Health worker and policy-maker perspectives on use of intramuscular artesunate for pre-referral and definitive treatment of severe malaria at health posts in Ethiopia

Key messages

- The intramuscular route is reportedly easier to administer than the intravenous route and could affect how artesunate is given for definitive treatment of severe malaria.
- Use of intramuscular artesunate at health post level as a pre-referral treatment requires evidence on safety and feasibility before policy shift.

Introduction

- The World Health Organization (WHO) recommends injectable artesunate (intravenous or intramuscular) for management of severe malaria.
- Intramuscular artesunate is not part of the drugs recommended for pre-referral treatment in Ethiopia.
- This study assessed the perspectives of health workers, and policy-makers on the use of intramuscular artesunate as a pre-referral and definitive treatment for severe malaria at the health post level.

Methods

- This study was conducted from January to March 2015 in two regions of Ethiopia: Southern Nations, Nationalities and Peoples Region (SNNPR) and Oromia.
- It is a qualitative exploratory study involving 101 respondents from 60 purposively selected health facilities and from eight purposively selected governmental institutions and development partners.

Results

- Majority of participants knew the contents of the current treatment guidelines for uncomplicated malaria and for severe malaria at hospital level and health centre level but many did not know about the use of rectal artesunate and intramuscular artesunate for pre-referral treatment.
- Provision of intramuscular artesunate as pre-referral and definitive treatment for severe malaria at health posts could be lifesaving in situations where referral is delayed or not possible.

Table 1: Respondents selected by category and region

<table>
<thead>
<tr>
<th>Category</th>
<th>Region</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SNNPR</td>
<td>Oromia</td>
</tr>
<tr>
<td>Health centre and health post staff</td>
<td>55</td>
<td>23</td>
</tr>
<tr>
<td>District, zonal and regional staff</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Hospital staff</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>FMOH</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Partners</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>101</td>
</tr>
</tbody>
</table>

- Health workers at health centres and hospitals frequently use the intravenous route because it allows for co-administration of other drugs. But health extension workers (HEWs) find the intramuscular route easier to use at the health post level.
- The reasons commonly cited against the management of severe malaria using intramuscular artesunate at health post level were: lack of capacity to manage complications and fear of irrational drug use.
- Some advocated for the use of intramuscular artesunate at health post. “I am very happy, because this particular area is highly malaria endemic. If a patient goes to a health centre, he/she may not get immediate service because the health centre serves a big population. But as [the health post] serves a small population it is easy for us to serve Kebele [village] population.” - HEW, SNNPR
- Intramuscular artesunate is already included in the national policy for health centres and hospitals, but pre-referral intramuscular artesunate at health post level will require evidence on safety and feasibility before policy shift.

Conclusion

- From the perspective of health workers, use of intramuscular artesunate as pre-referral treatment of severe malaria cases at the health post is possible but dependent on training and availability of skilled workers.
- Further operational research is needed to establish the feasibility, safety and efficacy of injectable artesunate as pre-referral and definitive treatments at health post level in order to guide any implementation of such an intervention.