## Appendix 3: Supplementary results

Table S1 (Pages 1-2): Characteristics of the included global health journals

Table S2 (Pages 3-4): Changes of non-COVID-19 publications with ITSA analysis due to the pandemic from January 2018 to June 2022 in the included global health journals using Newey-West test

Figure S1 (Pages 5-7): Auto correlation plots with Cumby-Huizinga general test (up to lag order=6) for non-COVID-19 publications in the included global health journals (Figure S1 includes A-T)

### Table S1 Characteristics of the included global health journals

| Journal name | First year issued | Edition | Frequency (issues per year) | Country / Region | First electronic JCR year | h-index (2021) | JCI (2021) | Total citations (2021) | APC [a] | Overall hot papers [d] | COVID-19-related hot papers | Overall highly cited papers [e] | COVID-19-related highly cited papers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | From January 2020 to June 2022 (N) | | | |
| Annals of Global Health | 2014 | SCIE | 1 | ENGLAND | 2014 | 7 | 0.60 | 2312 | 1365 dollars | 0 | 0 | 0 | 0 |
| BMJ Global Health | 2016 | SSCI/SCIE | 6 | ENGLAND | 2019 | 21 | 1.58 | 9641 | 3000 pounds | 2 | 2 | 20 | 16 |
| Bulletin of the World Health Organization | 1947 | SCIE | 12 | SWITZERLAND | 1997 | 12 | 2.23 | 21791 | No APC | 1 | 1 | 8 | 5 |
| Clinical Epidemiology and Global Health | 2013 | ESCI | 3 | INDIA | 2020 | 18 | 0.51 | 1384 | 1200 dollars | 0 | 0 | 0 | 0 |
| Global Health Action | 2008 | SSCI/SCIE | 1 | ENGLAND | 2011 | 8 | 0.78 | 5288 | 1582 dollars | 0 | 0 | 1 | 1 |
| Global Health Epidemiology and Genomics | 2016 | ESCI | 1 | ENGLAND | 2020 | 0 | 0.41 | 250 | 1350 dollars | 0 | 0 | 0 | 0 |
| Global Health Promotion | 1994 | SSCI | 4 | USA | 2012 | 5 | 0.46 | 974 | -[c] | 0 | 0 | 0 | 0 |
| Global Health Research and Policy | 2016 | ESCI | 1 | CHINA MAINLAND | 2020 | 5 | 1.48 | 862 | Covered [b] | 0 | 0 | 0 | 0 |
| Global Health-Science and Practice | 2013 | SSCI/SCIE | 4 | USA | 2019 | 7 | 0.73 | 1717 | No APC | 0 | 0 | 0 | 0 |
| Global Mental Health | 2014 | SCIE | 1 | ENGLAND | 2019 | 6 | 0.75 | 736 | 3255 dollars | 0 | 0 | 0 | 0 |
| Global Public Health | 2006 | SSCI | 10 | ENGLAND | 2011 | 11 | 0.82 | 3612 | 2575 dollars | 0 | 0 | 6 | 6 |
| Globalization and Health | 2005 | SSCI/SCIE | 1 | ENGLAND | 2011 | 18 | 1.61 | 5196 | 2890 dollars | 2 | 2 | 18 | 15 |
| International Health | 2009 | SSCI/SCIE | 6 | ENGLAND | 2012 | 8 | 0.59 | 1741 | 2000 pounds | 0 | 0 | 1 | 1 |
| International Journal of Health Science–IJHS | 2007 | ESCI | 6 | SAUDI ARABIA | 2020 | 4 | 0.42 | 1178 | 30 dollars | 0 | 0 | 0 | 0 |

