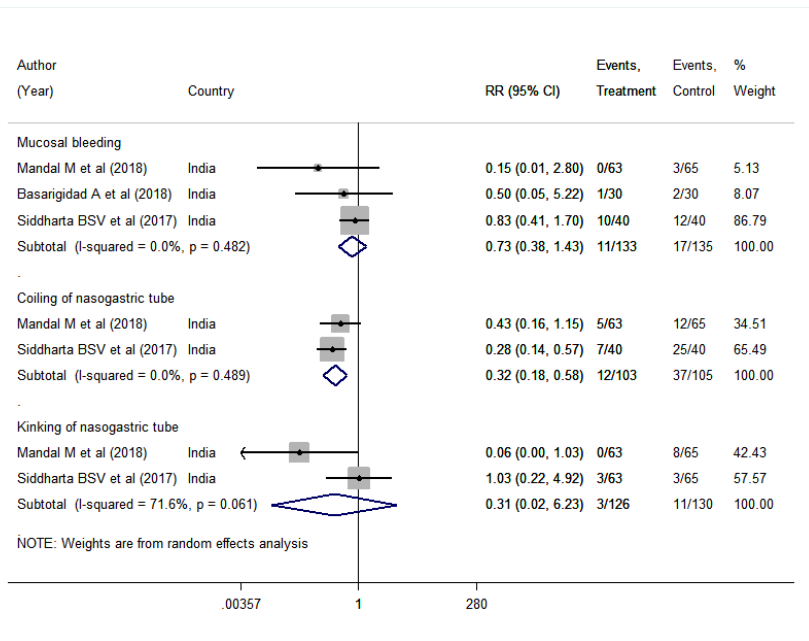
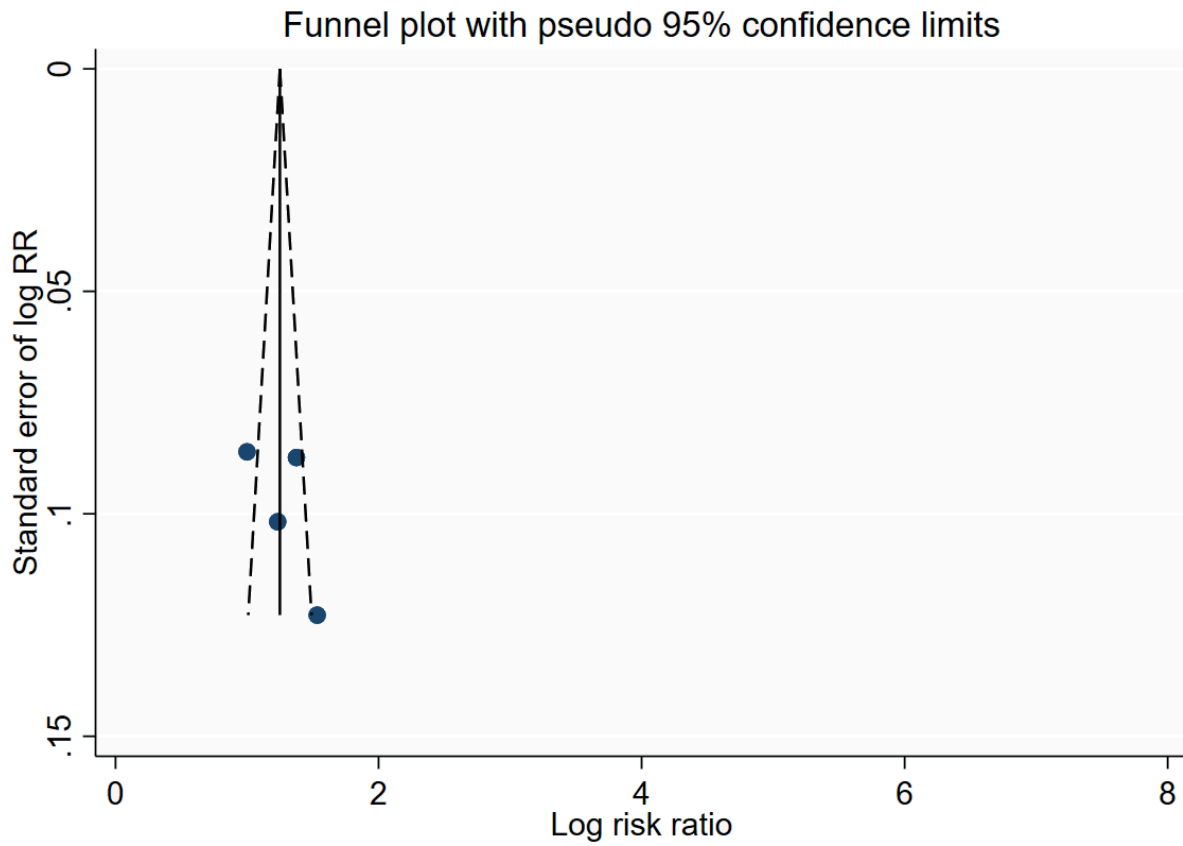


