



PHYSICAL HEALTH MONITORING AUDIT COMPARING SERVICE USERS ON ANTIPSYCHOTICS IN A LOW-SECURE FORENSIC UNIT WITH A PRISON PERSONALITY DISORDER UNIT

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INTRODUCTION

There is well established evidence of the link between chronic antipsychotic use, especially with atypicals, and various physical health problems.¹ This compounded with existing physical co-morbidities leads to excess premature mortality in service users prescribed these medications.

Antipsychotics are widely prescribed in forensic secure care units, in populations which often undergo lengthy periods of institutionalization, coupled with poor general health and from our observation, prominent sedentariness.²

We thus considered it important to audit the monitoring of physical health parameters in this vulnerable group.

AIMS

To review the current level of compliance with Cambridgeshire and Peterborough NHS Foundation Trust (CPFT) and Northamptonshire Healthcare NHS Foundation Trust (NHFT) guidelines on baseline physical health monitoring recommended for service users on antipsychotic medication.

To identify potential barriers to attaining full compliance with recommended standards and offer possible solutions.

RESULTS

Demographics:

Of the 18 service users on GMH, 17 were eligible for inclusion in the audit while 23 of the 50 service users on The Fens were prescribed regular antipsychotics.

The Fens is an all-male ward. Only 2 of the service users included in the study at GMH were female. Age distribution between both sites were similar.

None of the service users on the Fens had a diagnosis of paranoid schizophrenia while it was the most common diagnosis on GMH. Interestingly the most common indication for regular antipsychotics on the Fens fell under 'other' or 'unspecified psychotic disorder'.

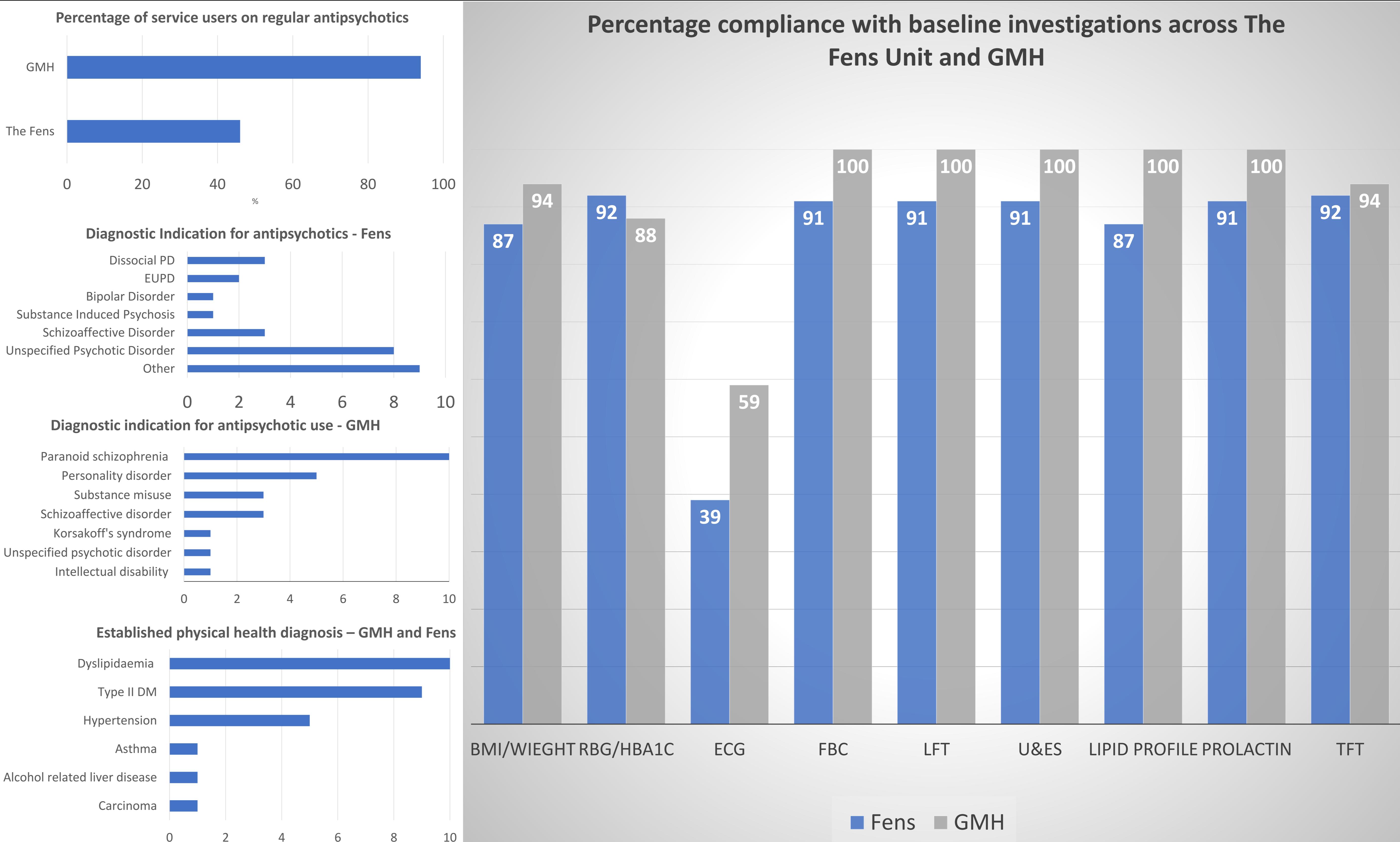
A significant number of service users also had established physical health diagnosis the commonest were dyslipidaemia, Type II diabetes mellitus and hypertension.