| Journal name | First year issued | Edition | Frequency (issues per year) | Country / Region | First electronic JCR year | h-index (2021) | JCI (2021) | Total citations (2021) | APC [a] | Overall hot papers [d] | COVID-19-related hot papers | Overall highly cited papers [e] | COVID-19-related highly cited papers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | From January 2020 to June 2022 (N) | | | |
| Journal of Epidemiology and Global Health | 2011 | SSCI/SCIE | 4 | FRANCE | 2019 | 9 | 0.88 | 1484 | 2290 dollars | 0 | 0 | 2 | 1 |
| Journal of Global Health | 2011 | SSCI/SCIE | 2 | SCOTLAND | 2015 | 15 | 1.11 | 4452 | 1950 pounds | 0 | 0 | 11 | 9 |
| Lancet Global Health | 2013 | SSCI/SCIE | 12 | ENGLAND | 2013 | 27 | 8.34 | 22156 | 5500 dollars | 6 | 2 | 39 | 21 |
| Lancet Planetary Health | 2017 | SSCI/SCIE | 12 | ENGLAND | 2020 | 23 | 4.00 | 4794 | 5500 dollars | 0 | 0 | 12 | 2 |
| Pathogens and Global Health | 1907 | SCIE | 8 | ENGLAND | 2012 | 8 | 0.91 | 1943 | No APC | 0 | 0 | 2 | 2 |
| Tropical Medicine & International Health | 1996 | SCIE | 12 | ENGLAND | 1997 | 8 | 0.70 | 9448 | 3150 dollars | 0 | 0 | 0 | 0 |

**Note:**

[a] APC is only charged for research or original articles in global health journals.

[b] APC covered by the Global Health Institute, Wuhan University, China before June 30, 2022.

[c] Information about APC in Global Health Promotion could not be found in the official website.

[d] Papers cited in the top 0.1% in a current bimonthly period. Papers are selected in each of 22 fields of science and must be published within the last two years (quoted from Clarivate).

[e] Highly cited papers reflect the top 1% of papers by field and publication year (quoted from Clarivate).

**Table S2 Changes of non-COVID-19 publications with ITSA analysis due to the pandemic from January 2018 to June 2022 in the included global health journals using Newey-West test**