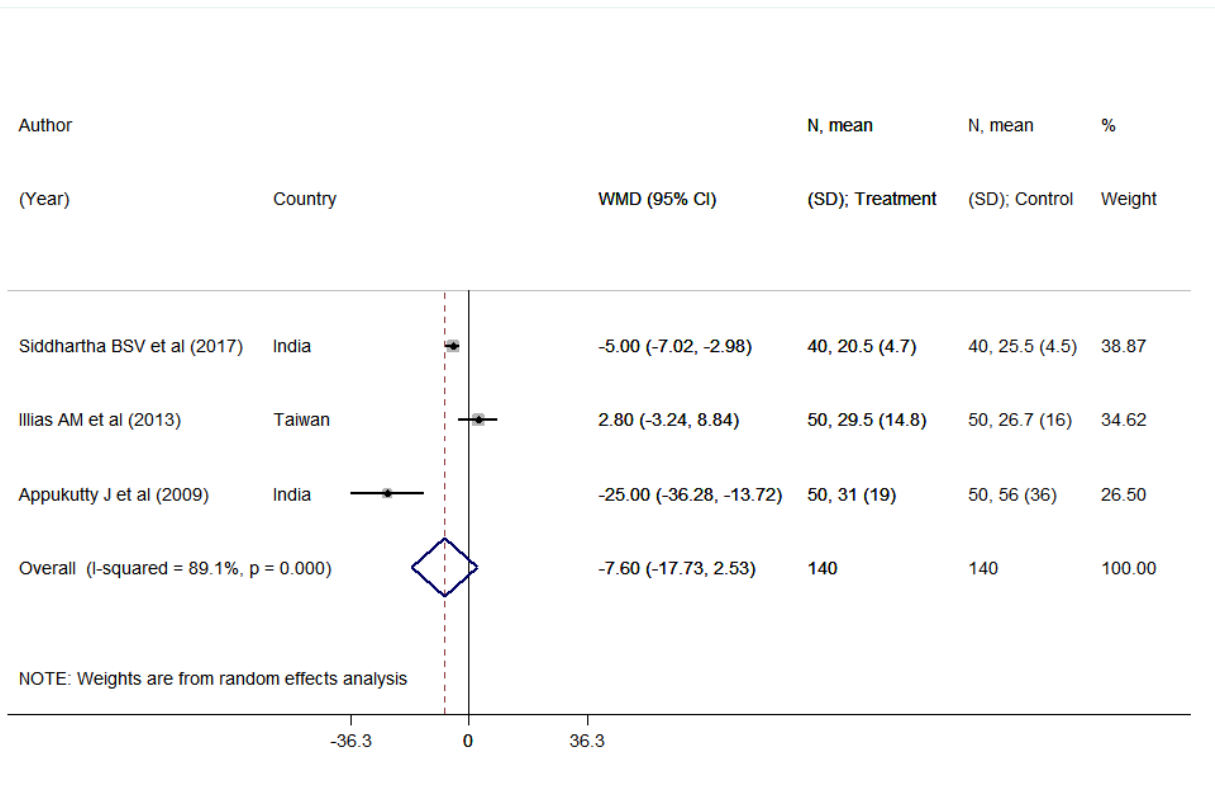
Supplementary Figure 1 Comparison between conventional technique and reverse Sellick's maneuver in terms of mean time involved in insertion of nasogastric tube (in seconds).



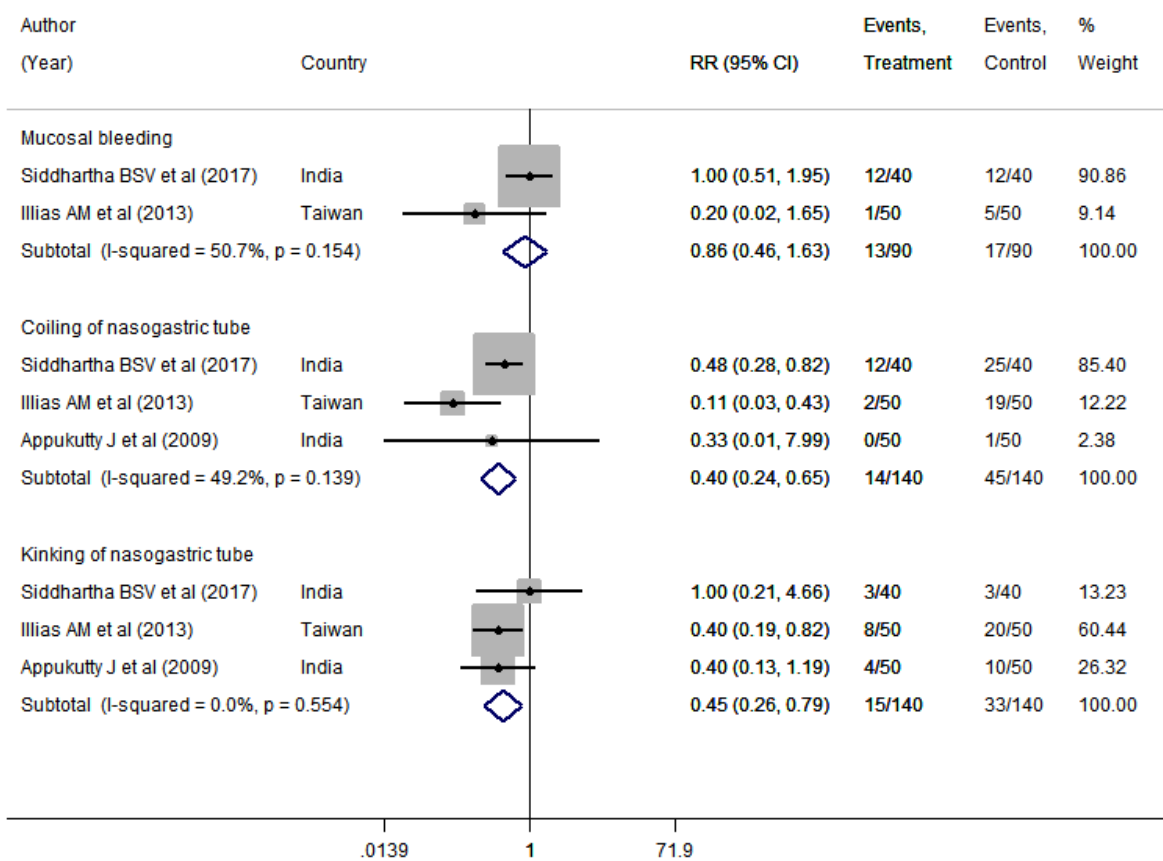
Supplementary Figure 2 Comparison between conventional technique and reverse Sellick’s maneuver in terms of complications during insertion.



