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Distress, depression and anxiety among persons seeking HIV testing

A Kagee¹, W Saal¹, and J Bantjes¹

¹Department of Psychology, Stellenbosch University, Stellenbosch, South Africa

Abstract

We investigated psychological distress and symptoms of depression and anxiety among 485 South Africans seeking HIV testing. The mean scores of the sample were 45.78 (SD=16.81) on the Hopkins Symptom Checklist; 15.8 (SD=12.4) on the Beck Depression Inventory; and 12.44 (SD=13.00) on the Beck Anxiety Inventory, which fell in the elevated, mild, and low ranges on these instruments, respectively. For more than a third of participants, symptoms of depression and clinically significant distress were at least moderate and in some cases severe, indicating that they may have benefitted from psychological help. We make the case that symptoms of depression and distress are common among persons seeking HIV testing and are therefore not a consequence of an HIV positive test result.

Keywords

Depression; distress; anxiety; test-seeking

It has been assumed that receipt of an HIV positive result may cause a person to become depressed, traumatised, or in some way psychologically disordered (e.g. Freeman, 2004). Yet, it is largely unknown whether psychological distress precedes HIV testing or whether receipt of an HIV positive test precipitates distress.

Persons living with HIV in South Africa often have high rates of depressive symptoms e.g. 34.9% (Olley, Gxamza, Seedat, Theron, Taljaard, Reid, Reuter, & Stein, 2003); 14% (Myer, Smit, Roux, Parker, Stein, & Seedat, 2008); and 11.1% (Freeman, Nkomo, Kafaar, & Kelly, 2007) and are comparably higher than that of the general South African population, which was found to be 9.8% (Herman, Stein, Seedat, Heeringa, Moomal, & Williams, 2009). In this study we report on symptoms of depression, anxiety and distress among persons seeking HIV testing, i.e. prior to their receiving an HIV test result.

METHOD

Participants

Participants were recruited by means of convenience sampling at five HIV testing sites in South Africa.

Procedures

When HIV test-seekers registered at the testing site, they were handed a flyer about the study and invited to meet with a researcher who invited them to participate. Those who agreed completed an informed consent form and participated in an interview. Eligibility criteria included not having symptoms of a psychotic disorder and being able to understand English.

Data collection

A cadre of trained data collectors administered the measures using an electronic tablet. The study was approved by the Stellenbosch University Health Ethics Committee. Participants who had clinically significant distress or a mental disorder were referred to a local mental health centre.

Measures

Psychological distress—We used the 25-item version of the Hopkins Symptom Checklist (HSCL-25; Hough et al., 1982) to assess global psychological functioning over the past month. The HSCL has been used in several studies among South African samples (Kagee, 2005; Kagee, 2008; Nel & Kagee, 2011; Kagee & Martin, 2010).

Symptoms of depression—The 21 item Beck Depression Inventory (BDI) (Beck, Steer, Garbin, 1988) was used to measure symptoms of depression. It has been used in a variety of studies worldwide, including South African (Martin & Kagee, 2010; Kagee, 2008).

Symptoms of anxiety—The 21 item Beck Anxiety Inventory (BAI) was used to measure symptoms of anxiety during the week prior to participating in the study. The scale has demonstrated high content, concurrent, construct, discriminant, and factorial validity (Beck & Steer, 1993; Steel and Edwards, 2008).

Analysis

SPSS version 22 was used to calculate descriptive statistics and conduct t-tests.

RESULTS

Description of the sample

525 test-seekers were approached, of whom 40 (7.6%) declined, yielding 485 participants (49.1% males; 50.9% females; mean age 36 years). As shown in Table 1, most participants (72.0%) classified themselves as “Coloured” (an apartheid racial category indicating mixed heritage), followed by 26.8% African and 0.8% White. Most participants (68.5%) indicated Afrikaans as their first language, and 6.0% and 20.0% stated that English and isiXhosa were their first languages, respectively. Almost all participants were conversant in English. Nearly half the sample were unemployed and had a family income of less than R10 000 (\$750) per annum.

Psychological distress

The internal consistency coefficients for the HSCL, BDI and BAI as measured by Cronbach's alpha were excellent: 0.95, 0.91, and 0.94, respectively. Table 2 shows the sample means for these measures. As can be seen in Table 3, the mean score on the HSCL was 45.58, which was in the clinically significant range and was significantly higher ($p=0.02$) than the cut-point for clinically significant distress of 44. The mean score on the BDI was in the range for mild depression and the mean score on the BAI was in the range for low anxiety. As can be seen in Tables 4, 5 and 6, on the HSCL 43.9% of the sample scored in the clinically significant range; on the BDI 38.4% scored in the moderate and severe ranges; and on the BAI 21.2% scored in the moderate to severe range.

