

Supplementary Fig. 1 Begg's funnel plot evaluating the publication bias. ES, economic status.

## **Supplementary Table S1** Quality assessment tool (modified for the study)

| Quality assessme  | ent checklist for s                      | elected studies <sup>a</sup>   |                   |
|-------------------|--|--|-------------------|
| 1. Was the sam    | pling method rep                         | resentative of the target population?  |                   |
|                   | Α.                                       | Nonprobability sampling (including: purposive, quota, convenience and snowball sampling) | 0                 |
|                   | В.                                       | Probability sampling (including: systematic recruitment, simple random)                  | 1                 |
| 2. Was sample     | size statistically d                     | etermined and/or adequately powered?   |                   |
|                   | A.                                       | No   | 0                 |
|                   | B.                                       | Yes  | 1                 |
| 3. Was eligibilit | ty criterion clearly                     | defined?   |                   |
|                   | A.                                       | No   | 0                 |
|                   | В.                                       | Yes  | 1                 |
| 4. Was the diag   | gnosis of parasitic                      | infection objective?   |                   |
|                   | A.                                       | By history or indirect evidence evaluation solely  | 0                 |
|                   | В.                                       | By laboratory test   | 1                 |
| 5. Were outcor    | nes measures clea                        | orly defined and assessed (what all parasites were obtained)?                            |                   |
|                   | A.                                       | No   | 0                 |
|                   | В.                                       | Yes  | 1                 |
|                   | stical methods co<br>ing the association | ntrol for confounding factors (e.g., stratification/matching adjustment) ns?             |                   |
|                   | A.                                       | No   | 0                 |
|                   | B.                                       | Yes  | 1                 |
| Scoring metho     | d:                                       |  |                   |
| Grading           | 5 or 6 out of 6                          | 3 or 4 out of 6  | 0,1 or 2 out of 6 |
| Risk of bias      | Low                                      | Medium   | High              |
| Study quality     | Good                                     | Satisfactory   | Poor              |

<sup>&</sup>lt;sup>a</sup>Adapted from: Wong WC, Cheung CS, Hart GJ. Development of a quality assessment tool for systematic reviews of observational studies (QATSO) of HIV prevalence in men having sex with men and associated risk behaviours. *Emerg Themes Epidemiol* 2008;5:23.

# Supplementary Table S2 Search strategy used and results extracted

| Search | Keywords   | Date      | Embase  | Scopus    | PubMed/Medline |
|--------|--|-----------|---------|-----------|----------------|
| #5     | #1 AND #2 AND #3 AND #4  | 16-Feb-21 | 574     | 293       | 520            |
| #4     | "india"/exp OR india OR "indian"/exp OR indian   | 16-Feb-21 | 1198648 | 7,69,433  |                |
| #3     | "prevalence"/exp OR prevalence OR "risk factor"/exp OR "risk factor" OR (("risk"/exp OR risk) AND factor) OR "epidemiology"/exp OR epidemiology OR predispose OR "causal factor" OR (causal AND factor)    | 16-Feb-21 | 5632106 | 32,34,351 | 5290969        |
| #2     | "pediatric"/exp OR pediatric OR "child"/exp OR child OR kid OR "baby"/exp OR baby  | 16-Feb-21 | 3769433 | 33,86,511 | 3483579        |
| #1     | soil-transmitted helminth OR ("soil transmitted" AND ("helminth"/exp OR helminth)) OR "helminth"/exp OR helminth OR "ascaris"/exp OR ascaris OR "trichuris"/exp OR trichuris OR "hookworm"/exp OR hookworm | 16-Feb-21 | 184683  | 57,211    | 149187         |