| Journal name | | Coefficient values | Newey-West Standard error | t | *P* | 95% Confidence interval |
|---|---|---|---|---|---|---|
| Total | _t [a] | 1.83 | 0.3 | 6.16 | <0.001* | [1.24, 2.43] |
| | _xFeb.2020 [b] | -14.2 | 5.52 | -2.58 | 0.013* | [-25.3, -3.1] |
| | _x_tFeb.2020 [c] | -2.47 | 0.50 | -4.92 | <0.001* | [-3.47, -1.46] |
| | _cons [d] | 153.3 | 3.9 | 39.54 | <0.001* | [145.5, 161.1] |
| Annals of Global Health | _t | 0.23 | 0.21 | 1.09 | 0.281 | [-0.19, 0.65] |
| | _xFeb.2020 | -1.3 | 3.8 | -0.33 | 0.743 | [-8.9, 6.4] |
| | _x_tFeb.2020 | -0.43 | 0.20 | -2.16 | 0.036* | [-0.83, -0.03] |
| | _cons | 7.0 | 2.7 | 2.59 | 0.013* | [1.6, 12.5] |
| BMJ Global Health | _t | 0.62 | 0.20 | 3.02 | 0.004* | [0.21, 1.02] |
| | _xFeb.2020 | -0.3 | 4.1 | -0.06 | 0.949 | [-8.5, 7.9] |
| | _x_tFeb.2020 | -0.56 | 0.26 | -2.14 | 0.037* | [-1.08, -0.04] |
| | _cons | 20.0 | 2.9 | 6.81 | <0.001* | [14.1, 25.9] |
| Bulletin of the World Health Organization | _t | -0.02 | 0.05 | -0.44 | 0.660 | [-0.11, 0.07] |
| | _xFeb.2020 | 0.9 | 1.3 | 0.70 | 0.489 | [-1.7, 3.6] |
| | _x_tFeb.2020 | -0.15 | 0.08 | -1.87 | 0.067 | [-0.31, 0.01] |
| | _cons | 10.3 | 0.5 | 19.73 | <0.001* | [9.2, 11.3] |
| Clinical Epidemiology and Global Health | _t | 0.49 | 0.14 | 3.50 | 0.001* | [0.21, 0.77] |
| | _xFeb.2020 | -2.0 | 4.5 | -0.45 | 0.658 | [-11.0, 7.0] |
| | _x_tFeb.2020 | -0.51 | 0.28 | -1.83 | 0.074 | [-1.06, 0.05] |
| | _cons | 4.8 | 1.3 | 3.80 | <0.001* | [2.2, 7.3] |
| Global Health Action | _t | -0.01 | 0.12 | -0.82 | 0.417 | [-0.33, 0.14] |
| | _xFeb.2020 | 4.4 | 3.2 | 1.35 | 0.183 | [-2.1, 10.9] |
| | _x_tFeb.2020 | -0.05 | 0.18 | -0.26 | 0.798 | [-0.41, 0.32] |
| | _cons | 11.3 | 1.7 | 6.86 | <0.001* | [8.0, 14.7] |
| Global Health Epidemiology and Genomics | _t | -0.07 | 0.03 | -2.73 | 0.009* | [-0.11, -0.02] |
| | _xFeb.2020 | 0.3 | 0.4 | 0.72 | 0.477 | [-0.5, 1.0] |
| | _x_tFeb.2020 | 0.06 | 0.03 | 2.12 | 0.039* | [0.00, 0.11] |
| | _cons | 1.9 | 0.4 | 4.64 | <0.001* | [1.1, 2.7] |
| Global Health Promotion | _t | 0.07 | 0.08 | 0.78 | 0.440 | [-0.10, 0.23] |
| | _xFeb.2020 | -2.4 | 1.6 | -1.49 | 0.143 | [-5.7, 0.8] |
| | _x_tFeb.2020 | 0.07 | 0.09 | 0.79 | 0.431 | [-0.11, 0.26] |
| | _cons | 2.7 | 1.0 | 2.72 | 0.009* | [0.7, 4.7] |
| Global Health Research and Policy | _t | 0.01 | 0.01 | 0.65 | 0.520 | [-0.02, 0.03] |
| | _xFeb.2020 | -0.8 | 0.7 | -1.16 | 0.253 | [-2.1, 0.6] |
| | _x_tFeb.2020 | -0.01 | 0.03 | -0.37 | 0.713 | [-0.07, 0.05] |
| | _cons | 2.9 | 0.1 | 20.56 | <0.001* | [2.7, 3.2] |
| International Journal of Health Sciences-IJHS | _t | -0.41 | 0.04 | -9.41 | <0.001* | [-0.50, -0.32] |
| | _xFeb.2020 | 0.8 | 1.1 | 0.74 | 0.467 | [-1.5, 3.1] |
| | _x_tFeb.2020 | 0.36 | 0.07 | 5.03 | <0.001* | [0.21, 0.51] |
| | _cons | 16.2 | 0.7 | 24.66 | <0.001* | [14..9, 17.6] |
| Global Mental Health | _t | -0.05 | 0.05 | -0.94 | 0.352 | [-0.16, 0.06] |
| | _xFeb.2020 | -0.1 | 1.1 | -0.10 | 0.924 | [-2.3, 2.1] |
| | _x_tFeb.2020 | 0.10 | 0.06 | 1.59 | 0.118 | [-0.03, 0.23] |
| | _cons | 3.5 | 0.6 | 6.25 | <0.001* | [2.4, 4.6] |
| Global Public Health | _t | 0.12 | 0.10 | 1.16 | 0.253 | [-0.09, 0.33] |
| | _xFeb.2020 | 2.3 | 2.9 | 0.80 | 0.430 | [-3.5, 8.2] |
| | _x_tFeb.2020 | -0.26 | 0.14 | -1.91 | 0.062 | [-0.53, 0.01] |
| | _cons | 8.5 | 1.6 | 5.22 | <0.001* | [5.2, 11.8] |

