Outpatient parenteral antimicrobial therapy (OPAT) service delivery of antiretrovirals – clinical staff and patient-reported outcome measures (PROMs)

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1. Background

- Long-acting cabotegravir/rilpivirine (LA-CAB/RPV) are new injectable anti-retroviral therapy (ART) formulations. Cardiff and Vale University Health Board has implemented a novel approach to delivering HIV care by administering LA-CAB/RPV using the existing outpatient parenteral antimicrobial therapy (OPAT) service. BHIVA recognises the logistical challenges associated with administering LA-CAB/RPV. OPAT runs extended hours 365 days a year, offering flexibility and accessibility, which is notlogistically possible in traditional HIV clinic setups. In 2017, 102 OPAT services were identified across the UK, so this approach is potentially widely scalable.
- The suitability of LA-CAB/RPV is determined via a multi-disciplinary decision. A specialist HIV pharmacist then initiates an oral lead-in, refers the patient to OPAT, and monitors their therapy. LA-CAB/RPV is administered by nursing staff that are not specialised in managing HIV.
- With any new service, the experience of its users is paramount to its success. We sought to evaluate the experiences of patients, HIV clinicians, and OPAT nurses in receiving, referring, and delivering LA-CAB/RPV.

2. Methods

- We developed and distributed three distinct questionnaires using Google Forms; for patients, HIV clinicians, and OPAT nurses.
- Relevant questionnaires were sent electronically to all patients who received at least one dose of LA-CAB/RPV (n=15), OPAT nurses (n=7), and local HIV clinicians (n=21).

3. Results

**Summary of patients’, OPAT nurses’, and HIV clinicians’ responses**

<table>
<thead>
<tr>
<th>Patients (n=11)</th>
<th>100%</th>
<th>90%</th>
<th>80%</th>
<th>70%</th>
<th>60%</th>
<th>50%</th>
<th>40%</th>
<th>30%</th>
<th>20%</th>
<th>10%</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied with my current treatment</td>
<td>81%</td>
<td>54.5%</td>
<td>36.4%</td>
<td>27.3%</td>
<td>9.1%</td>
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</tr>
<tr>
<td>Attending administration appointments is convenient</td>
<td>45.5%</td>
<td>63.6%</td>
<td>63.6%</td>
<td>63.6%</td>
<td>63.6%</td>
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<tr>
<td>The OPAT team have been flexible in arranging suitable administration appointments</td>
<td>63.6%</td>
<td>63.6%</td>
<td>63.6%</td>
<td>63.6%</td>
<td>63.6%</td>
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<tr>
<td>I would recommend injectables to a friend or relative if they had HIV</td>
<td>63.6%</td>
<td>63.6%</td>
<td>63.6%</td>
<td>63.6%</td>
<td>63.6%</td>
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</table>

**OPAT nurses (n=4)**

- Administering LA-CAB/RPV has improved my understanding of HIV | 100% |
- Administering LA-CAB/RPV has reduced my stigma surrounding HIV | 100% |
- Administering LA-CAB/RPV has improved my job satisfaction | 100% |

**HIV clinicians (n=18)**

- I have found the referral pathway for LA-CAB/RPV easily accessible | 38.9% |
- I would recommend LA-CAB/RPV to suitable patients that ask about it | 16.7% |
- I would recommend LA-CAB/RPV to suitable patients that don’t ask about it | 11.1% |

4. Patient comments

- “Since starting the injectable medications, I have been able to stop taking anti-depressants.”
- “I have forgotten that I have HIV; the daily pills were a reminder.”
- “I feel less stigmatised for having HIV each day.”
- “The nurses are really friendly and try their best.”
- “Due to my visual impairment, attending appointments with the OPAT team has given me my independence back when managing my HIV care; one of the nurses meets me at the entrance and takes me to my appointment. It’s a complete game changer for me.”

5. Staff feedback

- “Excellent service via OPAT”
- “I feel I am making a difference to these patients.”
- “I feel my knowledge of HIV has increased and given me a better understanding of the difficulties these patients encounter.”
- “I now have increased confidence with this patient cohort. It’s so lovely to hear people say we have ‘literally changed their life’. What an achievement – it doesn’t get better than that in nursing.”

6. Discussion

- Administering these new ART formulations in this novel, community, non-specialist setting via OPAT is acceptable, convenient, and flexible for patients, allowing this potentially life-changing medication to be provided to suitable patients outside of traditional HIV clinic setups.
- As demonstrated from the patient comments, facilitating the administration of LA-CAB/RPV via OPAT has increased the quality of life of many of the patients.
- Administering LA-CAB/RPV in this way has improved the OPAT nurses’ job satisfaction and understanding of HIV, while reducing the stigma surrounding HIV.
- Local HIV clinicians have varied views on recommending LA-CAB/RPV to all suitable patients, particularly if the patient does not enquire about the medications. This is potentially due to the increased treatment failure rates reported in studies.

7. Conclusions

- This novel approach to delivering LA-CAB/RPV has received positive responses from patients, OPAT nurses, and HIV clinicians. Due to the number of OPAT services across the UK, it is potentially widely generalisable to HIV services, increasing the availability of LA-CAB/RPV to suitable candidates.
- Further work should continue to monitor the reported outcome measures and treatment failure rates of patients prescribed these medications.

References