In Table 7, we summed the percentage of the sample who endorsed the HSCL items "quite a bit" and "extremely". Those most commonly endorsed were "worrying too much about things" (43.8%), followed by "headaches" (34.8); "blaming yourself for things" (32.3%); "feeling low in energy" (28.8%); "feeling hopeless" (28.6%) and "feeling lonely" (28.6%).

Symptoms of depression

Table 2 displays the mean score of the sample on the BDI of 15.8 and the associated standard deviation of 12.4, which fell in the mild to moderate range. As can be seen in Table 5, more than a third of the sample scored in the moderate and severe ranges and nearly one fifth (17%) scored in the severe range, indicating that a substantial proportion of the sample experienced clinically significant symptoms of depression.

As can be seen in Table 8, more than 30% of participants endorsed all items on the BDI, with the exception of the suicidality item. Further, more than 50% of the sample endorsed 8 items in the scoreable direction, namely, Pessimism, Loss of satisfaction, Self-criticalness, Irritability, Work inhibition, Sleep disturbance, Somatic preoccupation, and Tiredness or fatigue. Nearly, 80% of the sample reported minimal anxiety and about one fifth reported moderate or severe anxiety.

DISCUSSION

On average, participants in the study reported elevated psychological distress. The HSCL mean score of 45.58 was significantly higher than the commonly used cut-point of 44 and comparable with other South African samples, for example, South African former political detainees (56.18) (Kagee, 2005), patients living with hypertension (45.39); diabetes (41.36); and HIV (47.24) (Kagee, 2010). Almost half our sample scored in the clinically significant range on the HSCL. The major indicators of distress were worry, self-blame, low energy and hopelessness. Less than half the sample reported being employed and thus the demands on cognitive capacity brought on by unemployment may have led to excessive worry, self-blame and a sense of hopelessness. It is possible that a residual level of psychological distress may be present in many poor South African communities that is independent of their seeking HIV testing.

On the BDI, the mean score of the sample fell in the range for mild depression, although 38.4% scored in the moderate to severe range. More than a third of participants had

clinically significant symptoms of depression and may have benefitted from psychological help.

Several items were endorsed in the scoreable direction by over 50% of the sample. These items – Pessimism, Loss of satisfaction, Self-criticalness, Irritability, Work inhibition, Sleep disturbance, Somatic preoccupation, and Fatigue – have significant implications for the quality of life of study participants. Our data do not permit us to speculate whether it is HIV test-seeking – and presumably a sense of HIV risk – that accounted for our results, as we did not compare the sample to members of the general public who were not seeking testing. This is a potential area for further study.

On the BAI, the mean score of the sample fell in the low range. More than one fifth of participants scored in the moderate to severe range, indicating that anxiety was indeed a concern for these individuals. However, it was not a salient feature of the psychological condition for most participants, which is consistent with our findings on the anxiety subscale of the HSCL.

Rather than being precipitated by an HIV test result, we found that distress and symptoms of depression and anxiety are part of the psychological presentation of individuals seeking an HIV test. Many individuals may have symptoms of common mental disorders even prior to HIV testing. Thus it is necessary to explore ways to integrate psychological services within the HIV testing context so that these symptoms may be resolved in a timely manner. At the very least, staff at testing sites should be alerted to the possibility that test-seekers may be distressed. A referral trajectory should be identified that those needing psychological support may access.

Individuals who test positive for HIV and who are also depressed or otherwise distressed are less likely to enrol in antiretroviral therapy and those who do are less likely to be adherent to their medical regimens than persons who are non-distressed (Nel & Kagee, 2011; 2013). If psychological screening is implemented in the context of routine HIV testing, then individuals who have elevated distress may be followed up to determine the nature and severity of their symptoms and then referred for psychological treatment. The existence of such referral trajectories require adequate funding in the health system which, in the context of competing public health needs, may be difficult. Nonetheless, unmet mental health needs of HIV test-seekers require the attention of health policy makers.

Almost all participants who were approached to participate did so, thus minimising the likelihood of sampling bias. As the sample was recruited in the Western Cape in South Africa, generalising our results to other provinces is limited. Medical services, particularly primary health care, in South Africa remains largely biomedical and focuses on symptoms of physical illness. This study highlights the need for integrated person-centred psychological care at primary health care level in South Africa.