| Journal name | | Coefficient values | Newey-West Standard error | t | *P* | 95% Confidence interval |
|---|---|---|---|---|---|---|
| Globalization and Health | _t | -0.13 | 0.14 | -0.92 | 0.364 | [-0.42, 0.16] |
| | _xFeb.2020 | -0.6 | 2.6 | -0.22 | 0.828 | [-5.9, 4.7] |
| | _x_tFeb.2020 | 0.18 | 0.15 | 1.16 | 0.252 | [-0.13, 0.49] |
| | _cons | 10.4 | 1.7 | 6.27 | <0.001* | [7.1, 13.7] |
| International Health | _t | -0.16 | 0.20 | -0.82 | 0.417 | [-0.56, 0.24] |
| | _xFeb.2020 | -0.1 | 3.1 | -0.02 | 0.985 | [-6.4, 6.3] |
| | _x_tFeb.2020 | 0.13 | 0.23 | 0.55 | 0.585 | [-0.33, 0.58] |
| | _cons | 11.5 | 2.8 | 4.09 | <0.001* | [5.9, 17.2] |
| Journal of Epidemiology and Global Health | _t | 0.31 | 0.05 | 6.24 | <0.001* | [0.21, 0.41] |
| | _xFeb.2020 | -4.2 | 1.6 | -2.60 | 0.012* | [-7.4, -1.0] |
| | _x_tFeb.2020 | -0.41 | 0.07 | -5.86 | <0.001* | [-0.55, -0.27] |
| | _cons | 0.2 | 1.9 | 0.13 | 0.898 | [-3.5, 4.0] |
| Journal of Global Health | _t | 0.25 | 0.19 | 1.35 | 0.184 | [-0.12, 0.63] |
| | _xFeb.2020 | 4.8 | 4.6 | 1.05 | 0.298 | [-4.4, 13.9] |
| | _x_tFeb.2020 | -0.62 | 0.25 | -2.46 | 0.017* | [-1.12, -0.11] |
| | _cons | 8.0 | 1.9 | 4.31 | <0.001* | [4.3, 11.7] |
| Lancet Global Health | _t | 0.31 | 0.16 | 2.00 | 0.051 | [-0.00, 0.63] |
| | _xFeb.2020 | -13.2 | 3.2 | -4.16 | <0.001* | [-19.5, -6.8] |
| | _x_tFeb.2020 | -0.01 | 0.20 | -0.06 | 0.952 | [-0.42, 0.40] |
| | _cons | 23.4 | 2.3 | 10.06 | <0.001* | [18.7, 28.1] |
| Lancet Planetary Health | _t | -0.14 | 0.05 | -2.82 | 0.007* | [-0.24, -0.04] |
| | _xFeb.2020 | -2.5 | 1.1 | -2.23 | 0.030* | [-4.8, -0.3] |
| | _x_tFeb.2020 | 0.40 | 0.07 | 5.73 | <0.001* | [0.26, 0.54] |
| | _cons | 11.9 | 0.7 | 17.72 | <0.001* | [10.6, 13.3] |
| Pathogens and Global Health | _t | 0.01 | 0.09 | 0.12 | 0.908 | [-0.17, 0.20] |
| | _xFeb.2020 | 0.2 | 1.3 | 0.18 | 0.859 | [-2.3, 2.8] |
| | _x_tFeb.2020 | -0.10 | 0.12 | -0.78 | 0.436 | [-0.34, 0.15] |
| | _cons | 4.0 | 1.0 | 4.08 | <0.001* | [2.0, 6.0] |
| Tropical Medicine & International Health | _t | 0.09 | 0.16 | 0.53 | 0.595 | [-0.24, 0.41] |
| | _xFeb.2020 | 0.1 | 3.0 | 0.03 | 0.974 | [-5.9, 6.1] |
| | _x_tFeb.2020 | -0.30 | 0.19 | -1.59 | 0.119 | [-0.67, 0.08] |
| | _cons | 10.8 | 1.9 | 5.79 | <0.001* | [7.1, 14.6] |

***Note:**

[a] _t means the differences of the slopes before the pandemic.

