The Use of Screening Tools to Direct Pharmacy Counselling Services in Order to Improve Medications Adherence

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Introduction

Medications adherence: 'The extent to which the way a patient takes a medication correlates with the prescribers intention(1).'

As high as **50% of medications in the UK are not taken as directed by the prescriber(2)**
Poor adherence results in:

- personal and economic costs
- high rate of hospital admissions
- increased chance of treatment complications,
- Costs of approximately £500 million per year to the health sector(3).

Factors contributing to poor medications adherence and potential causative factors are listed in table 1.

The objective of this project was to assess whether the implementation of a screening tool to identify non-adherence in medicines, can help direct pharmacy counselling services to patients who are in greater need of medications counselling, with the overall aim of improving medicines adherence in a large teaching hospital.

Table 1: Factors Contributing to Medicines Adherence:

Negative attitude toward drugs in general
Adverse drug reactions
Drug effects (e.g., skipping a diuretic if planning to be out for the day)
Number of doses
Lack of symptoms.
Complex dosing regimens
Forgetting to take medication

Factors Affecting Medicines Adherence:

Advanced age
Cognitive impairment
Depression
Substance abuse
Asymptomatic disease
Belief systems about medications
Lack of trust for health care providers
Poor literacy
Language
Religion
Socioeconomic level
Culture
Race

Table 1: Contributing factors and causes to poor adherence (4, 5, 6)

Analysis and Intervention

Control Week 1: Adherence was measured using a tool based on MMAS-8 [7] to screen poor adherence. This was compared to standard counselling data already obtained by pharmacy to assess how many 'poorly-adherent' patients were missed.

Week 2: Notes of poorly adherent patients were 'flagged' to alert the pharmacy team. Patients counselled were recorded and results compared to baseline. This was repeated with nursing staff integrating the screening tool into clerking documents.

Week 3: The tool was incorporated into the medicines reconciliation.

Evaluation

Adherence issues are **poorly actioned** and **external flagging from pharmacy and nursing staff is ineffective**.

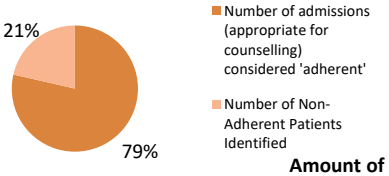
Incorporation into the medicines reconciliation showed promising results. However, these results have been concluded from small samples. Staffing levels, project timing (Christmas) and the COVID-19 pandemic have contributed to the lack of uptake and small sample sizes .

Future Action

- Expansion onto further wards .
- An information booklet has been created as an alternative to face to face counselling to reduce time and staff pressures (pending board approval and professional printing).

Results

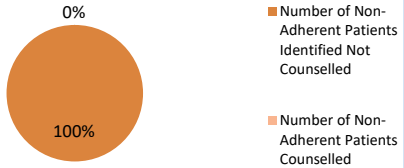
Baseline Prevelance of Non-Adherence



Baseline of non-adherent patients identified from all suitable admissions (n=11) over 1 week

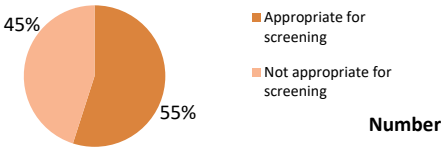
Amount of Non-Adherenent Counselled When Not Flagged

Baseline of non-adherent patients counselled by pharmacy when not flagged by screening



Using the external flagging system within the pharmacy team **100% of non-adherent patients (n=3) did not receive counselling.** When repeated with nursing staff, nil tools were implemented leading to **100% of non-adherence being missed**.

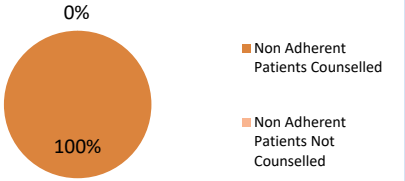
Amount of Patients Seen By Pharmacy Deemed Appropriate for Adherence Counselling



Percentage of patients identified as suitable for adherence screening when using an adherence tool built into the medicines reconciliation (n=5)

Number of Non-Adherent Patients Counselled

Percentage of patients counselled by pharmacy after being identified as non-adherent during the medicines reconciliation process (n=1).



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