Supplementary File 01

There was no study available for peer-led intervention and NCD control in the Indian context. Based on our experience and expert opinion, we have considered effect size as 20%.

The sample size was calculated using nMaster application (https://www.cmc-biostatistics.ac.in/nmaster/) with the formula for cluster study design-

$$n = \frac{\left(z_{\frac{\alpha}{2}} + z_{1-\beta}\right)^2 \left[p_1(1-p_1) + p_2(1-p_2)\right]\left[1 + (m-1)\rho\right]}{(p_1 - p_2)^2}$$

Where P1= proportion of outcome in the experimental group

P2= proportion of outcome in the control group

α= level of significance

1-β= power

ρ= Intra-cluster correlation coefficient

m= size of the cluster

Considering the proportion of outcome in the control group as 50%, an alpha of 5%, power of 90%, effect size of 20%, design effect of 2.5 and loss to follow-up as 20%, the estimated sample size was 720 participants (40 clusters with 18 participants in each cluster)

nMaster 2.0

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Sample Size Based on
Cluster design

Number of Groups
Two

Tests Available
Unmatched studies - Comparison of proportions (Design Effect)

Cluster Design - Two groups - Unmatched studies - Comparison of proportions (Design Effect)

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	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Co
Proportion of outcome in the experimental group	0.7								
Proportion of outcome in the control group	0.5								
Size of the cluster	15								
Design effect	2.5								
Power (1-β) %	90								
α Error (%)	5								
1 or 2 sided	2								
No. of clusters required	20								
Required sample size	302								

Number of Cluster:
The required number of cluster for the study

Customary:
Any integer > 0

X

Sample_Size_Peer_le
d_Intervention_SERB_