

performance against NICE guidelines targets

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BACKGROUND

The prevalence of Type 2 Diabetes Mellitus (T2D) in people living with HIV (PLWH) is higher than in the HIV-negative population. We conducted a clinical audit to identify patients with T2D amongst our cohort of PLWH, and evaluate whether diabetic control and standard of care meet current NICE guidelines.

METHOD

PLWH seen at Chelsea and Westminster Hospital clinical sites with T2D were identified via an electronic search of laboratory tests (up to December 2015), using the following criteria: Hb1Ac > 48mmol/mol (or $\geq 6.5\%$); fasting glucose > 6.9 mmol/L; glucose level >11.1 mmol/L. Electronic and laboratory records of patients were individually reviewed to confirm T2D and gather clinical data.

RESULTS

- **9131** available patient records, with T2D prevalence of 3%.
- **256 patients** with T2D, 224 (88%) were males and 47% White British;
- **HIV control:** Current ARV treatment include: darunavir/ritonavir (35.1%), efavirenz (23.8%) or raltegravir (20.4%). TDF/FTC backbone was used in 1/3 of patients (32.8%), followed by ABC/3TC (15.6%).
- 85.2% had suppressed HIV RNA (<20 copies/mL) and median CD4+ cell count of 637 cells/mm³.
- **Past exposure to older ARVs:** zidovudine: 38.7%, stavudine: 33.2%, didanosine: 29.7%, saquinavir: 13.3% and 7.42% for indinavir.
- **Most common comorbidities:** Cardiovascular disease - 54.3%, Dyslipidemia and Chronic kidney disease - 17.2%.
- **Diabetic medication:** 62% of patients were on metformin, followed by sulphonyureas (31.3%), insulin (25.0%), peptide analogues (17.2%), and 15.6% on diet control only.
- **Diabetic Monitoring:**
 - Almost half (48%) of PLWH were not meeting desirable blood pressure(BP) targets
 - Approximately 70% did not have LDL-cholesterol within T2D desirable ranges
 - Only 23.4% had Hb1Ac levels checked every six months
 - 48% had yearly checks of urine protein:creatinine ratio (uPCR),
 - Only 4.3% had their urine albumin:creatinine ratio (uACR) checked yearly.