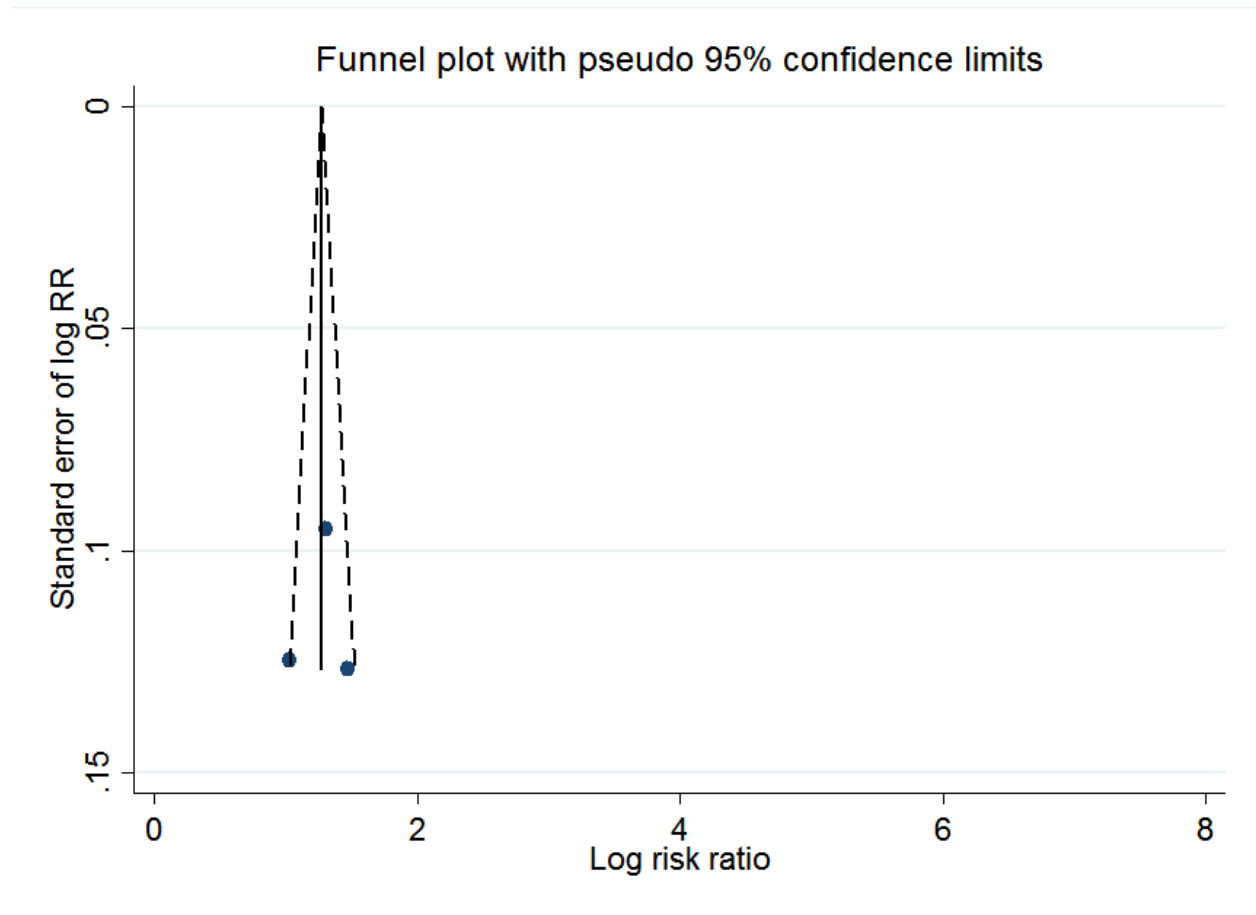
Supplementary Figure 3 Funnel plot for publication bias with respect to overall successful insertion in comparison between conventional technique and reverse Sellick's maneuver.



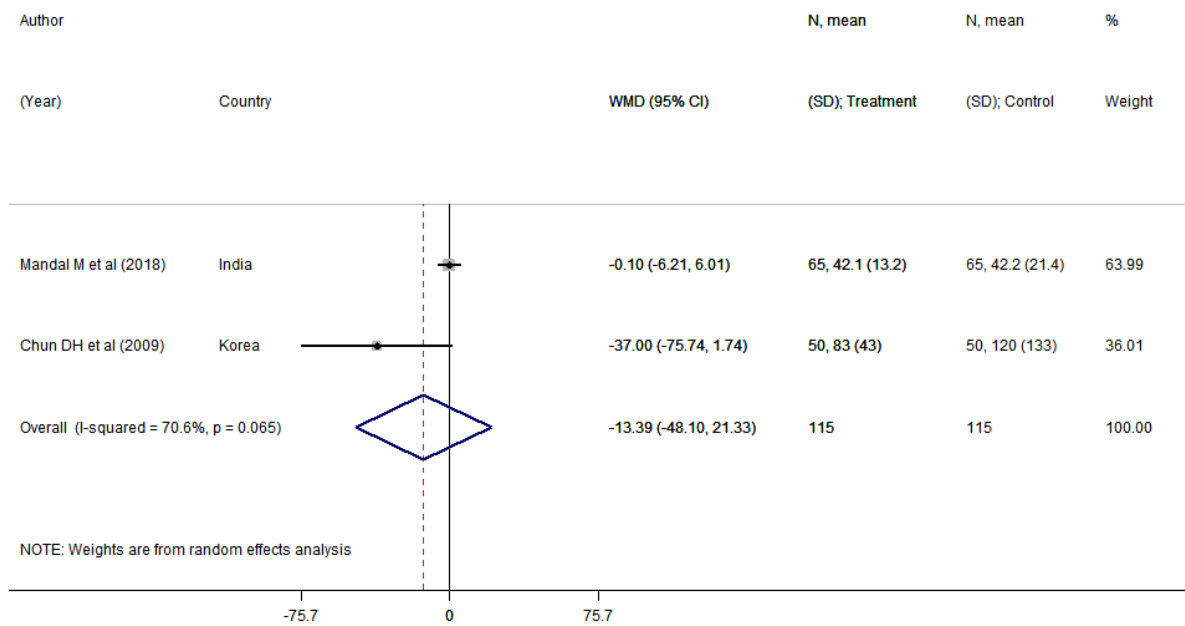
Supplementary Figure 4 Comparison between conventional technique and neck flexion with lateral neck pressure in context of mean time involved in insertion of nasogastric tube (in seconds).



