The cost-effectiveness of the mothers2mothers Mentor Model as a psychosocial well-being intervention

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Background

mothers2mothers is a peer education and psychosocial support programme that enhances the effectiveness of PMTCT services. Aligned with a public health perspective and against the background of the positive influence of well-being on health and mortality, m2m aims to impact on the health of its clients by addressing the challenges facing HIV-positive pregnant women and mothers, thus improving their psychosocial well-being. m2m’s impact on psychosocial well-being was used in a cost-effectiveness analysis of the m2m Mentor Model implemented under the STAR-EC Programme in Uganda compared with PMTCT services without psychosocial support.

Methods

A quasi-experimental matched area comparison design was used. Seven hundred and ninety-six (796) pregnant women and new mothers accessing PMTCT between June 2012 and March 2014 in 31 intervention facilities (where m2m Mentor Mothers provided peer education and psychosocial support) and 31 matched control facilities (where no peer education and psychosocial support were provided) participated in facility-based Psychosocial Wellbeing surveys. Informed by m2m’s Theory of Change, standardized questionnaires were used to measure multiple dimensions of psychosocial well-being. A composite measure of psychosocial well-being was constructed using Principal Component Analysis.

Incremental effectiveness was calculated as the difference in percentage points psychological well-being measured between intervention and control groups multiplied by the total women needing PMTCT in 2014 in Uganda as estimated by Uganda’s Ministry of Health. Using the AIM model in SPECTRUM, incremental cost was calculated as the cost of scaling up the m2m intervention to public health facilities in Uganda, following an ingredients approach from a provider perspective. Economic costs were captured, including donated goods and opportunity cost. A discount rate of 3% was used.

Results

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<th>Control</th>
<th>Intervention</th>
<th>Incremental effect</th>
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<tbody>
<tr>
<td>Have poor psychological well-being</td>
<td>63.5%</td>
<td>55.3%</td>
<td>8.2 p.p. (p=0.010)</td>
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<tr>
<td>Have good psychological well-being</td>
<td>36.5%</td>
<td>44.7%</td>
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Total women needing PMTCT in Uganda (2014) - Calculated in AIM (SPECTRUM)

Decision rule for ICER

The incremental cost per woman with psychosocial well-being was USD 601.90. Based on the threshold of GDP/GNI per capita in Uganda (USD 572, 2013), the m2m intervention was found to be cost effective as a psychosocial wellbeing intervention. The intervention was also cost-effective as measured against the sub-Saharan Africa threshold (USD 1,701, 2013).

Conclusion

Psychosocial support is sometimes overlooked in the care and treatment of PMTCT clients. Yet, literature suggests that subjectively experienced well-being impacts on healthy choices and improves health and longevity. m2m’s model of care is an important, cost-effective component of service delivery in the area of public health.

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