Missed and delayed doses of Parkinson’s medicines at North Bristol NHS Trust (NBT) (GB)

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Introduction/Background

The NPSA alert ‘reducing harm from omitted and delayed medicines in hospital’ states Parkinson’s medication should be on a ‘critical list of medicines’ as timeliness of administration is crucial. Delays can significantly affect Parkinson symptoms and increase length of hospital stay. Substantial work has been carried out at North Bristol Trust to improve missed doses, however particular groups of medicines such as for Parkinson’s, have not been investigated. An audit was therefore completed to determine whether doses of Parkinson’s medicines are given ‘on time’ and how this can be improved, by utilising the existing National campaign; ‘Get it On Time’.

Aim & Objectives

The aim was to improve the administration timing of Parkinson’s medicines within hospital, to prevent a possible worsening of symptoms.

Objectives:

I. Assess whether patients are receiving Parkinson’s medication on time, every time.
II. Discover whether Parkinson’s medicines are endorsed with the times for administration.
III. Identify the time frame of what constitutes a dose for Parkinson’s received ‘on time’.
IV. Investigate whether ‘Get it on Time’ stickers and endorsing times on drug charts improve the punctual administration of Parkinson’s medicines.

Methodology

Stage 1

- Identify whether Parkinson’s medicines are endorsed with the times for administration.
- Record the number of doses missed, delayed and on time by comparing the time the drug was administered, to when this should occur as prescribed.
- Where appropriate conduct a patient questionnaire related to Parkinson’s medicines management.

Results

- Total number of doses audited: stage 1 = 436 and re-audit = 202.
  1. Delays in the administration of the 1st dose did not occur 99.5% before tests of change and 99% thereafter.
  2. Further dose delays/omissions did not occur 70% before and 62% thereafter.
  3. No ‘critical list’ of medicines are recommended by North Bristol Trust.
  4. Administration times were endorsed on 52% drug charts before tests of change and 92% thereafter in the re-audit.

Five Patient questionnaires were completed which revealed all regular Parkinson’s medicines were reconciled on admission, with no dose delays or omissions reported to worsen symptoms.

- 3/5 believed self-administration would help improve medicines received on time.
- 2/5 were unaware of the specialist Parkinson’s nurse, at NBT.
- 3/5 felt staff awareness of Parkinson’s disease and the importance of medicine timing could be improved.

Discussion

No standards set by Parkinson’s UK ‘Get it On Time’ (audit standards 1 - 4) were adhered to by North Bristol Trust. A dose ‘on time’ for the purpose of the audit was considered to be within or equal to 30 minutes, as there is no existing National guideline for this. Doses ‘on time’ did not improve after the tests of change, (before 70%, after 62%), however less re-audit data was collected and several delayed doses greater than 2 hours skewed the overall results. Delays in the 1st dose was near 100%

No specification stated for the timing of a dose delayed, therefore for the purpose of the audit this was > 30 minutes.

Conclusion & Recommendations

Further developments are required to improve the timing of Parkinson’s medicines to achieve the audit standards set from Parkinson’s UK. ‘Get it On Time’ stickers and endorsing the times of administration increase doses administered ‘on time’ by 20% and should be recommended in the NBT Medicines Management Policy - CPSI. Future re-audits should focus on collecting more data and comparisons to any National standards made for doses ‘on time’. Pill timers on wards to aid specific timing of administration may be useful tests of change and have been trialled at Norfolk and Norwich University Hospitals. It is also important to continually reinforce strict timing for Parkinson drugs with effective ward handover and staff education.

Audit Standards (1-4 from Parkinson’s UK)

<table>
<thead>
<tr>
<th>Aim</th>
<th>Exception</th>
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<tbody>
<tr>
<td>1. “Delays in the administration of the 1st dose do not occur”</td>
<td>100% None</td>
</tr>
<tr>
<td>2. Further dose delays/omissions do not occur</td>
<td>90% Refusal or Absence - 10%</td>
</tr>
<tr>
<td>3. A ‘critical list’ contains Parkinson’s medicines</td>
<td>100% None</td>
</tr>
<tr>
<td>4. Parkinson’s medicines are clearly endorsed with administration times</td>
<td>100% None</td>
</tr>
<tr>
<td>5. Parkinson’s medicines should be given ≤30minutes of the time stated on the drug chart</td>
<td>90% Refusal or Absence - 10%</td>
</tr>
</tbody>
</table>

*No specification stated for the timing of a dose delayed, therefore for the purpose of the audit this was > 30 minutes.

References

2. Parkinson’s Get it On Time campaign. Available at: www.parkinsons.org.uk