Defining the cascade of mental healthcare: increased prevalence of depression and lack of access to care for people ageing with HIV

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POPPY
Pharmacokinetic and clinical observations in people over 50

BACKGROUND

Depressive symptoms are prevalent among people with HIV (PWH) including those with a suppressed viral load on antiretroviral therapy (ART) - amongst PWH, depression is negatively associated with HIV-related outcomes including ART adherence, virological suppression, immune control and mortality[1-3]

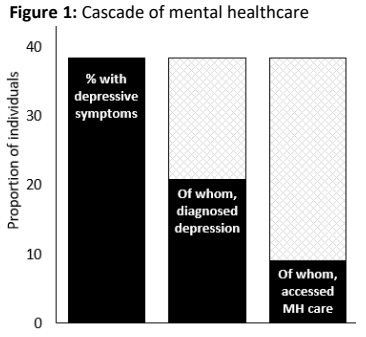
The Positive Voices survey has previously described the unmet need of mental healthcare in this population[4]

There have been no studies that have conceptualised the cascade of mental healthcare (**Figure 1**) which explores:

(i) How many of those experiencing depressive symptoms are diagnosed with depression, and

(ii) How many of those diagnosed with depression subsequently access mental healthcare

Figure 1: Cascade of mental healthcare



AIM

To describe the progress through the **cascade of mental healthcare** using clinical and healthcare utilisation data from the Pharmacokinetic and Clinical Observations in People Over Fifty (POPPY) study

METHODS

PARTICIPANTS

POPPY is a multicentre, prospective, observational study examining the effects of ageing on PWH in the UK and Ireland. The study **collects information on demographic, social, lifestyle, clinical and HIV-related factors**

The study recruited 699 PWH aged ≥50 years and 374 PWH aged <50 years between 2013 and 2016

For this study, participants were required to have completed the Patient Health Questionnaire-9 (PHQ-9) or Center for Epidemiologic Studies Depression Scale (CES-D) at study entry (1009/1073)

DEFINING THE CASCADE OF MENTAL HEALTHCARE

Depressive symptoms: defined as moderate/severe symptoms determined by a PHQ-9 score ≥10 or CES-D score ≥16

Diagnosis of depression: based on self-reported medical diagnosis of depression or reporting any antidepressant use

Accessing mental healthcare: reporting access or use of any specialist mental healthcare

STATISTICAL ANALYSES

The proportion of (i) PWH experiencing depressive symptoms and reporting a clinical diagnosis of depression, and (ii) proportion of those with clinical depression reporting mental healthcare were compared between PWH aged ≥50 years and <50 years using χ^2 tests

RESULTS

BASELINE CHARACTERISTICS

- In total, 1009 PWH from POPPY were included (**Table 1**), of whom 65.5% (661) were PWH aged ≥50 years and 34.5% (348) were PWH <50 years
- The majority of individuals were male (85.8%; 866), men who have sex with men (MSM) (76.7%; 774) and from a white ethnic background (85.1%; 859)
- Approximately one in ten (9.4%; 95) had a detectable viral load and over a quarter (28.6%; 289) had a CD4+ T-cell count <500 cells/mm^3

Table 1: Summary of baseline characteristics of POPPY participants who completed a PHQ-9 assessment at study entry (n (%) unless otherwise stated), by age group

