Impact of HIV on quality of life: Preliminary data using the HIV-Dependent Quality of Life (HIVDQoL) questionnaire in the UK and US

PE25/16

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OBJECTIVES

To compare the impact of HIV on quality of life (QoL) in the US and UK, using the newly developed condition-specific HIVDQoL (HIV Dependent Quality of Life) questionnaire. Data from the generic 16-item well-being questionnaire (W-BQ16) are now available and are also presented below.

METHOD

Using a survey design, 255 participants (UK=128, US=127), were recruited via the internet by Opinion Health. Participants were provided with a questionnaire pack and given the option to complete and return the pack individually (via post) or with a researcher (via telephone). Included in the pack were measures of QoL (HIVDQoL), well-being (W-BQ16), treatment satisfaction (HIVTSQ), medication adherence (HIVMQ), symptoms (HIVSRQ) and health status (EQ-5D).

Table 1: Participant Details

Country		Age				Gender		Years since Diagnosis			
	N	Mean	SD	Min	Max	Male	Female	Mean	SD	Min	Max
UK	128	47	9.10	25	72	99	29	12	8.30	1	30
US	127	51	11.68	25	78	104	20	19	9.40	0	36

HIVDQoL: The HIVDQoL, following the template from the ADDQoL for diabetes [1,2] and -DQoLs for other conditions, includes two overview items (generic 'present QoL' and ´HIV-specific QoL') and 26 domain-specific two-part items measuring HIV impact on the domain and domain importance for QoL. Twelve items have a not-applicable option (see Figure 1). Impact scores (-3 to +1) are multiplied by importance (3 to 0) to give Weighted Impact (WI) scores. In this way the HIVDQoL is sensitive to the fact that any given aspect of life may have different significance to different individuals and as such is likely to have varying impact on QoL and that the importance of a particular aspect of life may change over time even for the same individual. WI scores are summed and divided by the number of applicable items giving an average weighted impact (AWI) score (-9 greatest negative impact to +3 greatest positive impact). The HIVDoL thereby provides a highly personalised assessment of the impact of HIV on an individual's QoL.

2	**Are you currently working (paid or voluntary work)?** **Yes** ☐ **No** ☐ If ***yes***, complete **(a)** and **(b)**. **If *no*, would you like to work?** **Yes** ☐ **No** ☐ If ***yes***, complete **(a)** and **(b)**. If ***no*** to both questions, go straight to **3**.
(a)	**If I had *never had* HIV, my working life would be:** ☐ very much better ☐ much better ☐ a little better ☐ the same ☐ worse
(b)	**For me, having a working life is:** ☐ very important ☐ important ☐ somewhat important ☐ not at all important

Figure 1: HIV-specific domain item - item includes a non-applicable option

W-BQ16: The Well-Being Questionnaire, 16-item version (W-BQ16)[3] is a generic measure of well-being. Divided into four subscales the W-BQ16 measures negative well-being (e.g. depressed mood and anxiety), energy levels (e.g. tired, dull), positive well-being (e.g. happiness, coping), stress (e.g. demands, obstacles) and overall general well-being. As shown in Figure 2 respondents give answers on a 4-point scale ranging from '*All the time'* (scored as 3) to '*Not at all'* (scored as 0). Subscale scores range from 0 to 12 and general well-being scores from 0 to 48. The higher the score the higher the levels of negative well-being, energy, positive well-being and stress (see Poster PE25/13 for more details).

		all the time			not at all
3	I feel afraid for no reason at all ……	3	2	1	0

Figure 2: Example item from the W-BQ16 taken from the Negative Well-Being subscale

RESULTS

Table 2: Weighted Impact Scores Ordered by Greatest Negative Impact

		UK Data							US Data				
Item N	QoL Domain	N	Mean	Std. Deviation	Min	Max	Item N	QoL Domain	N	Mean	Std. Deviation	Min	Max
15	Stigma	96	-5.66	2.96	-9	0	15	Stigma	89	-4.35	3.22	-9	0
16	Conceal	112	-5.22	3.06	-9	0	19	Depend	86	-4.09	3.18	-9	0
26	Sleep	125	-4.82	3.73	-9	3	18	Finance	126	-3.99	3.81	-9	3
17	Future	127	-4.80	3.29	-9	3	16	Conceal	92	-3.98	3.16	-9	0
9	Dates	82	-4.51	2.83	-9	0	25	Children	47	-3.89	3.57	-9	0
19	Depend	85	-4.40	3.43	-9	3	6	Do Physically	126	-3.88	3.44	-9	3
11	Sex Life	121	-4.21	3.28	-9	3	17	Future	127	-3.80	3.28	-9	3
13	Confidence	125	-4.05	3.31	-9	3	11	Sex Life	118	-3.59	3.39	-9	3
6	Do Physically	128	-4.00	3.45	-9	3	2	Work	116	-3.53	3.48	-9	3
10	Relationships	116	-3.84	3.63	-9	3	9	Dates	88	-3.53	3.14	-9	0
25	Children	43	-3.81	3.46	-9	2	10	Relationships	116	-3.41	3.72	-9	3
18	Finance	126	-3.69	3.49	-9	3	26	Sleep	127	-3.39	3.43	-9	0
20	Others Worry	88	-3.66	3.08	-9	0	12	Appearance	127	-3.35	3.12	-9	2
2	Work	115	-3.62	3.71	-9	3	14	Motivation	127	-3.13	3.20	-9	2
1	Leisure	128	-3.29	2.89	-9	1	13	Confidence	127	-2.97	3.35	-9	3
14	Motivation	125	-3.17	3.72	-9	3	1	Leisure	127	-2.91	3.34	-9	3
4	Out & About	128	-3.15	3.32	-9	2	5	Journeys	127	-2.87	3.16	-9	0
8	Friendships	128	-3.13	3.39	-9	3	8	Friendships	127	-2.87	3.45	-9	3
3	Holidays	122	-2.98	2.85	-9	3	20	Others Worry	76	-2.78	3.18	-9	3
24	Past	127	-2.88	3.10	-9	3	4	Out & About	127	-2.75	3.19	-9	2
5	Journeys	127	-2.72	3.17	-9	0	3	Vacations	124	-2.73	3.17	-9	3
12	Appearance	126	-2.72	3.27	-9	1	24	Past	127	-1.99	2.41	-9	0
7	Family	120	-2.36	3.34	-9	3	7	Family	123	-1.92	2.82	-9	2
21	Eat	128	-1.95	3.16	-9	2	21	Eat	127	-1.42	2.57	-9	3
22	Drink	127	-1.72	2.79	-9	2	22	Drink	127	-1.03	2.36	-9	2
23	Religion	52	-1.19	3.60	-9	3	23	Religion	95	0.05	1.74	-9	3

