaware of the risks, especially those with low levels of formal education and who lack access to accurate, relevant information on HIV/AIDS and sexuality.
  - 7- Dangerous myths and misconceptions about HIV/AIDS, These include believing that the virus can be contracted by sharing food, hugs, kisses, sharing toilets, with the infected people and through mosquitoes and bugs bites. Beliefs such as this give people a false sense of their level of risk, and contribute to confusion about how HIV is transmitted or prevented (example, God will protect me).
  - 8- People who do possess some knowledge about HIV often do not protect themselves because they lack the skills, support or incentives to adopt safe behaviours.
  - 9- Young people may lack the skills to negotiate abstinence or Negative attitudes towards condom use, or be fearful of talking with their partner about sex. So, many young people pick up misinformation from their peers instead.
  - 10- Men regularly do not want to use condoms, because of beliefs such as "flesh to flesh" sex. Condoms also have strong associations of unfaithfulness, lack of trust and love.
  - 11- The importance of high fertility in the communities may hinder the practice of safer sex, and therefore people do not use condoms or abstain from sex.
- From the results, the socio-cultural issues identified and are possibly connected with increased virus transmission and can contribute to the spread of HIV/AIDS:-
- 12- Traditionally family encourage girls to have sexual intercourse only after marriage; boys can have sex in order to practice and to avoid not being described as homosexual (gay) so a boy can practice sex with adult women and sometimes with sex workers. If these women are infected these boys will be infected and they transmit this virus to their wives in the future and vice verse.
  - 13- Polygamous marriages, having more than one wife were a normal practices for the Moslem (sunnah) and culturally, socially practiced among other ethnic groups, and also for different reasons.(for example; sickness, desires on more kids, female sterility (infertility).
  - 14- Traditional marriages in rural areas within the same tribe were a mode to protect the group, and should be chosen by the parents. The one chosen was not known whether HIV infected or not.
  - 15- Cross Marriage or sisters' exchange could also have the same effect because nobody knows if one of them or both were infected or not.
  - 16- Widow inheritance, or substitution of wife/ husband, (who might have died of HIV/AIDS). The risk was even higher if engages in polygamous marriages.
  - 17- Body piercing for earring or nose or any parts according to the tribal cultures is still practiced with unsterile instruments.

- 18- Re-use of unsterile instruments the (knives, razors, seizers) by practitioners to for different ceremonies or practices one of it males circumcision in groups.
- 19- Sexual intercourse shortly at or after the time of girl circumcision or woman re-circumcision, when wounds are still open, is a less likely factor contributing to infection with HIV.
- 20- Hijamah and Fissadah, the practice involved a practitioner's used unsterile sharp objects to make cuts deep enough to allow blood to flow freely and rubbed the wound with mixture leaves ashes, potentially practitioner exposing himself to the patient's blood which may be unknown HIV infected or AIDS patient
- 21- Bloodletting: Traditional rural healers and midwives also were occasionally exposed to blood during their duties, sometimes family members when taking care of AIDS patient.
- 22- Gender inequality and male dominance perpetuate women's inferior status and afford them little or no power to protect themselves by insisting on condom use or refusing sex.
- 23- The stigma and discrimination against people with HIV/AIDS seem to be stronger, As a result and due to the fear, individuals living with HIV/AIDS are less inclined to live freely, declaring and acknowledging their HIV status. This leads to continued under-reporting of the epidemic, a resistance to the use of voluntary confidential counseling and testing services when available.
- 24- Many people do not know the transmission methods because of unclear messages, phrases or languages. Most of the HIV/AIDS messages were translated from scientific version or provided by external organizations. Even if it is provided by the local organizations, it is confusing and not understandable for groups like those residents in this camp and they used to exchange the information they learned, even if it is not correct.
- 25- The influence of religion is quite strong among some ethnic groups which states that a man should have sex only with his wife/wives, but in reality they don't.
- 26- The difficulty in establishing effective HIV/AIDS programs comes from a lack of openness in many societies, regarding sexuality, male-female relationships, illness and death, taboo subjects deeply rooted in the cultures. Finally, we could affirm that the results of this case study confirmed the hypothesis asserting that certain socio-cultural practices, particularly regarding sexuality, and traditional practices, could seriously obstruct the prevention campaigns and fight against HIV/AIDS. This situation is beyond the intervention of health professionals.

## References

- Global AIDS report, 2018. Geneva, Switzerland.
- Government of Sudan, Act on HIV/AIDS Prevention and Protection of the Rights of Infected Persons. (2006). (Draft). Khartoum, Sudan.
- HIV/AIDS integrated Report, North Sudan, (2004-2005), (Draft), Khartoum, Sudan.
- Mohamed S F; and Salah H. (2006). HIV Prevalence, Knowledge, Attitudes, Practices and Risk Factors among Truck Drivers in Khartoum State, Khartoum, Sudan.
- Omayma S-A. Gutbi and Ahmed M. G. Eldin. (2006). Women Tea-Sellers in Khartoum and HIV/AIDS: Surviving Against the Odds. Khartoum, Sudan.
- Sudan central bureau of statistics, (MICS / SMS 2000).
- Sudan National AIDS Control Programme, HIV/AIDS surveillance. Annual report (2004 -2005), Khartoum, Sudan.
- Sudan National AIDS Control Programme/ Federal Ministry of Health Report. Situation Analysis: Behavioral and Epidemiological Surveys, and response Analysis, (2002), Khartoum, Sudan.
- Sudan National Health Information Centre, Federal Ministry of Health. Annual Health Statistical Report 2006, Khartoum, Sudan.
- Sudan National AIDS Control Programme, National Communication Strategy and Guidelines for Planning and Carrying out Effective Communication. December (2006), Khartoum, Sudan.
- Sudan National AIDS Council. Sudan National Strategic Plan and Sectoral Plans on HIV/AIDS (2004 -2009), Khartoum, Sudan.
- The Federal Ministry of Health/Sudan report, (2011).
- UNAIDS Global Report, 2010, Geneva. Switzerland,
- UNAIDS Report (2005), on the global AIDS Epidemic.
- UNAIDS/WHO. AIDS epidemic report, (December 2005). Switzerland, Geneva.
- UNAIDS Report on global AIDS epidemic, (May 2006). Switzerland, Geneva.
- UNAIDS report, (2019).
- UNAIDS Global HIV/AIDS Statistics, 2019 Fact Sheet
- UNAIDS/WHO epidemiological facts sheet on HIV/AIDS and sexually transmitted infections, (Update, 2004). Switzerland, Geneva.

- United Nation general assembly special session on HIV/AIDS declaration of commitment, (February, 2006), New York, USA.
- UNICEF annual Report, 2004.
- World Health Organization, Summary country profile for HIV/AIDS treatment scale-up, (July 2004).
- World Health Organization. Global Prevalence and Incidence of Selected Curable Sexually Transmitted Infections Overview and Estimates, (2001) Geneva.
- World Health Organization Study, 1989, Geneva, Switzerland.
- World Health Organization / EMRO, report, 2005 Geneva, Switzerland.
- World Bank report, 1996.
- World Bank report, 2011.
- World Health Organization report 2008, Geneva, Switzerland.
- WHO country report, Khartoum, Sudan (2019).