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Table 1

Demographic Characteristics of the Sample

	Number of respondents (n = 485)	% of total sample
Gender		
Male	238	49.1
Female	247	50.9
Race		
African	130	26.8
“Coloured”	349	72.0
White	4	0.8
Other	2	0.4
First language		
Afrikaans	332	68.5
English	29	6.0
Xhosa	97	20.0
Other	27	5.5
Current work situation		
Employed fulltime	95	19.6
Employed part-time	101	20.8
Unemployed	228	47.0
Homemaker	11	2.3
Student	28	5.8
Disabled	6	1.2
Retired	16	3.3
Annual family income		
Less than *ZAR10 000	194	40.0
ZAR 10 001 – ZAR40 000	199	41.0
ZAR 40 001 – ZAR 80 000	56	11.5
ZAR 80 001 – ZAR 110 000	20	4.1
ZAR 110 001 – ZAR 170 000	8	1.6
ZAR 170 001 – ZAR 240 000	5	1.0
ZAR 240 000 and above	3	0.6
*15ZAR = 1USD		
Age (years)		
Mean	36.09	
Median	34.00	
Range	53	
Minimum	18	
Maximum	71	

Table 2

Means on the HSCL, BDI and BAI

Instrument	N	Mean	SD
HSCL Anxiety	493	17.3	6.29
HSCL Depression	493	28.46	11.23
HSCL Total	485	45.78	16.8
BDI	454	15.8	12.4
BAI	485	12.44	13.00

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Results of T-test for difference between the sample mean and clinical cut-point of 44

Table 3

	Mean	SD	T	Df	Sig (2-tailed)	Mean diff.	95% CI
HSCL-Tot	45.78	16.81	2.33	484	0.02	1.78	0.28–3.28

Table 4

Percentage of sample scoring above clinical cut-point of 44 on HSCL

	N	%
44	272	55.2
> 44	213	43.9

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Table 5

Percentages of the sample in each BDI category

	N	%
Normal (5–9)	184	37.3
Mild to moderate (10–18)	135	27.4
Moderate to severe (19–29)	97	19.7
Severe (30–63)	77	15.6

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Table 6

Percentages of the sample in each BAI category

	N	%
Low anxiety (0–21)	382	78.8
Moderate anxiety (22–35)	65	13.4
Severe anxiety (36–63)	38	7.8

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Table 7

Percentages of the sample endorsing items of the HSCL

Item no	Item Name	Not at all	A little	Quite a bit	Extremely	Quite a bit + extremely
1	Suddenly scared for no reason	59.4	25.8	11.0	3.9	14.9
2	Feeling fearful	56.6	26.8	12.2	4.5	16.7
3	Faintness, dizziness	50.1	29.0	13.4	7.5	20.9
4	Nervousness, shakiness	50.7	27.4	16.6	5.3	21.9
5	Heart pounding	52.5	28.6	12.8	6.1	18.9
6	Trembling	72.0	18.3	6.9	2.8	9.7
7	Feeling tense or keyed up	46.5	30.6	14.8	8.1	22.9
8	Headaches	30.2	34.9	17.8	17.0	34.8
9	Spells of terror or panic	66.9	20.7	9.7	2.6	12.3
10	Feeling restless, can't sit down	49.1	25.4	15.4	10.1	25.5
11	Feeling low in energy	37.9	33.3	17.8	11.0	28.8
12	Blaming yourself for things	40.0	27.8	18.1	14.2	32.3
13	Crying easily	45.6	27.0	11.8	15.6	27.4
14	Loss of sexual interest	51.1	22.3	14.4	12.2	26.6
15	Poor appetite	53.5	24.9	12.6	8.9	21.5
16	Difficulty falling asleep	46.2	25.8	13.0	15.0	28.0
17	Feeling hopeless	46.0	25.4	12.8	15.8	28.6
18	Feeling blue	55.4	25.2	12.8	6.7	19.5
19	Feeling lonely	47.1	24.3	13.4	15.2	28.6
20	Feeling trapped or caught	59.2	20.3	12.2	8.3	20.5
21	Worrying too much about things	25.6	30.6	18.9	24.9	43.8
22	Feeling no interest in things	49.7	25.2	15.0	10.1	25.1
23	Thoughts of ending your life	73.2	12.8	7.3	6.7	14.0
24	Feeling everything is an effort	46.2	30.6	13.6	9.5	23.1
25	Feelings of worthlessness	54.8	20.9	13.0	11.4	24.4

Table 8

Percentage of participants who endorsed scores on the BDI in the scoreable direction

Item	% endorsed in the scoreable direction
Sadness; low mood	45.6
Pessimism	51.0
Sense of failure	46.5
Loss of satisfaction	57.1
Feelings of guilt	46.6
Sense of being punished	48.7
Self-hate	43.0
Self-criticalness	51.5
Suicidal thoughts or wishes	23.9
Crying spells	39.7
Irritability	50.5
Loss of interest	44.6
Indecisiveness	42.6
Body image	34.6
Work inhibition	54.1
Sleep disturbance	50.4
Somatic preoccupation	52.0
Loss of libido	48.4
Tiredness or fatigue	52.5
Loss of appetite	49.5
Weight loss	42.7