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Session 3: Care Delivery and Response from the Frontline

Session chair: Mr. Azrul Mohd Khalib (UNTG)

KEYNOTE ADDRESS

David Musyimi Ndetei ***(Profession of Psychiatry, University of Nairobi, Kenya & Director, African Mental Health Foundation:AMHF)***

Mental Health Burden of HIV/AIDS in Developing Countries

The WHO Executive Board during their 124th session in a meeting on 20th November 2008 considered a report by the WHO Secretariat entitled "HIV/AIDS and Mental Health".

I believe this report to be the most authoritative summary of all the evidence linking HIV/AIDS and mental health.

Outline

- My talk will draw a lot from this report
- Illustrate the global scale and then have a quick look at Kenyan data
- Summarize the priorities for action, opportunities and challenges

I hope I will be able to convince you that indeed we can live up to the challenge.

Mental health and HIV/AIDS are closely interlinked;

- Mental health problems, including substance-use disorders
- Associated with increased risk of HIV infection and AIDS and interfere with their treatment
- Conversely some mental disorders occur as a direct result of HIV infection

Studies in both low and high income countries have reported higher rates of depression in HIV-positive people compared with HIV negative control groups.

Some studies have reported behavioral risk factors for transmission of HIV in between 30% and 60% of people with severe mental illnesses. The prevalence of mental illnesses in HIV-infected individuals is substantially higher than in the general population;

- High rates of sexual contact with multiple partners
- Injecting drug use

- Sexual contact with injecting drug users
- Sexual abuse (in which women are particularly vulnerable to HIV infection)
- Unprotected sex and low use of condoms
- Mental disorders may interfere with the ability to acquire and/or use information about HIV/AIDS and thus to practice safer behaviors or increase the likelihood of situations occurring in which risk behaviors are more common.
- Mental and substance-use disorders affect help-seeking behavior or uptake of diagnostic and treatment services for HIV/AIDS. Mental illnesses have been associated with lower likelihood of receiving antiretroviral medication.
- Substance-use disorders affect both the progression of HIV disease and the response to treatment.

Therefore it is not surprising that there is a high seroprevalence of HIV infection in people with serious chronic mental illnesses.

HIV/AIDS and injection drugs use:

- About 10% of HIV cases wordwide are attributable to injecting drug use
- About three million injecting drug users might be infected with HIV.

The Burden

- HIV/AIDS is a significant cause of death and disability especially in low and middle income countries. UNAIDS estimates that in 2007, 33 million people were living with HIV.
- HIV/AIDS imposes a significant psychological burden. People with HIV often suffer from depression and anxiety as they adjust to the impact of the diagnosis, for instance shortened life expectancy, complicated therapeutic regimens, stigmatization and loss of social support, family or friends.
- HIV infection can be associated with high risk of suicide or attempted suicide. The psychological predictors of suicidal ideation in HIV-infected individuals include concurrent substance-use disorders, past history of depression and presence of hopelessness.
- Apart from psychological impact, HIV infection has direct effects on the central nervous system, and causes neuropsychiatric complications including HIV encephalopathy, depression, mania, cognitive disorder and frank dementia, often in combination.
- Infants and children with HIV infection are more likely to experience deficits in motor and cognitive development compared with HIV negative children.
- Cognitive impairment in HIV/AIDS has been associated with greatly increased mortality, independent of other factors such as baseline clinical stage, CD4+ cell count, serum hemoglobin concentration, antiretroviral treatment, and social and demographic characteristics.

Urban Areas

Table 1: Methods/Routes of Use of Drugs (%)

	Mombasa n = 314	Malindi n = 75	Nairobi n = 340	Nakuru n = 222	Kisumu n = 209
Swallow	33.4	16.0	47.4	59.5	72.2
Smoke	43.9	62.7	30.6	32.4	23.9
Snort/Sniff	5.7	0.0	5.0	5.0	1.4
Inject	12.1	21.3	15.9	0.9	1.9
Others	4.8	0.0	1.2	2.3	0.5

Oral (45.7% on average) and nasal (38.7%) were by far the most common modes of consumption of drugs, followed by parenteral administration (injectable) at 10.4% on average (Table 3).