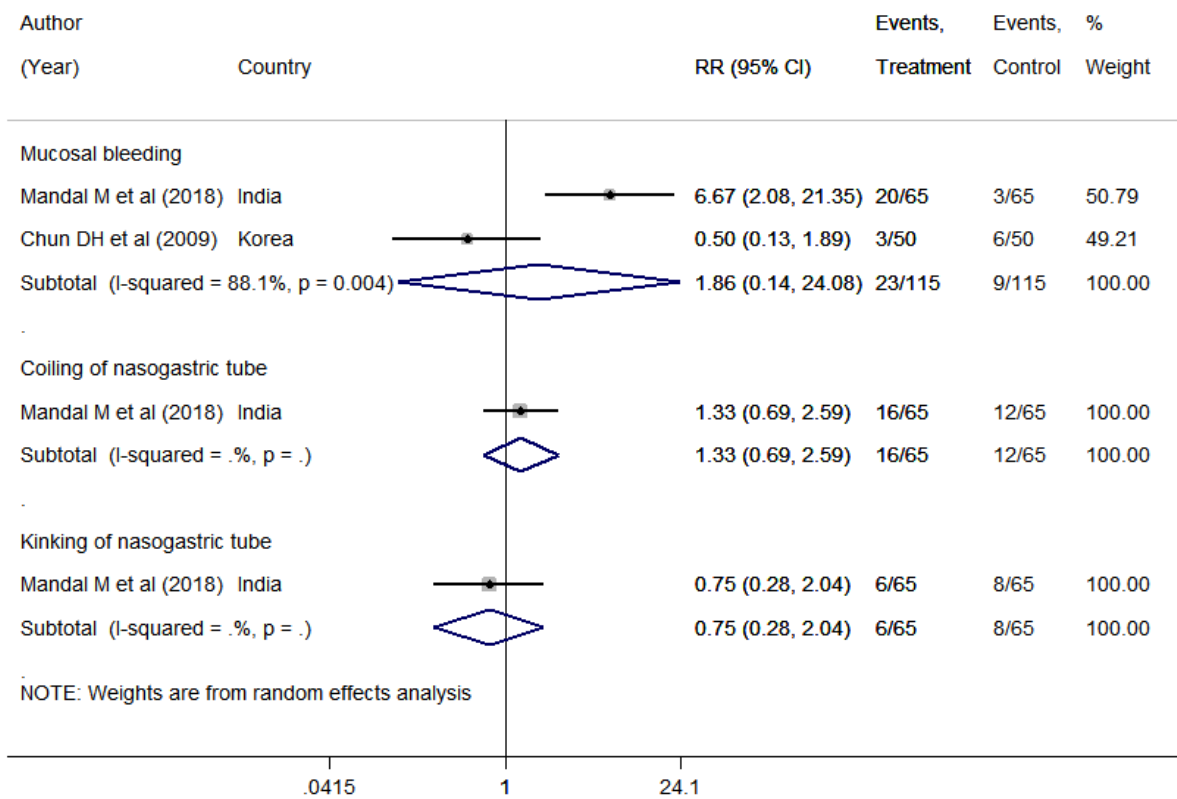
Supplementary Figure 5 Comparison between conventional technique and neck flexion with lateral neck pressure in terms of complications during insertion.



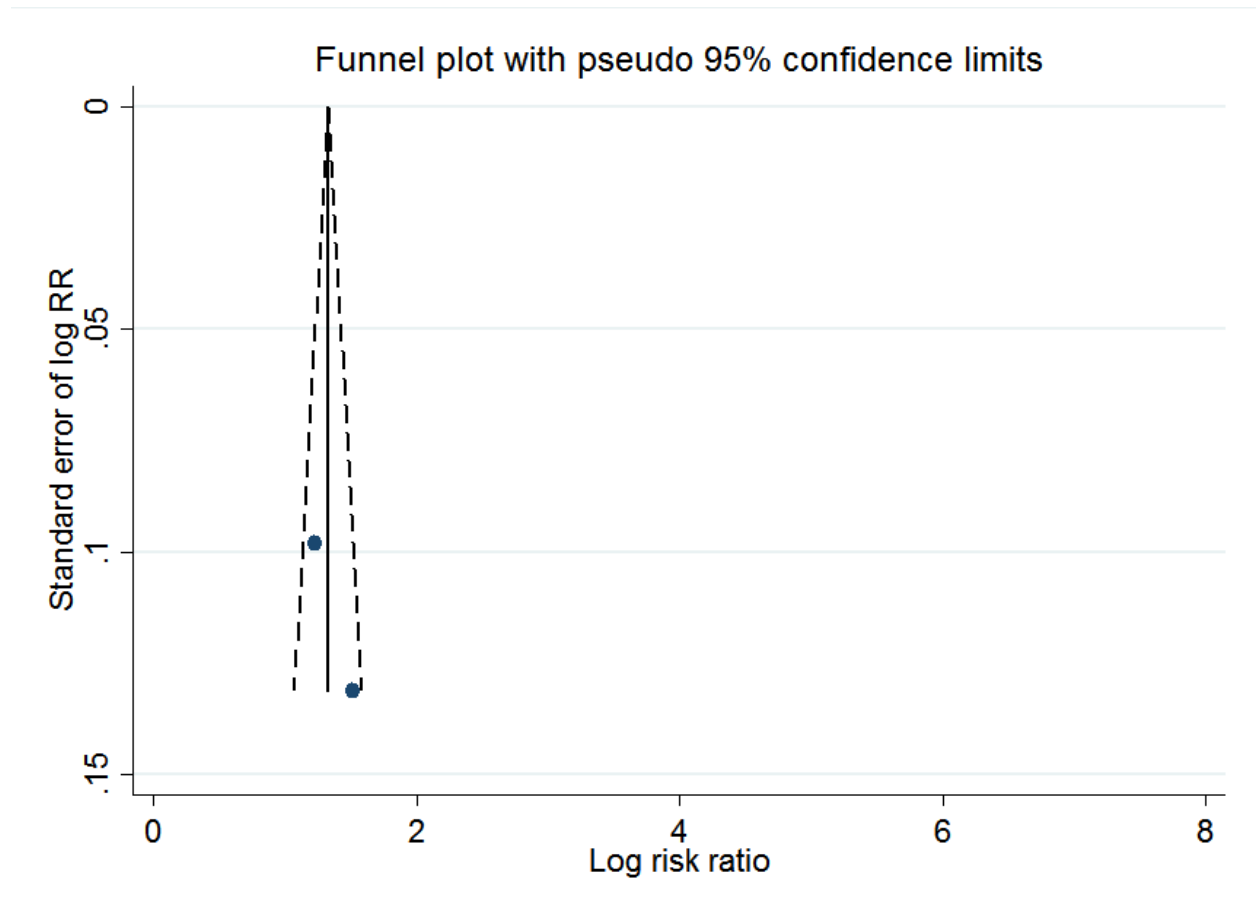
Supplementary Figure 6 Funnel plot for publication bias with respect to overall successful insertion in comparison between conventional technique and neck flexion with lateral neck pressure.



