Conference Poster

A review of recent technological advancements in malaria diagnostics

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A review of recent technological advancements in malaria diagnostics

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Introduction

- Malaria transmission declines across geographical areas

- Active case detection highlights a need for ultra-sensitive Diagnostics (Dx)

Method

Search methodology for landscape of malaria Rapid Diagnostic Tests (mRDTs)

| mRDTs used | Newly developed and promising prototypes
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sources of information</td>
<td>mRDTs used in current malaria program</td>
</tr>
<tr>
<td>Documents from non-governmental organisations (World Health Organisation, Foundation for Innovative New Diagnostics, etc)</td>
<td>Scientific publications</td>
</tr>
<tr>
<td>Number of documents</td>
<td>50</td>
</tr>
<tr>
<td>Time period</td>
<td>2000 – 2015</td>
</tr>
<tr>
<td>Keys</td>
<td>Malaria, elimination, eradication, diagnostics, point-of-care, technology</td>
</tr>
<tr>
<td>Assessment criteria</td>
<td>1. In-field performance (sensitivity, specificity) 2. Quality control</td>
</tr>
</tbody>
</table>

- 2.1 Technology

- 2.2 Assessment

- 2.3 Limitations

- 2.4 Target Product Profile

Conclusions

Future research and application in practice

- Improved sensitivity
- Non-invasive sampling
- Positive control integration
- Low cost

Potential development impact

1. Essential detection of asymptomatic individuals in case management and transmission monitoring
2. Appropriate treatments can be given to those who are infected, minimizing drug resistance
3. Reduce economic burden on developing regions

References


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