Figure 1. % of Patients Meeting NICE Blood Pressure Targets

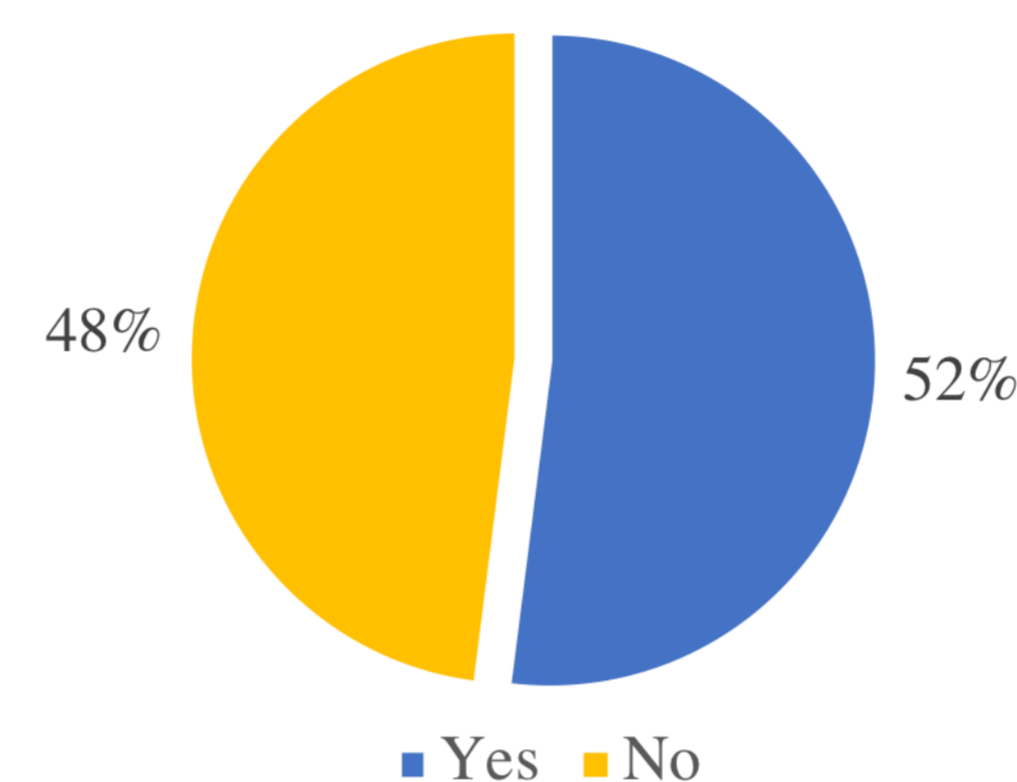


Figure 2. % of Patients Meeting LDL Cholesterol Targets

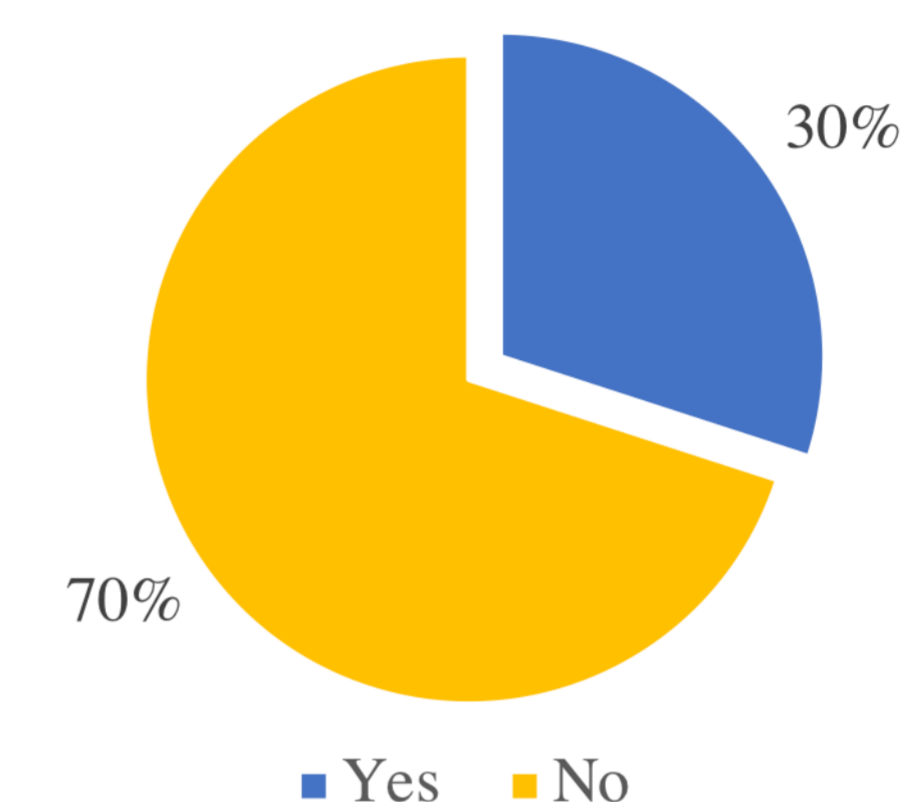


Figure 3: Hb1Ac levels checked every six months

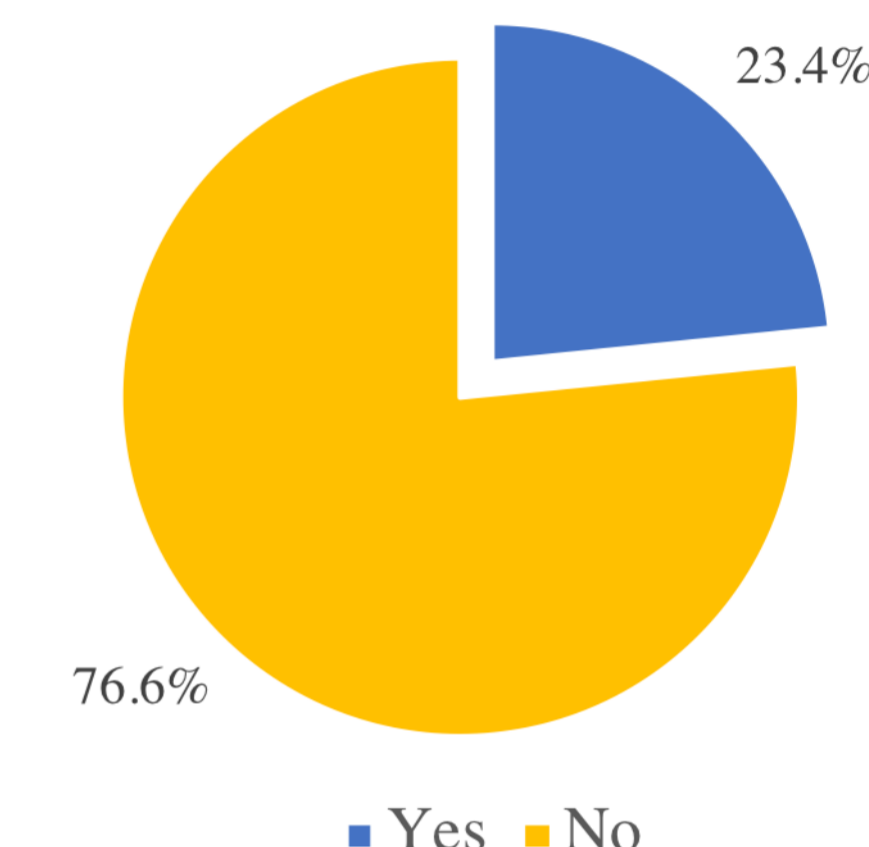


Figure 4. uPCR checked every six months

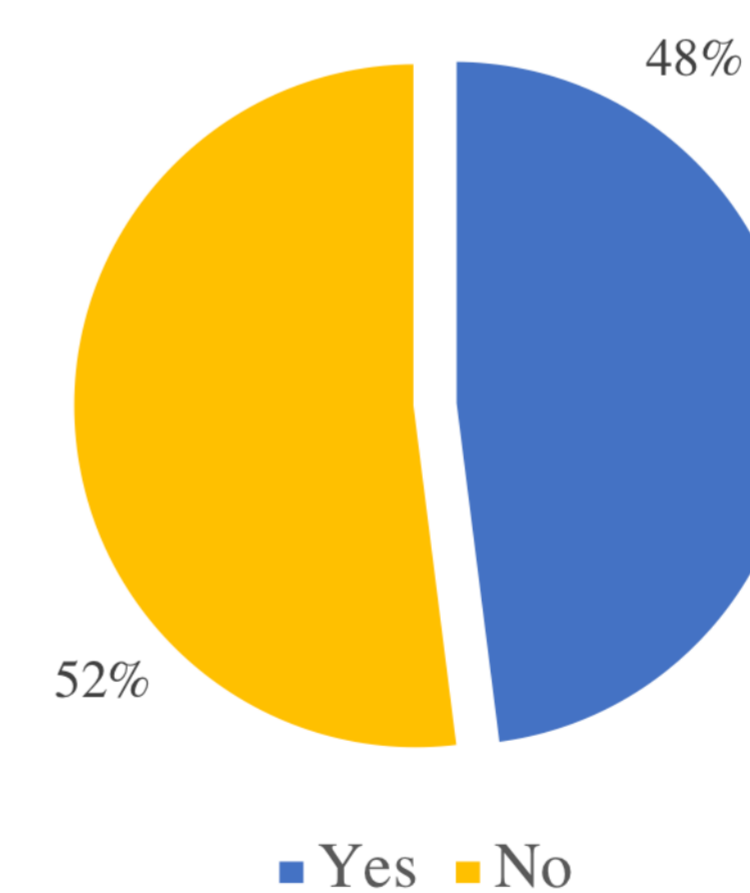
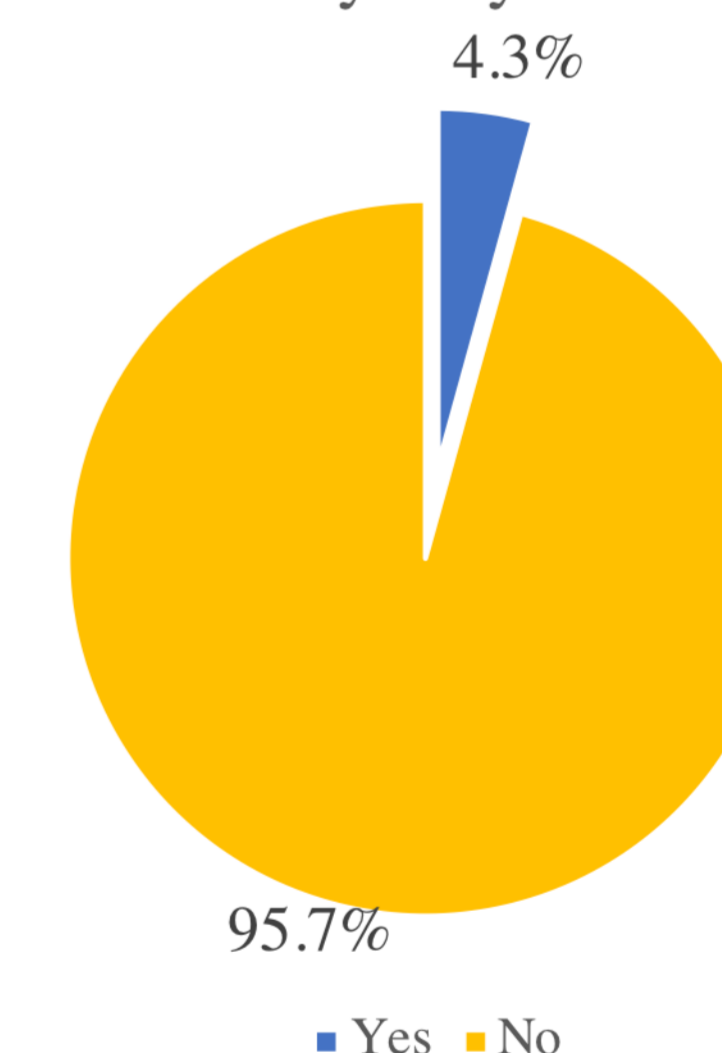


Figure 5. uACR checked yearly



CONCLUSION

The majority of PLWH affected by T2D did not meet NICE targets nor were monitored appropriately.

Improved monitoring, modification of/or review of ARV treatment and updating of anti-diabetic prescribing (such as use of SGLT-2 inhibitors) in combination with better communication with primary care physicians may improve management.

As a result of this audit and to ensure better management and monitoring of PLWH diagnosed with T2D, we have initiated a specialist Metabolic/HIV clinic.