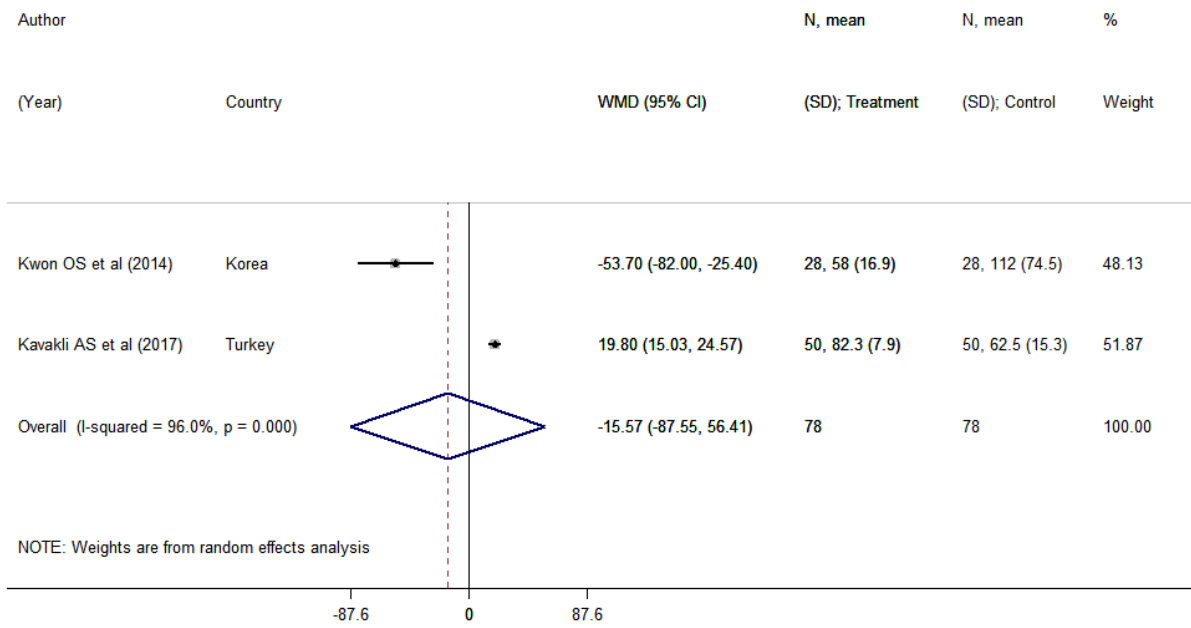
Supplementary Figure 7 Comparison between placement of normal nasogastric tube and frozen nasogastric tube in context of mean time involved in insertion of nasogastric tube (in seconds).



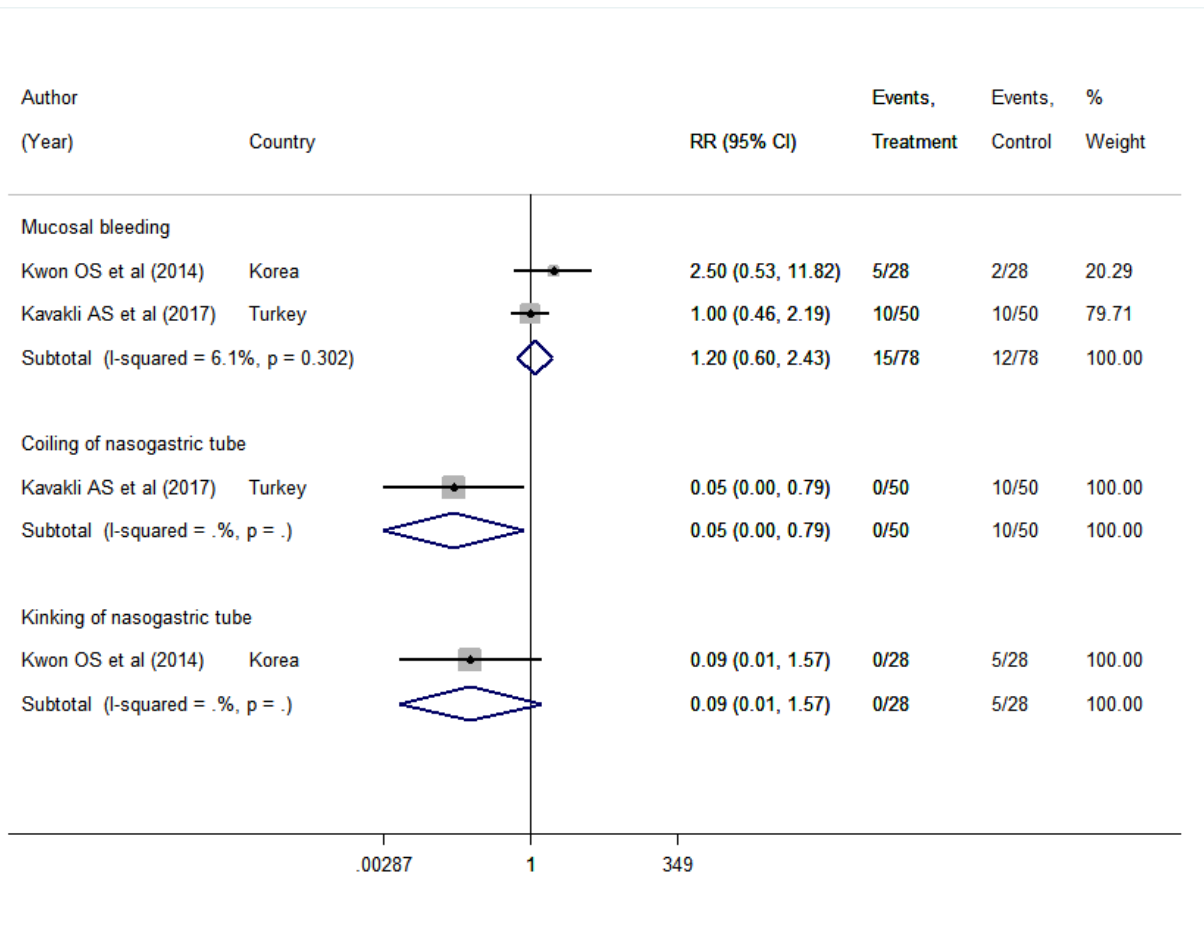
Supplementary Figure 8 Comparison of complications between placement of normal nasogastric tube and frozen nasogastric tube.