Table 2: Pattern of drug Injection (%)

	Mombasa	Malindi	Nairobi	Nakuru	Kisumu
i. Annual prevalence rates of IDUs					
Once a week	1.1	0.5	12.9	6.1	4.3
More than once a week	1.7	9.3	34.9	3.3	11.2
Once a day	2.9	0.5	4.4	2.0	0
More than once a day	17.1	10.4	3.8	0.4	0
Non-injectors	77.1	89.6	44.0	88.2	84.5
ii. Injecting self alone. Yes	12.9	0.5	12.9	4.9	2.2
iii. Annual use of needle after others. Yes					
Once	5.1	9.3	26.1	3.7	12.6
Up to 5 times	3.7	0	3.8	1.2	0
More than 5 times	4.3	0.5	7.1	3.7	0
iv. Use of the needle after others. Yes					
One person	4.6	0	3.0	4.1	0.7
Up to 5 people	3.7	0	3.0	0.4	0
More than 5 people	3.7	0.5	6.6	2.4	0
v. Dispensing used needle to others in 12 months. Yes					
Once	3.7	2.7	17.0	2.0	32.5
Up to 5 times	2.9	0.9	3.3	1.6	0
More than 5 times	4.3	0.5	6.6	3.7	0
vi. Cleaning needles before re-use in 12 months. Yes					
Every time	8.9	1.6	3.8	2.0	1.1
Sometimes	9.1	0	8.8	1.6	2.9
Never	4.3	0	11.3	14.6	1.1
vii. Bleaching needle in the					

	Mombasa	Malindi	Nairobi	Nakuru	Kisumu
last 12 months. Yes					
Every time	1.7	1.6	10.2	3.7	24.2
Sometimes	2.3	5.5	23.6	2.4	15.2
Never	20.3	2.7	30.8	19.9	24.9
vii. Equipment cleaning in ways other than afore mentioned. Explain:					
Boiling	4.9	0.5	3.6	4.9	0.4
Disinfectant	0.9	0	1.9	3.3	0
Direct heating	0	0	0.5	0.4	0
Other	10.6	0	0.5	0.8	0

Table 3(a): Needle sharing behavior

Study Sites	Use of a needle after someone else in the last 12 months (%)			
	Never	Once	Up to 5 times	> 5 times
Mombasa	47.1	35.3	17.5	0.0
Malindi	0.0	0.0	0.0	100.0
Nairobi	37.1	17.1	14.3	31.4
Nakuru	73.3	13.3	6.7	6.7
Kisumu	80.0	0.0	0.0	0.0
Average	47.5	13.1	7.7	27.6

Those who knew that they were HIV positive used needles that had just been used by somebody else. This practice was most frequent in Malindi and Nairobi but was not found in Kisumu.

Table 3(b): Drug injection & HIV status

HIV status +ve.	Others using needle before respondent in the last 12 months (%)			
	Never	Once	Up to 5 times	> 5 times
Mombasa	46.7	26.7	26.7	0
Malindi	0	0	0	100.0
Nairobi	44.0	12.0	8.0	36.0
Nakuru	73.3	26.7	0	0
Kisumu	100.0	0	0	0
Average	52.8	13.1	6.9	27.2

Those who knew that they were HIV positive passed on the needles they had used to others to also use. This practice was commonest in Malindi, followed by Nairobi but was not found in Kisumu. Thus awareness in HIV transmission and positive in HIV status was not reflected in the practice of sharing needles, at least on the part of those who already knew their positive status. However the findings for Malindi should be seen in the light of Table 3(d) below.

Table 3(c): Drug injection & HIV status

HIV status +ve.	Others people using needle after respondent in the last 12 months (%)			
	Never	Once	Up to 5 times	> 5 times
Mombasa	66.7	6.7	26.7	0
Malindi	0	0	0	100.0
Nairobi	40.0	20.0	14.3	25.7
Nakuru	66.7	20.0	13.3	0
Kisumu	80.0	0	0	0
Average	50.7	9.3	10.9	2.5

This table reflects the findings of Table 3(b).

Table 3(d): Drug injection & HIV status

HIV status +ve.	Cleaning of needles before re-use in the last 12 months (%)			
	No re-use	Every time	Sometimes	Never
Mombasa	21.4	7.1	28.6	42.9
Malindi	0	100.0	0	0
Nairobi	18.5	18.5	29.6	33.3
Nakuru	13.3	13.3	0	73.3
Kisumu	100.0	0	0	0
Average	30.6	27.8	11.6	30.0

Malindi cohort always cleaned their needles, thus putting into practice their knowledge on the risks involved in sharing needles. In Kisumu there was no sharing of needles. In all the other cohorts, majority cleaned only sometimes or never.

Table 3(e): Drug injection & HIV status

HIV status +ve.	Bleaching needles before use in the last 12 months (%)		
	Every time	Sometimes	Never
Mombasa	0	0	100.0
Malindi	0	0	100.0
Nairobi	16.2	35.1	48.6
Nakuru	0	13.3	86.7
Kisumu	20.0	0	80.0
Average	7.2	9.7	83.1

Bleaching of needles was a practice found only in upcountry cohorts.

