



STRENGTHENING THE EVIDENCE IN EXERCISE SCIENCES

The SEES Initiative

Journal Reports 2019

European Journal of Preventive Cardiology

Systematic Reviews with Meta-Analyses



www.sees-initiative.org

About SEES Initiative

We are a group of academics, including faculty, post-doctoral fellows, graduate, and undergraduate students, highly compelled to do meta-research in publications featuring interventions of exercise and physical activity applied to several health conditions.

Our primary goal is to promote surveillance of published evidence in exercise sciences, fostering a culture of respectful and critical appraisal for the published evidence in our field. We attempt to do so as transparently and collaboratively as possible.

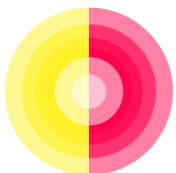
Further, we ultimately aim to increase the awareness regarding the need for transparent and informative scientific reports that should be valued by a complete reporting, carefully designed methods, and well-reasoned claims on the pursued research question.

About this collection

The present journal collection displays assessment reports generated by us as a result of continuous and systematic surveillance of published articles by the featured journal. Such publications reported either randomized clinical trials or systematic reviews with meta-analysis. All of our assessment reports were sent by email to the corresponding authors. Whenever requested by authors, we were prone to proceed required revisions and self-correction (whenever applicable), disseminating the corrected assessment reported.

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Contents



Journal: European Journal of Preventive Cardiology

Editor in Chief: Massimo Piepoli

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Website: <https://journals.sagepub.com/home/cpr>

Number of systematic reviews with meta-analyses assessed by the SEES Initiative

06 articles

Information for individual publication reports

Title	Pack*	Links
Safety and efficacy of aerobic exercise commenced early after cardiac surgery: A systematic review and meta-analysis	01	SEES link: https://sees-initiative.org/doyle-30188177/
Additional effects of psychological interventions on subjective and objective outcomes compared with exercise-based cardiac rehabilitation alone in patients with cardiovascular disease: A systematic review and meta-analysis	03	SEES link: https://sees-initiative.org/albus-30857429/
The association of resistance training with mortality: A systematic review and meta-analysis	05	SEES link: https://sees-initiative.org/pmid31104484/
Exercise-based cardiac rehabilitation in patients with reduced left ventricular ejection fraction: The Cardiac Rehabilitation Outcome Study in Heart Failure (CROS-HF): A systematic review and meta-analysis	06	SEES link: https://sees-initiative.org/pmid31177833/
The effect of exercise training on blood	08	SEES link:

pressure in African and Asian populations: A systematic review and meta-analysis of randomized controlled trials		https://sees-initiative.org/pmid31450966/
Comparative efficacy of exercise and anti-hypertensive pharmacological interventions in reducing blood pressure in people with hypertension: A network meta-analysis	10	SEES link: https://sees-initiative.org/pmid31615283/

*Pack: (place where each month's articles are archived).



Strengthening the Evidence in Exercise Sciences Initiative (SEES Initiative)

Assessment Report for Individual Study

Study title

Safety and efficacy of aerobic exercise commenced early after cardiac surgery: A systematic review and meta-analysis