Table 2 demonstrates that for individuals living in the UK all 26 quality of life domains are negatively impacted by HIV and all domains, except religion, are negatively impacted for individuals living in the US. The four least negatively impacted domains are the same regardless of country as is the greatest negatively impacted domain: stigma associated with HIV has the greatest negative impact on quality of life in both the UK and the US. The need to conceal things from others and the need to depend on others are also both in the top six negatively impacted domains in both countries.

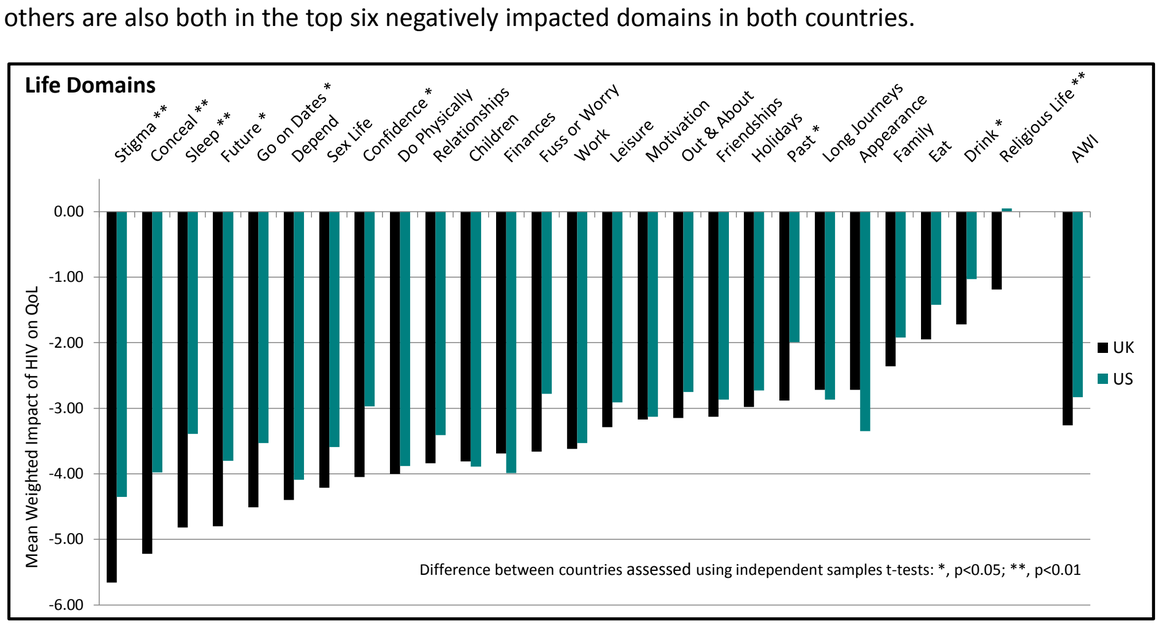

Figure 3: HIVDQoL: Comparison of UK and US Mean Weighted Impact scores for each domain-specific item and overall Average Weighted Impact (AWI) score

In 22 of 26 individual domains UK participants reported greater negative impact of HIV on QoL than US participants. Nine differences were significant (Figure 3). For overall AWI scores, a significant difference was found between countries when time since diagnosis was controlled for (p=0.014).

Table 3: Independent samples t-test analyses for the W-BQ16 by country

	UK			US						
W-BQ16 Subscales	N	Mean	Std. Deviation	N	Mean	Std. Deviation	t	df	*p*	*d*
Negative Well-being	127	4.13	2.97	127	2.94	2.97	3.184	252	0.002	0.40
Energy	128	4.81	2.77	125	6.13	3.24	-3.465	251	0.001	-0.44
Positive Well-being	127	5.94	2.58	127	7.40	3.03	-4.128	252	<0.001	-0.52
Stress	128	6.37	3.09	127	4.75	3.27	4.060	253	<0.001	0.50
General Well-being	126	24.13	9.43	125	29.73	10.65	-4.413	249	<0.001	-0.56

As shown in Table 3, independent samples t-tests of the well-being data found significant differences between participants living in the UK and those living in the US. Consistent with the findings from the HIVDQoL, UK participants reported lower well-being scores than US participants, experiencing poorer overall levels of well-being, greater negative well-being, higher levels of stress, lower levels of energy and lower levels of positive well-being.

CONCLUSIONS

The HIVDQoL and W-BQ16 show greater negative impact of HIV on the QoL of UK participants who also reported worse well-being compared to US participants. The new condition-specific HIVDQoL reveals specific areas of life most negatively impacted by HIV, highlighting how efforts may be prioritised to meet the greatest challenges for individuals and populations living with HIV.

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ENQUIRIES

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Information on these and other questionnaires: Visit **www.healthpsychologyresearch.com**
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