Table 4: Use of condoms vs. HIV status (%)

	Mombasa	Malindi	Nairobi	Nakuru	Kisumu
Frequency of use a condom whenever you have sex vs. awareness of HIV status					
Not at all	20.0	35.0	22.4	27.1	32.3
Sometimes	42.1	35.0	55.2	43.9	41.2
Always	37.9	28.8	22.4	29.0	26.5

	Mombasa	Malindi	Nairobi	Nakuru	Kisumu
Frequency of use a condom whenever you have sex vs. HIV status					
Not at all	19.0	37.5	27.7	30.8	34.5
Sometimes	53.2	29.2	47.7	48.7	34.6
Always	27.8	33.2	24.6	20.5	26.9

Whether they were aware of HIV status or not, the majority did not use condom during sex, again reflecting a gap between knowledge on HIV transmission and practice.

Table 5: Laboratory results

A total of 120 were recruited, 111 males and 9 females

Number of drug abusers tested	**120**	**Percentage**
Hepatitis C+	73	60.83
HIV +	50	41.66
Number of IDU's tested	**101**	**Percentage**
Hepatitis C+	71	70.29
HIV +	50	49.50

Of the total sample of 120, seventy three tested positive for Hepatitis C (60.83%) and 50 tested positive for HIV (41.66%). Out of that sample 10 were IDU's . All who tested positive for HIV (50) were IDU's (49.5%), and 70.29% who tested positive for Hepatitis C were IDU's.

Table 6: Age distribution

Age	**Number of drug abusers tested 120**	**Percentage**	**HIV +**		**HCV +**	
			Number	**Percentage**	**Number**	**Percentage**
17 – 30	65	54.2	27	26.73	39	38.61
31 – 40	43	35.8	19	18.81	27	26.73
41 – 52	12	10.0	4	3.96	5	4.95
Total	101	100	50	49.5	71	79.29

Table 7(a): Gender

Gender	**Number of drug abusers tested 120**	**Percentage**
Male	111	92.5
Female	9	7.5
Gender	**Number of IDU's tested 101**	**Percentage**
Male	94	93.06
Female	7	6.94

The low turnout of females to participate in the study can be attributed to the following :

1. Their low number in general.
2. Their fear of being tested, as many of them are also commercial sex workers.
3. Little attention has been paid to them as an affected group up to now.

Table 7(b): Gender

Gender	Number of IDU's tested	Number of HIV +	Number of Hepatitis C+
Male	94	46	66
Female	7	6	5

Out of the 7 female IDU's, six tested positive for HIV/AIDS and 5 tested positive for Hepatitis C, Out of the 94 male IDU's, 46 tested positive for HIV/AIDS and 66 tested positive for Hepatitis C.

Of the total sample of 120, seventy three tested positive for Hepatitis C (60.83%) and 50 tested positive for HIV (41.66%). Out of that sample 101 were IDUs. All those who tested positive for HIV (50) were IDUs (49.5%)

Conclusions based on Kenyan experience

1. IDUs is an emerging phenomenon in Kenya, and there is urgent need for intervention practice to keep it in check
2. There is a high correlation between IDUs and HIV in Kenya:
    - Laboratory tests on a cohort of IDUs in Mombasa found that 49.5% were HIV positive. This was a forward for testing and may therefore have been a cause of underestimation of the percentage of iinkages.
    - An average of 68 – 88 % of different cohorts of IDUs very active in drug abuse and injecting drug abuse were HIV positive.
3. There is an urgent need to prevent IDU from becoming a major vector of HIV in Kenya
4. This study indicates homosexuality as an emerging sexual practice in Kenya. This was particularly found amongst youth, drug users and IDUs
5. In spite of knowledge on how HIV is transmitted, this is not reflected in both drug abuse and sexual activity pattern
6. The research indicates that drug abuse predisposes to risky sexual behavior. This in turn fuels more drug abuse. This was confirmed by qualitative data

Recommendations

1. There is an urgent need to develop new policy on IDU and its relationship to HIV.
2. There is an urgent need to translate policy into action in a comprehensive inclusive way.
3. Urgent research is required to bridge the gap between knowledge and practice in relation to drug abuse, injecting drug use, sexual practice and HIV.
4. Timely interventions are indicated to limit the spread of HIV among drug users and Injecting Drug Users.

General priorities for action

1. Integration of mental health and HIV/AIDS diagnostic information and mental health systems:

- Integrated training tools for diagnosis
- Joint management
- Supervision

2. Appropriate policy to back the integration
3. Operational research so that developing countries can have their own data

It is unacceptable that despite the fact that developing countries carry more than 90% of the burden of HIV/AIDS, little information about the interaction between HIV/AIDS and mental health is available from low and middle-income countries.

Yes We Can!!!