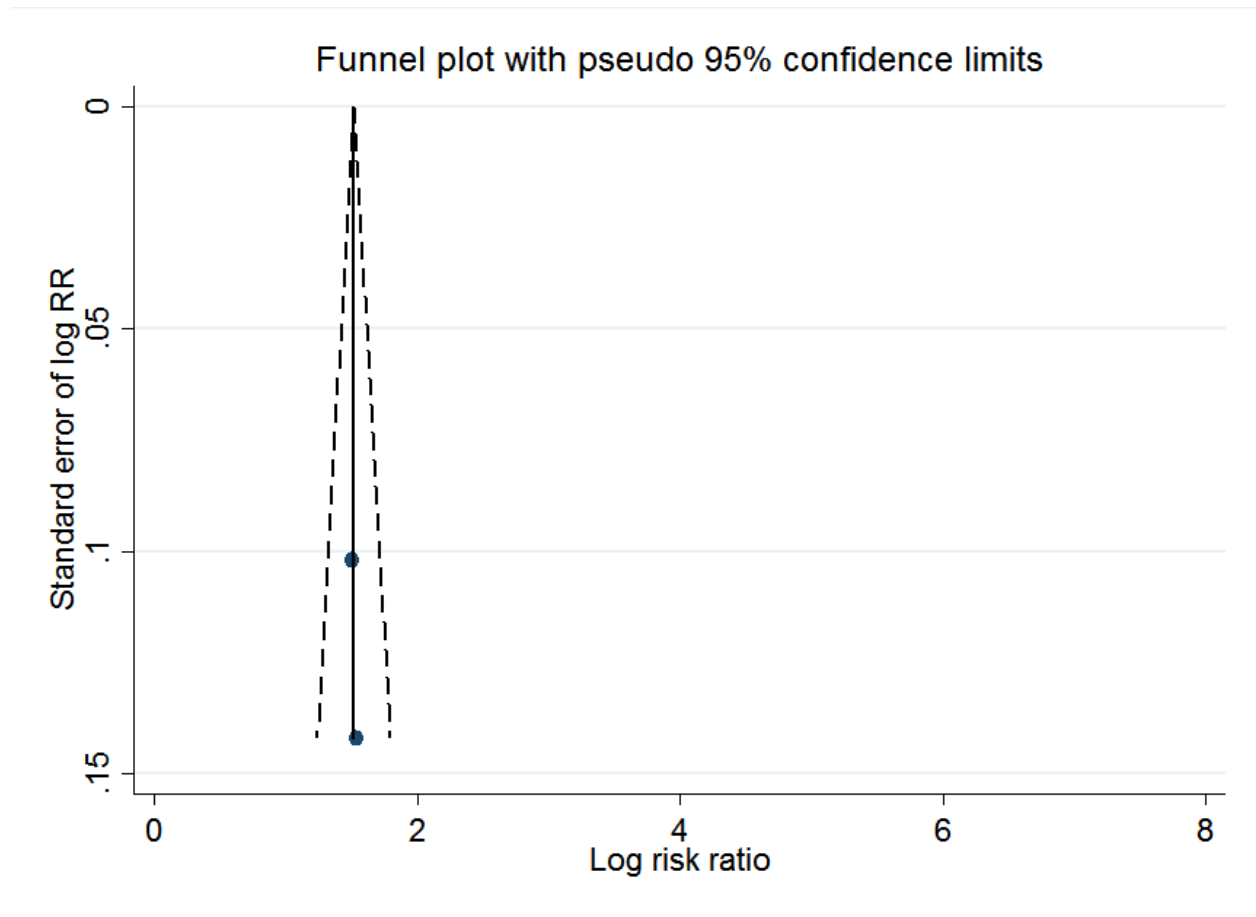
Supplementary Figure 9 Funnel plot for publication bias with respect to overall successful insertion in comparison between placement of normal nasogastric tube and frozen nasogastric tube.



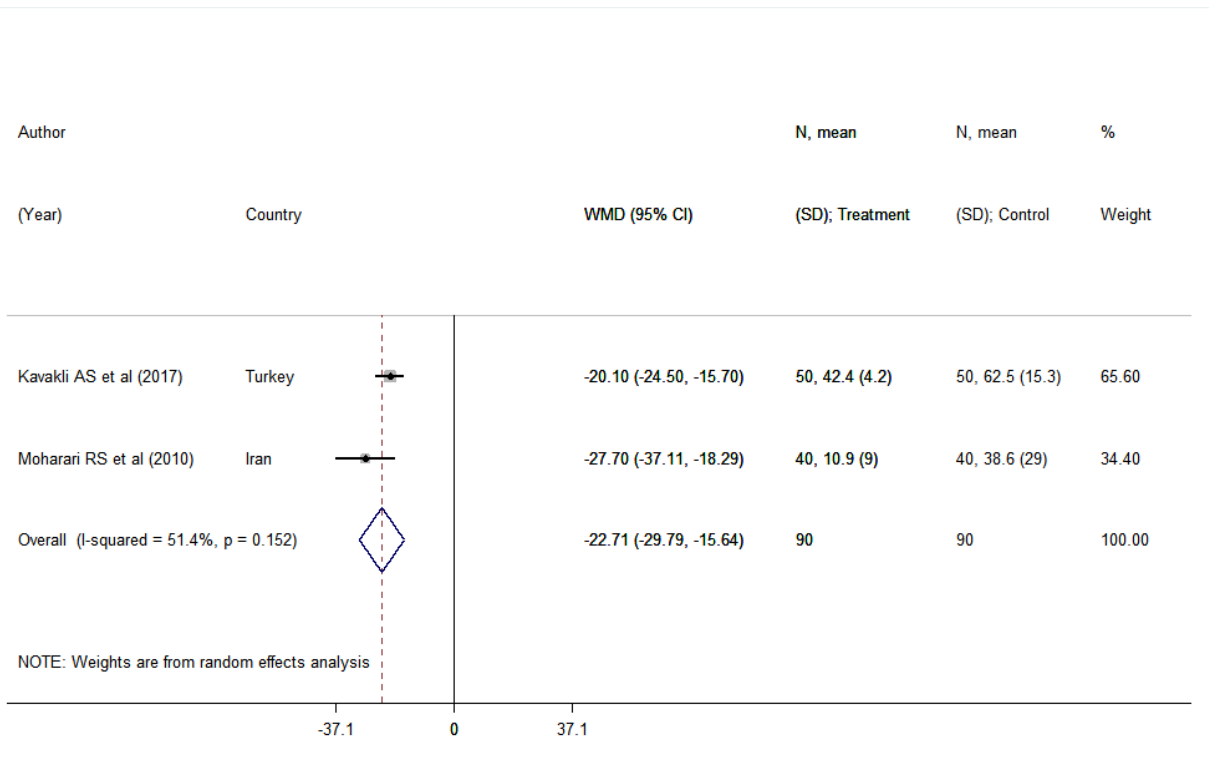
Supplementary Figure 10 Comparison between conventional technique of NGT placement and endotracheal tube assisted placement in terms of mean time involved in insertion of nasogastric tube (in seconds).



