The Value of Invasive Meningococcal Disease Combination Vaccine – A Qualitative Study of Adolescents and Parents/Caregivers’ Preferences in the US

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Objective
This qualitative study aims to identify concepts affecting preferences in adolescents (Ado) and young adults and parents/caregivers (P/C) decision making towards current and future Invasive Meningococcal Disease (IMD) vaccines in the US.

Methods
- Two 90-min focus group discussions (FGDs) were conducted with Ado/Young adults (16-23 years) and P/C of 16-18 years old adolescents separately (Eligibility criteria in Supplementary Table 1).
- A targeted literature review informed the discussion guide development, outlining the potential important attributes of meningococcal vaccination and a future combination vaccine.
- FGDs were coded to apply thematic assessment. Results were synthesized separately by moderator-probed and spontaneously mentioned themes. Percentages were calculated on participant numbers contributing to a theme.

Results
- Thirteen participants were included in FGDs (6 Ado/young adults and 7 parents/caregivers), with characteristics presented in Figure 1.
- Results emanating from the probed discussion points were presented in Figure 2.

Figure 1. Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Adolescents and young adults (16-23 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>3</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
</tr>
<tr>
<td>Trans-female</td>
<td>1</td>
</tr>
</tbody>
</table>

Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Parents / Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
</tr>
</tbody>
</table>

Education

<table>
<thead>
<tr>
<th>Education</th>
<th>Adolescents and young adults (16-23 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below college degree</td>
<td>2</td>
</tr>
<tr>
<td>College degree or above</td>
<td>4</td>
</tr>
</tbody>
</table>

Figure 2. Most and Least Important Factors Influencing Decision-making for Future Meningococcal Combination Vaccine

- Most Important factors
  - Time savings due to RNI (100%)
  - Fewer healthcare facility visit due to RNI (100%)
  - Feeling of convenience due to RNI (83%)
  - Added protection against other infectious diseases e.g. sexually-transmitted disease (67%)
- Least Important factors
  - Reduced injection site discomfort due to number of injections (100%)
  - Positive environmental and system level impacts (67%)

- Most Important factors
  - Reduced injection site discomfort due to number of injections (71%)
  - Positive environmental and system level impacts (43%)
- Least Important factors
  - Added protection against other infectious diseases e.g. sexually-transmitted disease (42%)

Background
- MenACWY and MenB are commonly used vaccines to prevent IMD, targeting serogroups A, B, C, W, Y.
- MenABCWY combination vaccines are under development and could provide increased vaccine coverage of serogroups (2).
- It is important to understand how the adolescents and young adults and their parents/caregivers value the potential attributes of a meningococcal combination vaccine when making a vaccine decision.

Conclusions
- Both Ado/young adults (16-23 year old) and parents/caregivers of 16-18 year olds found attributes of a future IMD combination vaccine important for vaccine decision-making.
- Vaccine-receivers preferred a combination vaccine covering serogroups A, B, C, W, Y, with simplified schedules (e.g. fewer visits and injections)
- Added-protection against other infectious disease was considered as an important attribute for both ado/young people and parents/caregivers.

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References
1. Mbaeyi S et al. 2022;11(3):937-951 Infect Dis Ther

Disclosures
- GSK, UK was employed by and shareholder in GlaxoSmithKline Biologicals SA. GlaxoSmithKline Biologicals SA was involved in the development and publication of this poster.
- Authors declare no other financial and non-financial relationships and activities.

Abbreviations
Ado: Adolescents; GSK: GlaxoSmithKline; IMD: Invasive Meningococcal Disease; P/C: Parents/Caregivers; RNI: Reduced number of injections

Digital poster
Supplemental data
Narrated summary
The study underscores preferences from parents/caregivers and adolescents/young people for a combination meningococcal vaccine, driven by considering attributes such as added-protection to other infectious diseases, number of injections or visits and discomforts associated with injections.