User: George Laliotis

Stata 18.0 BE-Basic Edition

Statistics and Data Science

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Notes:

1. Unicode is supported; see help unicode advice.

1 . import delimited "/Users/georgelaliotis/Downloads/MPH 596_CRC VitD Meta-analysis

> Data Template.csv"

(encoding automatically selected: UTF-8)
(12 vars, 5 obs)

2 . meta set loghr seloghr, studylabel(study)

Meta-analysis setting information

Study information

No. of studies: **5**Study label: **study**Study size: N/A

Effect size

Type: <generic>
Label: Effect size

Variable: **loghr**

Precision

Std. err.: **seloghr**

CI: [_meta_cil, _meta_ciu]

CI level: 95%

Model and method

Model: Random effects

Method: REML



3 . meta summarize

Effect-size label: Effect size

Effect size: loghr
Std. err.: seloghr
Study label: study

Meta-analysis summary

Number of studies =

Random-effects model Heterogeneity:

% weight	interval]	[95% conf.	Effect size	Study
1.84 27.83 10.34 45.10 14.89	1.804 0.207 0.471 0.256 0.555	-2.696 -0.949 -1.427 -0.653 -1.026	-0.446 -0.371 -0.478 -0.198 -0.236	SUNSHINE, 2019 AMATERASU, 2019 Trivedi et al, 2003 WHI, 2006 VITAL, 2019
	0.020	-0.591	-0.286	theta

4 . meta forestplot, nullrefline(favorsleft("Favors Vitamin D Supplementation", colo > r(green)) favorsright("Favors No Vitamin D Supplementation", color (red)))

Effect-size label: Effect size

Effect size: loghr
Std. err.: seloghr
Study label: study

5 . meta funnelplot

Effect-size label: Effect size

Effect size: loghr
Std. err.: seloghr

Model: Common effect Method: Inverse-variance

6 . meta trimfill, funnel

Effect-size label: Effect size

Effect size: loghr
Std. err.: seloghr

Nonparametric trim—and—fill analysis of publication bias Linear estimator, imputing on the right

Iteration Number of studies = 7

Model: Random-effects observed = 5
Method: REML imputed = 2

Pooling

Model: Random-effects

Method: REML

Studies	Effect size	[95% conf.	interval]
Observed	-0.286	-0.591	0.020
Observed + Imputed	-0.259	-0.548	0.029

7 . meta bias, egger

Effect-size label: Effect size

Effect size: loghr
Std. err.: seloghr

Regression-based Egger test for small-study effects

Random-effects model

Method: REML

H0: beta1 = 0; no small-study effects

beta1 = **-0.40**

SE of beta1 = **1.098**

z = -0.36

Prob > |z| = 0.7181

8 . meta bias, begg

Effect-size label: Effect size

Effect size: loghr
Std. err.: seloghr

Begg's test for small-study effects

Kendall's score = -4.00

SE of score = 4.082

z = **-1.22**

Prob > |z| = 0.4624