[b] _xFeb.2020 indicates the differences of the non-COVID-19 publications at the intervention time point, that is, the pandemic.

[c] _x_tFeb.2020 indicates the differences of the slopes between before and after the pandemic.

[d] _cons means the constant values, that is, the number of non-COVID-19 publications in January 2018.

### A All the included global health journals

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 1.060 | 1 | 0.3032 | 1 | 1.060 | 1 | 0.3032 |
| 1 - 2 | 9.129 | 2 | 0.0104 | 2 | 6.817 | 1 | 0.0090 |
| 1 - 3 | 9.133 | 3 | 0.0276 | 3 | 0.562 | 1 | 0.4535 |
| 1 - 4 | 9.137 | 4 | 0.0578 | 4 | 0.776 | 1 | 0.3782 |
| 1 - 5 | 10.406 | 5 | 0.0645 | 5 | 0.268 | 1 | 0.6046 |
| 1 - 6 | 20.231 | 6 | 0.0025 | 6 | 9.900 | 1 | 0.0017 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### B Annals of Global Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 1.942 | 1 | 0.1635 | 1 | 1.942 | 1 | 0.1635 |
| 1 - 2 | 2.997 | 2 | 0.2235 | 2 | 0.504 | 1 | 0.4779 |
| 1 - 3 | 3.267 | 3 | 0.3522 | 3 | 0.014 | 1 | 0.9044 |
| 1 - 4 | 8.004 | 4 | 0.0914 | 4 | 5.105 | 1 | 0.0239 |
| 1 - 5 | 8.158 | 5 | 0.1478 | 5 | 1.318 | 1 | 0.2509 |
| 1 - 6 | 14.575 | 6 | 0.0238 | 6 | 4.212 | 1 | 0.0401 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### C BMJ Global Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 2.339 | 1 | 0.1261 | 1 | 2.339 | 1 | 0.1261 |
| 1 - 2 | 2.855 | 2 | 0.2399 | 2 | 0.139 | 1 | 0.7098 |
| 1 - 3 | 2.932 | 3 | 0.4023 | 3 | 0.000 | 1 | 0.9905 |
| 1 - 4 | 3.138 | 4 | 0.5350 | 4 | 0.123 | 1 | 0.7259 |
| 1 - 5 | 4.099 | 5 | 0.5353 | 5 | 1.407 | 1 | 0.2356 |
| 1 - 6 | 4.773 | 6 | 0.5733 | 6 | 1.192 | 1 | 0.2748 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### D Bulletin of the World Health Organization

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 0.010 | 1 | 0.9220 | 1 | 0.010 | 1 | 0.9220 |
| 1 - 2 | 0.176 | 2 | 0.9159 | 2 | 0.165 | 1 | 0.6843 |
| 1 - 3 | 1.438 | 3 | 0.6967 | 3 | 1.242 | 1 | 0.2650 |
| 1 - 4 | 2.019 | 4 | 0.7323 | 4 | 0.433 | 1 | 0.5105 |
| 1 - 5 | 2.207 | 5 | 0.8199 | 5 | 0.101 | 1 | 0.7509 |
| 1 - 6 | 2.235 | 6 | 0.8968 | 6 | 0.018 | 1 | 0.8947 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### E Clinical Epidemiology and Global Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 8.158 | 1 | 0.0043 | 1 | 8.158 | 1 | 0.0043 |
| 1 - 2 | 8.359 | 2 | 0.0153 | 2 | 1.566 | 1 | 0.2108 |
| 1 - 3 | 8.524 | 3 | 0.0363 | 3 | 0.075 | 1 | 0.7841 |
| 1 - 4 | 9.257 | 4 | 0.0550 | 4 | 0.578 | 1 | 0.4473 |
| 1 - 5 | 9.264 | 5 | 0.0990 | 5 | 0.615 | 1 | 0.4329 |
| 1 - 6 | 9.413 | 6 | 0.1517 | 6 | 0.781 | 1 | 0.3769 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### F Global Health Action