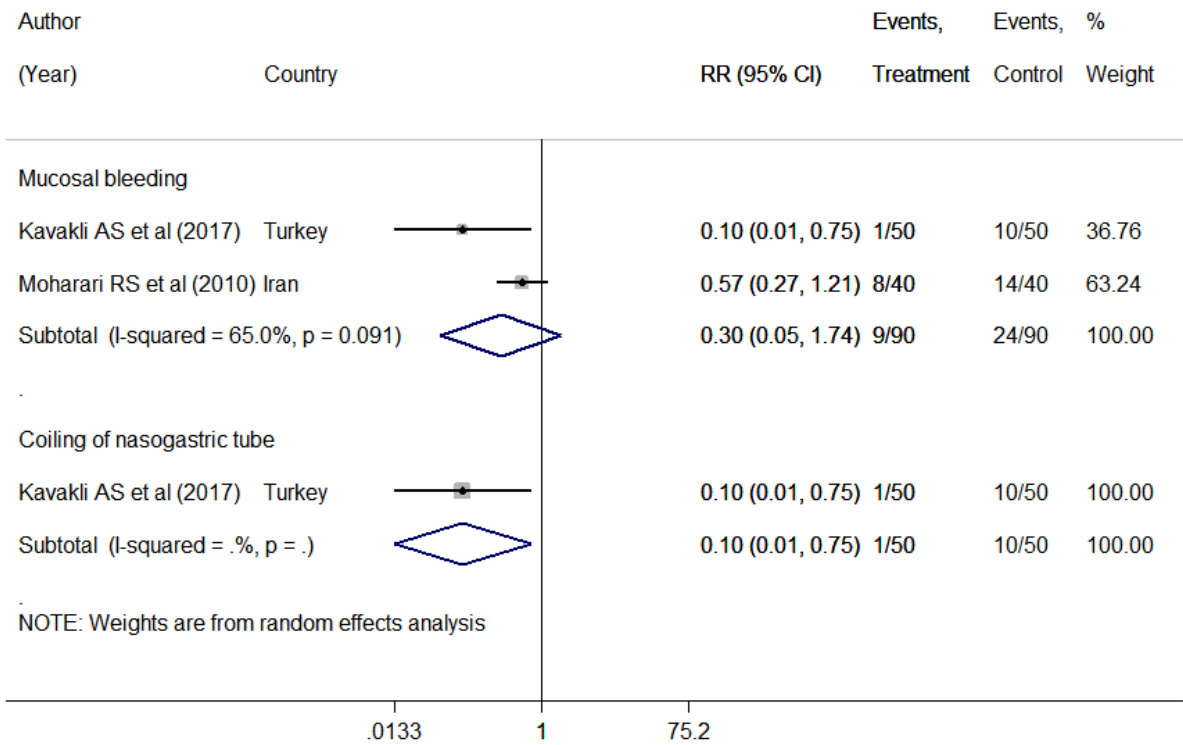
Supplementary Figure 11 Comparison of complications between placement of nasogastric tube using conventional technique and endotracheal tube assisted placement of nasogastric tube.



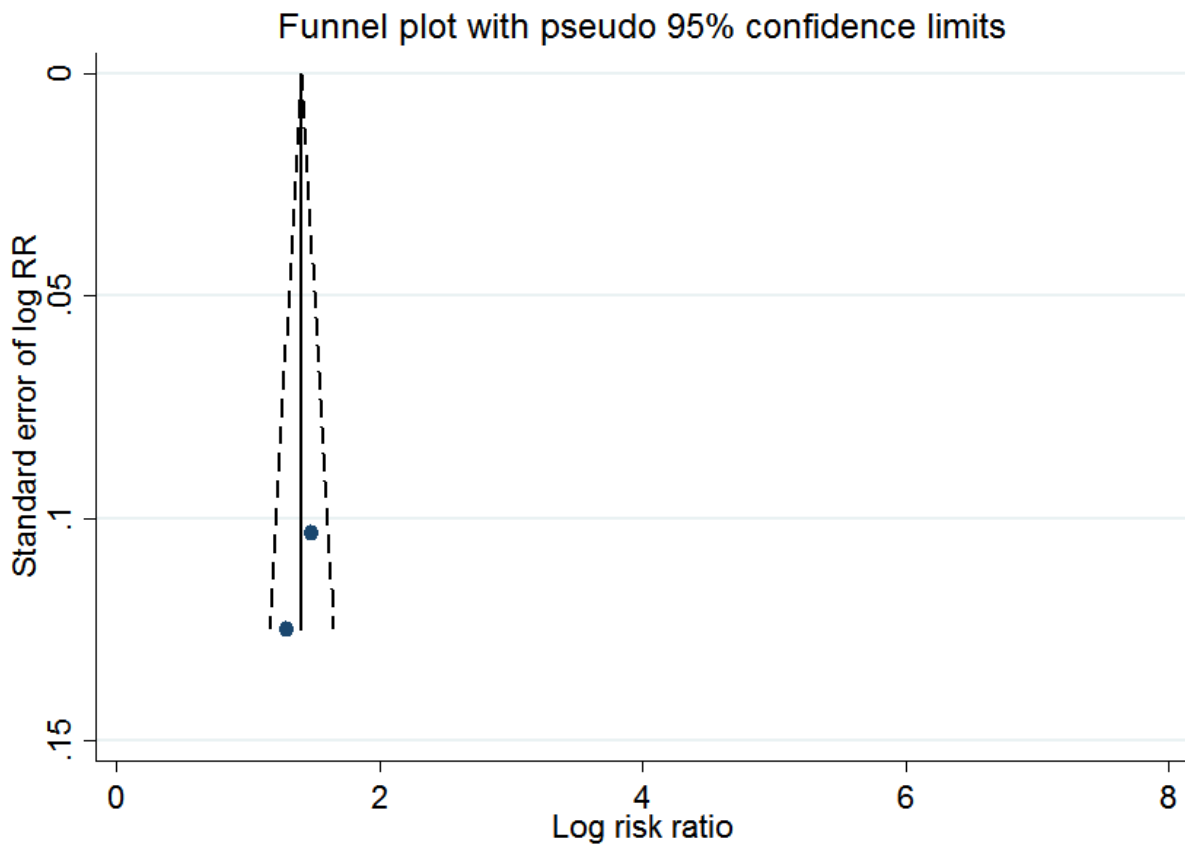
Supplementary Figure 12 Funnel plot for publication bias with respect to overall successful insertion in comparison between conventional technique of nasogastric tube placement and endotracheal tube assisted placement.



