**Online Supplement -** Influence of maternal exposure to malaria social and behavioral change messages and effectiveness of communication media on bed net use and malaria infection in Malawi

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| Table s1 cross tabulation and correlation of household ITN ownership and exposure to any malaria related knowledge. |
|  | ITN ownership | p-value |
|  | Nonen (%) | Yesn (%) |
| Maternal exposure to any malaria-related message |  |  | 0.122 |
|  | No  | 202 (14.3) | 1215 (85.7) |  |
|  | Yes | 70 (11.0) | 568 (89.0) |  |
| Cramér V correlation test | 0.06 |  |
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| **Table s2 Association between sources of malaria messages, ITN usage, and malaria infection – among those owning nets** |
|  | **ITN use** | **Malaria infection** |
| **Characteristic** | **aORa** | **95% CI** | **aORa** | **95% CI** |
|  |  |  |  |  |
| ***Mode of delivery of any malaria SBC messages*** |  |  |  |  |
| TV source of malaria-related messages |  |  |  |  |
|  | No  | 1.00 |  | 1.00 |  |
|  | Yes | 0.94 | (0.49–1.81) | 0.79 | (0.19–3.31) |
| Radio source of malaria-related messages |  |  |  |  |
|  | No  | 1.00 |  | 1.00 |  |
|  | Yes | 1.21 | (0.78–1.90) | 0.75 | (0.37–1.51) |
| Newspaper source of malaria-related messages |  |  |  |  |
|  | No  | 1.00 |  | - |  |
|  | Yes | 0.75 | (0.31–1.77) | **-** | **-** |
| Poster source of malaria-related messages |  |  |  |  |
|  | No  | 1.00 |  | 1.00 |  |
|  | Yes | 1.01 | (0.52–1.94) | 0.60 | (0.21–1.68) |
| Health worker source of malaria-related messages |  |  |  |  |
|  | No  | 1.00 |  | 1.00 |  |
|  | Yes | **1.69** | **(1.15–2.50)** | **0.51** | **(0.32–0.81)** |
| Peer educator source of malaria-related messages |  |  |  |  |
|  | No  | 1.00 |  | 1.00 |  |
|  | Yes | 1.13 | (0.39–3.27) | 0.93 | (0.26–3.38) |
| At least one message outlet (composite)§ |  |  |  |  |
|  | No  | 1.00 |  | 1.00 |  |
|  | Yes | **1.69** | **(1.16–2.45)** | **0.53** | **(0.34–0.84)** |
| ***Malaria Knowledge*** |  |  |  |  |
| Knowledge of malaria cause |  |  |  |  |
|  | No | 1.00 |  | 1.00 |  |
|  | Yes | 2.01 | (0.93–4.34) | 1.06 | (0.48–2.33) |
| Knowledge of malaria protection |  |  |  |  |
|  | No | 1.00 |  | 1.00 |  |
|  | Yes | 0.87 | (0.62–1.23) | 0.60 | (0.36–1.01)\* |
| Malaria knowledge (composite) |  |  |  |  |
|  | No | 1.00 |  | 1.00 |  |
|  | Yes | 0.99  | (0.69–1.40) | 0.70 | (0.42–1.16) |
| \*p-value at borderline = 0.057 § Heard ITN-related messages during 6 months preceding the survey, § composite variable for different sources of any malaria messages (i.e., TV, radio, newspaper, poster, health worker, and peer educators) in the last 6 months, CI confidence interval, OR odds ratio, aOR adjusted odds ratio, ITN insecticide treated nets, TV television, Micro+ positive malaria using microscopy test, a Adjusted for sex of the child, age of the child, maternal education, age of head of the household, sex of head of household, wealth, household size, residence, region, household has one ITN per two individuals , \* sample included children aged 6–59 months, \*\* sample included all children aged under 59 months |

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| **Table s3 Association between ITN malaria-related messages, sources of malaria messages, ITN usage, and malaria infection** |
|  |  | **ITN usage\*\*** | **Malaria infection (Micro+)\*** |
| **Characteristic** | **OR** | **95% CI** | **aORa** | **95% CI** | **OR** | **95% CI** | **aORa** | **95% CI** |
| ***ITN-related malaria messages*** |  |  |  |  |  |  |  |  |
| Maternal exposure to at least one ITN message § |  |  |  |  |  |  |  |  |
|  | No | 1.00 |  | 1.00 |  | 1.00 |  | 1.00 |  |
|  | Yes | **1.62** | **(1.21–2.17)** | **1.57** | **(1.14–2.16)** | **0.56** | **(0.37–0.82)** | **0.65** | **(0.42–0.99)** |
| § Heard ITN-related messages during 6 months preceding the survey, *CI* confidence interval, *OR* odds ratio*, aOR* adjusted odds ratio, *ITN* insecticide treated nets, *TV* television, *Micro+* positive malaria using microscopy test, a Adjusted for sex of the child, age of the child, maternal education, age of head of the household, sex of head of household, wealth, household size, residence, region , household has one ITN per two individuals \* sample included children aged 6–59 months, \*\* sample included all children aged under 59 months |