# **Supplementary Table S3** Quality assessment of studies selected for the review

| Sl. no | Author/year                         | Quality<br>score 1 | Quality score 2 | Quality score 3 | Quality score 4 | Quality score 5 | Quality<br>score 6 | Total |
|--------|-------------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|--------------------|-------|
| 1      | Narain et al/2000 <sup>25</sup>     | 0                  | 0               | 1               | 1               | 1               | 1                  | 4     |
| 2      | Subba and Singh/2020 <sup>12</sup>  | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 3      | Devi/2009 <sup>15</sup>             | 1                  | 0               | 1               | 1               | 1               | 0                  | 4     |
| 4      | Wani and Ahmad/2009 <sup>26</sup>   | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 5      | Wani and Amin/2016 <sup>27</sup>    | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 6      | Wani et al/2008 (a) <sup>28</sup>   | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 7      | Lone et al/2011 <sup>29</sup>       | 0                  | 1               | 1               | 1               | 1               | 0                  | 4     |
| 8      | Wani et al/2007 (a) <sup>30</sup>   | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 9      | Wani et al/2008 (b) <sup>31</sup>   | 1                  | 1               | 1               | 1               | 1               | 0                  | 5     |
| 10     | Wani et al /2010 <sup>32</sup>      | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 11     | Wani et al/2007(b) <sup>33</sup>    | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 12     | Das et al/2019 <sup>9</sup>         | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 13     | Chowdhury et al/1968 <sup>14</sup>  | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 14     | Nawalinski et al/1978 <sup>34</sup> | 1                  | 1               | 1               | 1               | 1               | 0                  | 5     |
| 15     | Greenland et al/2015 <sup>16</sup>  | 1                  | 1               | 1               | 1               | 1               | 0                  | 5     |
| 16     | Mahapatra et al/2020 <sup>17</sup>  | 0                  | 1               | 1               | 1               | 1               | 0                  | 4     |
| 17     | Bora et al/2006 <sup>35</sup>       | 0                  | 0               | 1               | 1               | 0               | 0                  | 2     |
| 18     | Bansal et al/2018 <sup>18</sup>     | 0                  | 1               | 1               | 1               | 1               | 0                  | 4     |
| 19     | Awasthi et al/1997 <sup>36</sup>    | 1                  | 0               | 1               | 1               | 1               | 0                  | 4     |
| 20     | Ganguly et al/2017 <sup>10</sup>    | 1                  | 1               | 1               | 1               | 1               | 1                  | 6     |
| 21     | Bisht et al /2011 <sup>37</sup>     | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 22     | Awasthi et al/2008 <sup>23</sup>    | 1                  | 1               | 1               | 1               | 1               | 0                  | 5     |
| 23     | Yunus et al/1979 <sup>24</sup>      | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 24     | Chandi et al /2018 <sup>38</sup>    | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 25     | Ranjan et al/2015 <sup>39</sup>     | 1                  | 1               | 1               | 1               | 1               | 1                  | 6     |
| 26     | DattaBanik et al/1978 <sup>40</sup> | 0                  | 0               | 1               | 1               | 1               | 0                  | 3     |
| 27     | Gupta et al /2020 <sup>19</sup>     | 1                  | 1               | 1               | 1               | 1               | 1                  | 6     |
| 28     | Dhaka et al/2020 <sup>41</sup>      | 1                  | 1               | 1               | 1               | 1               | 0                  | 5     |

# **Supplementary Table S3** (Continued)

| Sl. no | Author/year                             | Quality<br>score 1 | Quality<br>score 2 | Quality score 3 | Quality<br>score 4 | Quality score 5 | Quality score 6 | Total |
|--------|---|--------------------|--------------------|-----------------|--------------------|-----------------|-----------------|-------|
| 29     | Tripathi et al/2014 <sup>42</sup>       | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 30     | Choubisa et al/2012 <sup>43</sup>       | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 31     | Shobha et al/2013 <sup>20</sup>         | 1                  | 0                  | 1               | 1                  | 0               | 0               | 3     |
| 32     | Lakhani et al<br>/2012 <sup>44</sup>    | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 33     | Naish et al/2004 <sup>11</sup>          | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 34     | Paul et al/1999 <sup>45</sup>           | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 35     | Rangaiahagari et al/2013 <sup>46</sup>  | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 36     | Aher and Kulkarni /2011 <sup>47</sup>   | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 37     | Anbumani et al/2011 <sup>48</sup>       | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 38     | Elkins /1984 <sup>49</sup>              | 1                  | 0                  | 1               | 1                  | 1               | 0               | 4     |
| 39     | Kattula et al/2014 <sup>50</sup>        | 1                  | 1                  | 1               | 1                  | 1               | 1               | 6     |
| 40     | Gopalakrishnan et al/2018 <sup>51</sup> | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 41     | Christu Rajan et al/2020 <sup>13</sup>  | 1                  | 1                  | 1               | 1                  | 1               | 1               | 6     |
| 42     | Ragunathan et al/2010 <sup>21</sup>     | 0                  | 0                  | 1               | 1                  | 0               | 0               | 2     |
| 43     | Golia/2014 <sup>52</sup>                | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |
| 44     | Panda et al/2012 <sup>22</sup>          | 0                  | 0                  | 1               | 1                  | 1               | 0               | 3     |

# Supplementary Table S4 Pooled prevalence of STH in different regions of India

|                  | Ascaris<br>% prevalence<br>(95% CI) | No. of studies<br>giving the<br>prevalence<br>of Ascaris | Trichuris<br>% prevalence<br>(95% CI) | No. of studies<br>giving the<br>prevalence<br>of <i>Trichuris</i> | Hookworm<br>% prevalence<br>(95% CI) | No. of studies<br>giving the<br>prevalence of<br>hookworm |
|------------------|-------------------------------------|--|---------------------------------------|---|--------------------------------------|---|
| North East India | 46 (44–49)                          | 2  | 12 (1–34)                             | 3   | 2 (1–3)                              | 1   |
| North India      | 35 (22–50)                          | 19   | 14 (7–22)                             | 15  | 5 (1–13)                             | 9   |
| Central India    | 8 (6–10)                            | 2  | -                                     | -   | 4 (3-6)                              | 2   |
| East India       | 18 (3–42)                           | 4  | 3 (1–6)                               | 3   | 49 (25–74)                           | 4   |
| West India       | 3 (2-4)                             | 4  | 1 (0-4)                               | 1   | 1 (0-2)                              | 3   |
| South India      | 25 (9–47)                           | 10   | 19 (5–38)                             | 9   | 10 (4–17)                            | 10  |

Abbreviations: CI, confidence interval; STH, soil-transmitted helminths.