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 2.373 | 1 | 0.1234 | 1 | 2.373 | 1 | 0.1234 |
| 1 - 2 | 2.522 | 2 | 0.2833 | 2 | 0.001 | 1 | 0.9751 |
| 1 - 3 | 3.723 | 3 | 0.2929 | 3 | 0.901 | 1 | 0.3425 |
| 1 - 4 | 3.932 | 4 | 0.4152 | 4 | 0.000 | 1 | 0.9846 |
| 1 - 5 | 3.954 | 5 | 0.5561 | 5 | 0.001 | 1 | 0.9708 |
| 1 - 6 | 5.693 | 6 | 0.4584 | 6 | 0.999 | 1 | 0.3175 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### G Global Health Promotion

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 2.865 | 1 | 0.0905 | 1 | 2.865 | 1 | 0.0905 |
| 1 - 2 | 3.096 | 2 | 0.2126 | 2 | 0.672 | 1 | 0.4125 |
| 1 - 3 | 10.118 | 3 | 0.0176 | 3 | 7.296 | 1 | 0.0069 |
| 1 - 4 | 11.247 | 4 | 0.0239 | 4 | 0.032 | 1 | 0.8574 |
| 1 - 5 | 12.462 | 5 | 0.0290 | 5 | 0.549 | 1 | 0.4589 |
| 1 - 6 | 12.482 | 6 | 0.0520 | 6 | 0.302 | 1 | 0.5824 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### H Global Health Promotion

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 3.423 | 1 | 0.0643 | 1 | 3.423 | 1 | 0.0643 |
| 1 - 2 | 6.497 | 2 | 0.0388 | 2 | 1.374 | 1 | 0.2412 |
| 1 - 3 | 7.686 | 3 | 0.0530 | 3 | 0.028 | 1 | 0.8665 |
| 1 - 4 | 8.197 | 4 | 0.0846 | 4 | 0.003 | 1 | 0.9530 |
| 1 - 5 | 8.886 | 5 | 0.1137 | 5 | 0.064 | 1 | 0.8003 |
| 1 - 6 | 9.219 | 6 | 0.1616 | 6 | 0.002 | 1 | 0.9655 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### I Global Health Research and Policy

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 0.059 | 1 | 0.8078 | 1 | 0.059 | 1 | 0.8078 |
| 1 - 2 | 0.061 | 2 | 0.9701 | 2 | 0.002 | 1 | 0.9637 |
| 1 - 3 | 4.157 | 3 | 0.2450 | 3 | 4.130 | 1 | 0.0421 |
| 1 - 4 | 8.952 | 4 | 0.0623 | 4 | 4.228 | 1 | 0.0398 |
| 1 - 5 | 9.081 | 5 | 0.1059 | 5 | 0.213 | 1 | 0.6448 |
| 1 - 6 | 9.197 | 6 | 0.1628 | 6 | 0.702 | 1 | 0.4022 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### J Global Mental Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 1.141 | 1 | 0.2855 | 1 | 1.141 | 1 | 0.2855 |
| 1 - 2 | 3.796 | 2 | 0.1498 | 2 | 2.034 | 1 | 0.1538 |
| 1 - 3 | 3.867 | 3 | 0.2762 | 3 | 0.050 | 1 | 0.8228 |
| 1 - 4 | 9.181 | 4 | 0.0567 | 4 | 3.232 | 1 | 0.0722 |
| 1 - 5 | 9.539 | 5 | 0.0894 | 5 | 0.115 | 1* | 0.7348 |
| 1 - 6 | 10.859 | 6 | 0.0928 | 6 | 0.001 | 1* | 0.9801 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity
* Eigenvalues adjusted to make matrix positive semidefinite