Compliance rates:

All service users at GMH had baseline full blood count, urea and electrolytes, lipid profile, prolactin, and liver function tests done. There was also good compliance with these same tests at the Fens with around 90% of service users having this done.

Baseline glycated haemoglobin/random blood glucose, body mass index, and thyroid function tests were around 90% adherence with trust guidelines across both sites which was also positive.

Only 59% of patients at GMH had baseline ECG done. Compliance was even worse at the Fens where only 39% had ECG done.



METHOD

The audit was carried out as a retrospective study using clinical notes, medication charts, and information documented on SystmOne amongst service users on George Mackenzie House (GMH - low secure forensic unit) and the Fens Unit at HMP Whitemoor (category A/B maximum security men's prison).

We chose to compare monitoring at two distinct forensic inpatient settings – low secure unit and a prison mental health unit – to see if there were any discrepancies.

All service users on the ward between 2nd December 2021 – 2nd December 2022 prescribed regular antipsychotic medication were included.

We then screened their medical records for relevant investigation results carried out within the trust guidelines' recommended time-frame to assess compliance.

DISCUSSION

There was significant heterogeneity in diagnostic indications for antipsychotic use across The Fens vs GMH. The most common indication for their prescription on the Fens was 'others' which included anger, insomnia, anxiety, auditory hallucinations and quasi-psychotic symptoms.

Compliance with baseline blood tests was near perfect across both sites while ECG monitoring was significantly inadequate. We postulate that logistical reasons (time-consuming to do ECG, inconvenient, lack of trained staff) and poor awareness of trust guidelines could account for this. This is particularly concerning especially due to effects of antipsychotics on QT interval.

Overall, compliance rates were slightly lower in the prison unit than hospital ward. There could be several reasons for this including difference in service user receptivity to investigations between both sites, difference in phlebotomy availability etc.

CONCLUSION

Recommendations:

Appropriateness of antipsychotic prescription should be investigated, especially for prison setting.

Educate staff and service users on importance of physical health monitoring with antipsychotic use at both sites. Prison staff could collaborate with hospital staff to find ways of encouraging better compliance with physical health monitoring.

Action plans:

Conduct follow-up audit on indications for antipsychotic prescription in relation to NICE/Trust guidelines.

Carry out qualitative survey of staff and patients, on knowledge, beliefs and attitudes towards antipsychotic use and its attendant risks at both sites.

Arrange for an educational session to familiarize all staff with Trust guidelines on the relevant physical parameters to monitor, with emphasis on ECG.

REFERENCE

¹Anne M.Doherty, Aoife M. Egan.(2021), 'Antipsychotic Medications and Metabolic Syndrome', in Mental Health, Diabetes and Endocrinology, RCPsych, Cambridge University Press, pp.19-30

²Farrell C, Brink J. The Prevalence and Factors Associated With Antipsychotic Polypharmacy in a Forensic Psychiatric Sample. Front Psychiatry. 2020 Apr 17;11:263. doi: 10.3389/fpsyg.2020.00263. PMID: 32528318; PMCID: PMC7247840.

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