1. Background

- Harm reduction such as long-term use of less harmful nicotine products could reduce the high rates of tobacco-related disease among People Living with HIV (PLHIV).
- This study aimed to elicit acceptability of different nicotine products, including new vaporized nicotine products e.g. e-cigarettes for short-term or long-term use.

2. Methods

- We showed participants demonstrations of standard nicotine products (gum; patch; mouth spray; oral strip; inhalator) and vaporized products (two different tank style vapourisers).
- Participants completed a brief questionnaire, then selected up to two standard nicotine products and up to two vaporised nicotine products with their choice of e-liquid (18mg/mL nicotine or nicotine-free in 50:50 propylene glycol/vegetable glycerol mixture +/- menthol).
- One product was sent out per week with instructions and a demonstration video on how to use it.
- Participants recorded their use in a product diary and received weekly phone calls from the research team.
- After all products had been tried, participants attended a final face-to-face interview where product diaries and any unused products were collected.
- We discussed the participants’ experiences of using the products using a semi-structured questionnaire. These qualitative data were recorded, transcribed verbatim and analysed thematically.

3. Participants – Baseline

- Eleven participants attended the demonstration session and completed the baseline questionnaire.
- One participant was lost to follow-up after week 1.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>N (%)</th>
</tr>
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<tbody>
<tr>
<td>Male</td>
<td>10 (90.9)</td>
</tr>
<tr>
<td>Age</td>
<td>Median 46</td>
</tr>
<tr>
<td></td>
<td>Range 18-51</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Time since last quit attempt</th>
<th>N (%)</th>
<th>Prior NRT use</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In last 6 months</td>
<td>3 (27.3)</td>
<td>Gum</td>
<td>6 (54.5)</td>
</tr>
<tr>
<td>6-12 months ago</td>
<td>3 (27.3)</td>
<td>Mouth spray</td>
<td>2 (18.2)</td>
</tr>
<tr>
<td>1-2 years ago</td>
<td>3 (27.3)</td>
<td>Patch</td>
<td>9 (75.0)</td>
</tr>
<tr>
<td>&gt;2 years ago</td>
<td>2 (18.2)</td>
<td>Dissolvable strip</td>
<td>1 (9.1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalator</td>
<td>2 (18.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>3 (27.3)</td>
</tr>
</tbody>
</table>

4. Results

Gum (N=1)
- Liked it
- Keeps your occupied
- Can imagine using long-term

Inhalator (N=6)
- Effective
- Liked it
- Convenient
- Satisfied ‘hand to mouth’
- Good for travelling

Patch (N=2)
- Effective
- Didn’t like it
- Can’t use for too long

iTaste VV4.0 (N=8)
- Underwhelmed
- Too big and heavy
- Didn’t fit in pocket
- Not stylish enough
- Reminded of hookah
- Still wanted a cigarette
- Frustrated that it wasn’t satisfactory
- Couldn’t replace cigarettes

Mouth spray (N=7)
- Effective
- Liked it
- Easy to use
- Helped cut down
- Can imagine using long-term

CoolFire IV (N=8)
- Effective
- Liked it
- Helped cut down
- Satisfied ‘hand to mouth’
- Can imagine using long-term
- Felt marked improvement in lung function

Dissolvable oral strip (N=6)
- Pack difficult to open
- Disappointing
- Takes some practice
- Quickly lost effectiveness once dissolved

- Still wanted a cigarette
- Stuck to side of mouth

“Takes some getting used to but is very effective”
“Can’t that hand to mouth aspect of smoking”
“When I used it iTaste it felt too much like you were smoking ice”

Participant reactions to vaporised nicotine products

“My family’s negative comments about my Cool Fire made me question whether or not this product is for me”
“The iTaste just reminds me too much of medical equipment”

“Takes some getting used to but is very effective”
“I’m nervous to use my e-cigarette outside of the house”

5. Conclusions

- There were mixed responses to all products tested. Some participants preferred standard products over vaporised products and vice versa.
- Participants reported more side effects with standard nicotine products than with vaporised products.
- A number of factors influenced acceptability including nicotine delivery (satisfaction/effectiveness), taste, convenience, and social acceptability.
- The results suggest there are a number of barriers to overcome to make tank style vapourisers acceptable for some PLHIV to use them, especially in public.

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