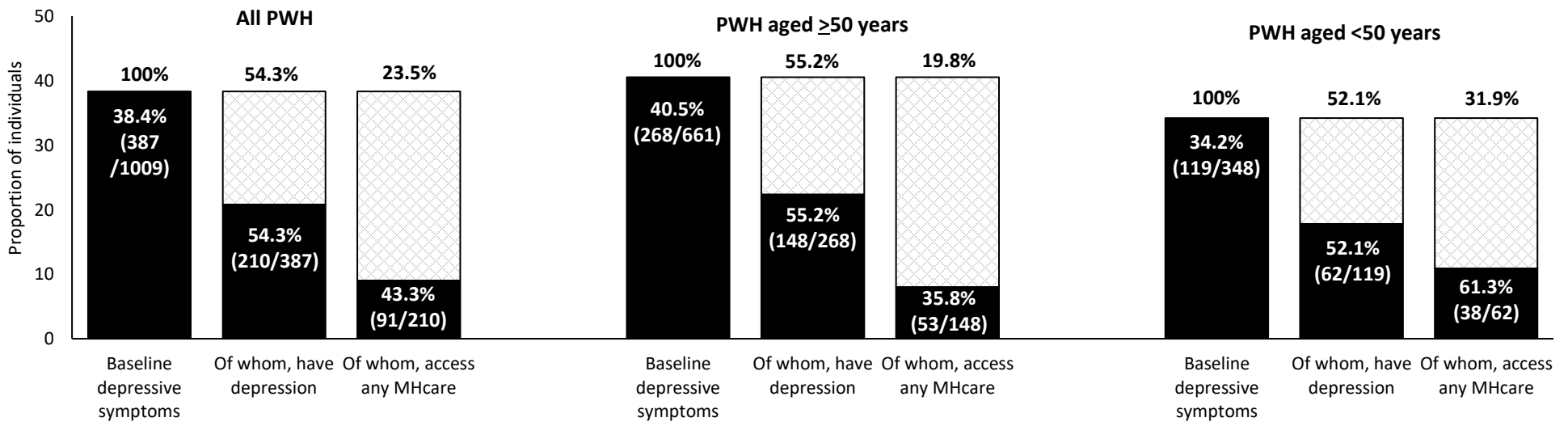
		All	PWH ≥50 years	PWH <50 years
	N	1009	661	348
Age (years), median [IQR]		52 [47, 59]	56 [53, 62]	43 [38, 47]
Sex	Female	143 (14.2%)	79 (12.0%)	64 (18.4%)
	Male	866 (85.8%)	582 (88.0%)	284 (81.6%)
Race	Black African	150 (14.9%)	86 (13.0%)	64 (18.4%)
	White	859 (85.1%)	575 (87.0%)	284 (81.6%)
Born in the UK		638 (63.2%)	461 (69.7%)	177 (50.9%)
Risk group	MSM	774 (76.7%)	520 (78.7%)	254 (73.0%)
	Heterosexual	235 (23.3%)	141 (21.3%)	94 (27.0%)
In a relationship		390 (38.7%)	253 (38.3%)	137 (39.4%)
Currently employed		513 (50.8%)	270 (40.8%)	243 (69.8%)
University educated		458 (45.4%)	289 (43.7%)	169 (48.6%)
Current smoker		253 (25.1%)	151 (22.8%)	102 (29.3%)
Current alcohol use		814 (80.7%)	526 (79.6%)	288 (82.8%)
Recreational drug use (last 6 months)		289 (28.6%)	165 (25.0%)	124 (35.6%)
Injecting drug use		103 (10.2%)	59 (8.9%)	44 (12.6%)
HBV positive		141 (14.0%)	93 (14.1%)	48 (13.8%)
HCV positive		72 (7.1%)	46 (7.0%)	26 (7.5%)
Undetectable viral load		914 (90.6%)	612 (92.6%)	302 (86.8%)
CD4 count <500 cells/mm^3		289 (28.6%)	206 (31.2%)	83 (23.9%)

PWH: people with HIV; MSM: Men who have sex with men; HBV: Hepatitis B virus; HCV: Hepatitis C virus.

CASCADE OF MENTAL HEALTHCARE

- At study entry, 38.4% (387/1009) of individuals were experiencing depressive symptoms, over half of whom (54.3%; 210/387) reported having a medical diagnosis of depression
- Only 43.3% (91/210) of individuals who were medically diagnosed with depression reported accessing some form of mental healthcare. The most accessed mental healthcare included visiting a psychologist/psychiatrist (35/91) or counsellor (22/91)
- The prevalence of depressive symptoms was higher amongst PWH aged ≥50 years (40.5%) vs. <50 years (34.2%, p=0.05) (**Figure 2**)
- There was no difference in the reported rates of medical diagnosis of depression between PWH aged ≥50 years (55.2%) and <50 years (52.1%, p=0.57). In contrast, there was a lower proportion of older PWH who reported accessing mental health services (35.8% vs. 61.3%, respectively, p<0.001) (**Figure 2**)

Figure 2: Cascade of mental healthcare; defining the proportion of people with HIV (PWH) who report depressive symptoms, clinical diagnosis of depression and those who have accessed mental health services, stratified by older (≥50 years) and younger (<50 years) age groups



Proportions above graph represent total proportion of the study group experiencing depressive symptoms; proportion within bar are based on the denominator of the previous group. PWH: people with HIV; MH: mental health.

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CONCLUSION

The majority of PWH in the POPPY study experiencing depressive symptoms did not report accessing any mental healthcare. These findings are in line with previous accounts of unmet need reported by Positive Voices[4] and the National AIDS Trust: HIV and Mental health report[5].

This analysis may suggest older PWH struggle to access mental health services. However, it is important to note this is not unique to PWH. Further research is required to understand whether the unique experiences of PWH introduces additional barriers to accessing mental healthcare when compared to the general population.

References: 1. Gonzalez, JS et al., *J Acquir Immune Defic Syndr*, 2011. 58(2):181-7 2. Gokhale, RH, et al., *AIDS Behav*, 2019. 23(12):3452-9. 3. Do, AN, et al., *PLoS One*, 2014. 9(3):e92842. 4. Kall, M et al., 2020. Public Health England: London. 5. National AIDS Trust, 2021.