Supplementary Figure 13 Comparison between conventional technique of NGT placement and video-assisted placement in context of mean time involved in insertion of nasogastric tube (in seconds).



Supplementary Figure 14 Comparison of complications between placement of nasogastric tube using conventional technique and video-assisted placement of nasogastric tube.



Supplementary Figure 15 Funnel plot for publication bias with respect to overall successful insertion in comparison between conventional technique of nasogastric tube placement and video-assisted placement.

Supplemental Table 1 Search strategy and results of PubMed database for identification of studies to be included in the review

| Search number | Query | Search details | Results |
|----------------------|--|--|----------------|
| 1 | (nasogastric tube) AND (technique) | ((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All Fields]) AND (((("methods"[MeSH Subheading] OR "methods"[All Fields]) OR "techniques"[All Fields]) OR "methods"[MeSH Terms]) OR "technique"[All Fields]) OR "technique s"[All Fields]) | 3,069 |
| 2 | (nasogastric tube) AND (randomised controlled trial) | ((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All Fields]) AND (((("randomized controlled trial"[Publication Type] OR "randomized controlled trials as topic"[MeSH Terms]) OR "randomised controlled trial"[All Fields]) OR "randomized controlled trial"[All Fields]) | 622 |
| 3 | (nasogastric tube) AND (insertion success) | ((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All Fields]) AND (((((((((((("insert"[All Fields] OR "insert s"[All Fields]) OR "inserted"[All Fields]) OR "inserter"[All Fields]) OR "inserters"[All Fields]) OR "inserting"[All Fields]) OR "insertion s"[All Fields]) OR "insertional"[All Fields]) OR "insertions"[All Fields]) OR "inserts"[All Fields]) OR "mutagenesis, insertional"[MeSH Terms]) OR ("mutagenesis"[All Fields] AND "insertional"[All Fields])) OR "insertional mutagenesis"[All Fields]) OR "insertion"[All Fields]) AND (("success"[All Fields] OR "successes"[All Fields]) OR "successful"[All Fields])) | 102 |
| 4 | (nasogastric tube) AND (time) | ((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All Fields]) AND ("time"[MeSH Terms] OR "time"[All Fields]) | 1,381 |

- 5 (nasogastric tube) (((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All 2,341
AND Fields]) AND (((((((("complicances"[All Fields] OR "complicate"[All Fields]) OR "complicated"[All Fields])
(complications) OR "complicates"[All Fields]) OR "complicating"[All Fields]) OR "complication"[All Fields]) OR
"complication s"[All Fields]) OR "complications"[MeSH Subheading]) OR "complications"[All Fields])
- 6 (nasogastric tube) (((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All 3
AND (reverse Fields]) AND (((((((((((("reversal"[All Fields] OR "reversals"[All Fields]) OR "reverse"[All Fields]) OR
Sellick's) "reversed"[All Fields]) OR "reversely"[All Fields]) OR "reverses"[All Fields]) OR "reversibilities"[All
Fields]) OR "reversibility"[All Fields]) OR "reversible"[All Fields]) OR "reversing"[All Fields]) OR
"reversion"[All Fields]) OR "reversions"[All Fields]) AND ("sellick"[All Fields] OR "sellick s"[All Fields]))
- 7 (nasogastric tube) (((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All 19
AND (frozen Fields]) AND (((("freezing"[MeSH Terms] OR "freezing"[All Fields]) OR "frozen"[All Fields]) AND
tube) "tube"[All Fields])
- 8 (nasogastric tube) (((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All 9
AND (neck Fields]) AND (("neck"[MeSH Terms] OR "neck"[All Fields]) AND (("flexion"[All Fields] OR "flexional"[All
flexion) Fields]) OR "flexions"[All Fields]))
- 9 (nasogastric tube) (((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All 8
AND (video- Fields]) AND "video-assisted"[All Fields]
assisted)
- 10 (nasogastric tube) (((("nasogastral"[All Fields] OR "nasogastric"[All Fields]) OR "nasogastrically"[All Fields]) AND "tube"[All 16
AND Fields]) AND (("endotracheal"[All Fields] OR "endotracheally"[All Fields]) AND "tube"[All Fields] AND
((((((((((((("assistances"[All Fields] OR "assistant s"[All Fields]) OR "assistants"[All Fields]) OR
-

(endotracheal tube assisted) "assisted"[All Fields]) OR "assisting"[All Fields]) OR "assistive"[All Fields]) OR "dental assistants"[MeSH Terms]) OR ("dental"[All Fields] AND "assistants"[All Fields])) OR "dental assistants"[All Fields]) OR "assistant"[All Fields]) OR "helping behavior"[MeSH Terms]) OR ("helping"[All Fields] AND "behavior"[All Fields])) OR "helping behavior"[All Fields]) OR "assist"[All Fields]) OR "assistance"[All Fields]) OR "assists"[All Fields]))

Supplementary Table 2 Author's evaluation of risk of bias based on the Cochrane risk of bias assessment items

| Included studies | Random sequence generation | Allocation concealment | Blinding of participants | Blinding of personnel | Blinding of outcome assessment team | Attrition bias | Other bias |
|-------------------------------|-----------------------------------|-------------------------------|---------------------------------|------------------------------|--|-----------------------|-------------------|
| Zhao et al (2018) | + | + | + | + | + | + | None identified |
| Mandal M et al (2018) | + | ? | ? | ? | + | + | None identified |
| Chun DH et al (2009) | + | + | + | + | + | + | None identified |
| Siddhartha BSV et al (2017) | + | + | + | + | + | + | None identified |
| Appukutty J et al (2009) | + | + | + | + | + | + | None identified |
| Kwon OS et al (2014) | + | + | + | + | + | + | None identified |
| Illias AM et al (2013) | + | + | + | + | + | + | None identified |
| Kavakli AS et al (2017) | + | + | + | + | + | + | None identified |
| Wan Ibadullah WH et al (2016) | + | + | + | + | + | + | None identified |

