Additional file 3. Formula for calculation of sample size after adjusting for cluster randomisation

adjusted sample size = sample size/design effect \[1\]
design effect = 1 + (M-1) ICC \[1\]

Where
M = Average cluster size
ICC = Intracluster Correlation Coefficient

Formula for calculating ICC from an Anova table:
ICC = (MSB-MSE)/(MSB+ (K-1)MSE) \[2\]

Where
MSB = Between subject mean squares
MSE = Residual mean squares
K = number of observations

Data availability for studies with cluster randomized design

<table>
<thead>
<tr>
<th>Studies with cluster randomisation</th>
<th>Data available for calculating adjusted sample size</th>
<th>Included in meta-analysis with sample size adjusted for cluster randomisation</th>
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<tr>
<td>Chen (2008) [3]</td>
<td>Yes</td>
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<td>Chen (2009) [4]</td>
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<td>Chen (2010) [5]</td>
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<td>Chen (2010) [6]</td>
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<tr>
<td>Hariprasad (2013) [7]</td>
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References