### K Global Public Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 2.495 | 1 | 0.1142 | 1 | 2.495 | 1 | 0.1142 |
| 1 - 2 | 2.526 | 2 | 0.2828 | 2 | 0.026 | 1 | 0.8717 |
| 1 - 3 | 2.859 | 3 | 0.4138 | 3 | 0.282 | 1 | 0.5956 |
| 1 - 4 | 4.342 | 4 | 0.3616 | 4 | 1.940 | 1 | 0.1636 |
| 1 - 5 | 7.185 | 5 | 0.2072 | 5 | 4.038 | 1 | 0.0445 |
| 1 - 6 | 7.897 | 6 | 0.2458 | 6 | 1.760 | 1 | 0.1846 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### L Globalization and Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 0.057 | 1 | 0.8111 | 1 | 0.057 | 1 | 0.8111 |
| 1 - 2 | 0.160 | 2 | 0.9231 | 2 | 0.095 | 1 | 0.7576 |
| 1 - 3 | 0.184 | 3 | 0.9801 | 3 | 0.010 | 1 | 0.9199 |
| 1 - 4 | 0.567 | 4 | 0.9667 | 4 | 0.444 | 1 | 0.5052 |
| 1 - 5 | 2.071 | 5 | 0.8392 | 5 | 1.543 | 1 | 0.2141 |
| 1 - 6 | 2.084 | 6 | 0.9118 | 6 | 0.003 | 1 | 0.9529 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### M International Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 0.527 | 1 | 0.4678 | 1 | 0.527 | 1 | 0.4678 |
| 1 - 2 | 1.450 | 2 | 0.4842 | 2 | 0.757 | 1 | 0.3843 |
| 1 - 3 | 1.675 | 3 | 0.6425 | 3 | 0.475 | 1 | 0.4907 |
| 1 - 4 | 4.793 | 4 | 0.3092 | 4 | 2.696 | 1 | 0.1006 |
| 1 - 5 | 4.797 | 5 | 0.4412 | 5 | 0.066 | 1 | 0.7974 |
| 1 - 6 | 5.073 | 6 | 0.5344 | 6 | 0.007 | 1 | 0.9324 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### N International Journal of Health Science–IJHS

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 0.928 | 1 | 0.3354 | 1 | 0.928 | 1 | 0.3354 |
| 1 - 2 | 4.436 | 2 | 0.1089 | 2 | 2.467 | 1 | 0.1163 |
| 1 - 3 | 4.846 | 3 | 0.1834 | 3 | 1.472 | 1 | 0.2250 |
| 1 - 4 | 6.905 | 4 | 0.1410 | 4 | 1.078 | 1 | 0.2990 |
| 1 - 5 | 6.905 | 5 | 0.2278 | 5 | 0.000 | 1* | 0.9969 |
| 1 - 6 | 15.090 | 6 | 0.0196 | 6 | 0.428 | 1* | 0.5131 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity
* Eigenvalues adjusted to make matrix positive semidefinite

### O Journal of Epidemiology and Global Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 0.594 | 1 | 0.4410 | 1 | 0.594 | 1 | 0.4410 |
| 1 - 2 | 1.654 | 2 | 0.4373 | 2 | 0.863 | 1 | 0.3528 |
| 1 - 3 | 1.854 | 3 | 0.6033 | 3 | 0.043 | 1 | 0.8361 |
| 1 - 4 | 3.400 | 4 | 0.4932 | 4 | 0.950 | 1 | 0.3296 |
| 1 - 5 | 3.638 | 5 | 0.6027 | 5 | 0.006 | 1 | 0.9399 |
| 1 - 6 | 3.660 | 6 | 0.7226 | 6 | 0.084 | 1 | 0.7714 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### P Journal of Global Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 1.275 | 1 | 0.2589 | 1 | 1.275 | 1 | 0.2589 |
| 1 - 2 | 4.195 | 2 | 0.1227 | 2 | 2.154 | 1 | 0.1422 |
| 1 - 3 | 6.019 | 3 | 0.1107 | 3 | 0.401 | 1 | 0.5265 |
| 1 - 4 | 6.072 | 4 | 0.1938 | 4 | 0.300 | 1 | 0.5840 |
| 1 - 5 | 8.117 | 5 | 0.1499 | 5 | 0.833 | 1 | 0.3613 |
| 1 - 6 | 8.176 | 6 | 0.2255 | 6 | 0.118 | 1 | 0.7318 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### Q Lancet Global Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 0.040 | 1 | 0.8415 | 1 | 0.040 | 1 | 0.8415 |
| 1 - 2 | 1.145 | 2 | 0.5641 | 2 | 1.096 | 1 | 0.2951 |
| 1 - 3 | 5.082 | 3 | 0.1659 | 3 | 3.523 | 1 | 0.0605 |
| 1 - 4 | 5.136 | 4 | 0.2736 | 4 | 0.001 | 1 | 0.9730 |
| 1 - 5 | 7.076 | 5 | 0.2151 | 5 | 2.955 | 1 | 0.0856 |
| 1 - 6 | 8.607 | 6 | 0.1969 | 6 | 0.560 | 1 | 0.4544 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

### R Lancet Planetary Health

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| | H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 3.385 | 1 | 0.0658 | 1 | 3.385 | 1 | 0.0658 |
| 1 - 2 | 4.094 | 2 | 0.1291 | 2 | 1.308 | 1 | 0.2528 |
| 1 - 3 | 4.124 | 3 | 0.2484 | 3 | 0.080 | 1 | 0.7779 |
| 1 - 4 | 4.320 | 4 | 0.3644 | 4 | 0.320 | 1 | 0.5716 |
| 1 - 5 | 5.694 | 5 | 0.3371 | 5 | 0.572 | 1 | 0.4494 |
| 1 - 6 | 8.681 | 6 | 0.1923 | 6 | 3.728 | 1 | 0.0535 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

**S Pathogens and Global Health**

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 5.243 | 1 | 0.0220 | 1 | 5.243 | 1 | 0.0220 |
| 1 - 2 | 5.359 | 2 | 0.0686 | 2 | 0.524 | 1 | 0.4693 |
| 1 - 3 | 6.727 | 3 | 0.0811 | 3 | 1.368 | 1 | 0.2421 |
| 1 - 4 | 8.821 | 4 | 0.0657 | 4 | 1.379 | 1 | 0.2404 |
| 1 - 5 | 8.837 | 5 | 0.1157 | 5 | 0.754 | 1 | 0.3853 |
| 1 - 6 | 12.767 | 6 | 0.0469 | 6 | 3.941 | 1 | 0.0471 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

**T Tropical Medicine & International Health**

Cumby-Huizinga test for autocorrelation (Breusch-Godfrey)
H0: variable is MA process up to order q
HA: serial correlation present at specified lags >q

| H0: q=0 (serially uncorrelated) HA: s.c. present at range specified | | | | H0: q=specified lag-1 HA: s.c. present at lag specified | | | |
|---|---|---|---|---|---|---|---|
| lags | chi2 | df | p-val | lag | chi2 | df | p-val |
| 1 - 1 | 5.632 | 1 | 0.0176 | 1 | 5.632 | 1 | 0.0176 |
| 1 - 2 | 5.634 | 2 | 0.0598 | 2 | 0.597 | 1 | 0.4397 |
| 1 - 3 | 7.316 | 3 | 0.0625 | 3 | 1.782 | 1 | 0.1819 |
| 1 - 4 | 7.863 | 4 | 0.0967 | 4 | 0.088 | 1 | 0.7662 |
| 1 - 5 | 7.932 | 5 | 0.1600 | 5 | 0.006 | 1 | 0.9385 |
| 1 - 6 | 7.949 | 6 | 0.2419 | 6 | 0.039 | 1 | 0.8428 |

Test allows predetermined regressors/instruments
Test requires conditional homoskedasticity

**Figure S1 Auto correlation plots with Cumby-Huizinga general test (up to lag order=6) for non-COVID-19 publications in the included global health journals**

**Note:** We excluded the number of publications from the Global Health-Science and Practice journal for the ITSA analysis since it only publishes the papers in specific months for a year and the interval of time issued is not equal.