PMID

30188177

Journal

Eur J Prev Cardiol

Type of Publication and Period of assessment

Systematic Review with Meta-Analysis, SEES Pack 1

Component	Item	SEES assessment
Transparency	Registration: Is the review registered in a public database?	No
Transparency	Protocol: Is there referral of a publicly available methodological protocol? (Note: if so, you must also use the protocol to consult information about the review)	No
Completeness	Title: Is the study identified as a systematic review, meta-analysis, or both?	Yes
Completeness	Abstract: Does the abstract list the data sources used in the review? (Note: if more than five databases were used, simplified or partial referral should be considered as "Yes")	No
Completeness	Abstract: Does the abstract inform key eligibility criteria for study selection?	Yes
Participants	Abstract: Is there a description regarding the population (participants) or main condition(s) addressed in the review?	No
Intervention / Exposure	Abstract: Is there a description regarding the interventions/exposures (or, broadly, independent variables) addressed in the review?	Yes
Completeness	Abstract: Is there a description of the number of included studies?	No
Outcome	Abstract: Is there a result description for the main outcome of interest?	Yes
Completeness	Introduction: Is there a description for the research question (with PICOS elements) or precisely stated objectives (with PICOS) ?	No
Transparency	Methods: Is there at least one search query fully available? (Note: a full search query should allow complete replication)	No
Methodological rigor	Methods: Did the search strategy include non-published evidence? ("grey literature")	Yes
Methodological rigor	Methods: If the search is restricted for evidence generated after 1980, is there an indirect or direct justification related to the time range?	The searches were carried out from the database inception (earliest date)
Methodological rigor	Methods: How many languages were considered for study eligibility?	1
Completeness	Methods: Is there a detailed explanation of eligibility criteria for PICOS elements? (Note: detailed explanation should allow complete replication)	No
Methodological rigor	Methods: Was the study selection carried out in duplicate?	Yes
Methodological rigor	Methods: Was the data extraction carried out in duplicate?	Yes
Methodological rigor	Methods: Is there a description of the assessment of risk of biases?	No
Methodological rigor	Methods: Was the assessment of risk of biases carried out in duplicate?	Does not apply
Outcome	Methods: Is there a description of the statistical combination (meta-analysis) regarding the effect measure (e.g., relative risk or mean difference), statistical method (e.g., inverse variance), and effects approach (fixed or random)?	Yes
Outcome	Methods: Is there a description regarding the assessment of statistical heterogeneity?	Yes
Completeness	Results: Is there a full description regarding the numbers of references (retrieval, eligibility, synthesis)?	Yes
Completeness	Results: Is there a description about the sample sizes of individual studies?	Yes
Participants, Intervention / Exposure	Results: Is there a full description of characteristics? (Note: the available PICOS elements should be considered)	Yes

Completeness	Results: Is there a description of study duration (follow-up lengths)?	Yes
Outcome	Results: Is there a minimally recommended description of meta-analytic summary estimates? (Note: binary outcomes as frequencies with and without the event (or as proportions such as 12/45); continuous outcomes as the mean, standard deviation, and sample size for each group)	Yes
Outcome	Results: Is there a full description of individual results for studies composing the meta-analysis? (Note: effects size, imprecision measure and percentage weight should be considered)	Yes
Critical appraisal	Results: Is there a description of risk of bias within studies? (Note: your assessment should be based on the characteristic of the RoB tool)	No
Critical appraisal	Results: Is there a description for non-planned modifications to the synthesis during the course of the review? (e.g.: change in eligibility criteria or RoB tools; please, what was changed and its justification [why] should be considered).	Unclear
Critical appraisal	Discussion: Is there a potential spin bias based on a specific reporting strategy to highlight that the experimental treatment (or condition of interest) leads to the hypothesized result?	No
Critical appraisal	Discussion: Are the results discussed in light of the risk of biases in individual studies?	No
Critical appraisal	Discussion: Are limitations discussed at the study/outcome and/or at the review level?	Yes, ONLY for the study and/or outcome level (review processes not mentioned)
Transparency	Is there a statement regarding the data availability (data sharing plan)?	No
Completeness	Is there a statement regarding the sources of funding? (Note: funding for the review itself)	Yes
Completeness	Did the review authors declare whether they had any conflicts of interest (COI)?	Yes, authors declare non-financial COIs



Strengthening the Evidence in Exercise Sciences Initiative (SEES Initiative)

Assessment Report for Individual Study

Study title

Additional effects of psychological interventions on subjective and objective outcomes compared with exercise-based cardiac rehabilitation alone in patients with cardiovascular disease: A systematic review and meta-analysis

PMID

30857429

Journal

Eur J Prev Cardiol

Type of Publication and Period of assessment

Systematic Review with Meta-Analysis, SEES Pack 3

Component	Item	SEES assessment
Transparency	Registration: Is the review registered in a public database?	Yes - Registered in PROSPERO
Transparency	Protocol: Is there referral of a publicly available methodological protocol? (Note: if so, you must also use the protocol to consult information about the review)	No
Completeness	Title: Is the study identified as a systematic review, meta-analysis, or both?	Yes
Completeness	Abstract: Does the abstract list the data sources used in the review? (Note: if more than five databases were used, simplified or partial referral should be considered as "Yes")	No
Completeness	Abstract: Does the abstract inform key eligibility criteria for study selection?	Yes
Participants	Abstract: Is there a description regarding the population (participants) or main condition(s) addressed in the review?	No
Intervention / Exposure	Abstract: Is there a description regarding the interventions/exposures (or, broadly, independent variables) addressed in the review?	No
Completeness	Abstract: Is there a description of the number of included studies?	Yes
Outcome	Abstract: Is there a result description for the main outcome of interest?	Yes
Completeness	Introduction: Is there a description for the research question (with PICOS elements) or precisely stated objectives (with PICOS) ?	Yes
Transparency	Methods: Is there at least one search query fully available? (Note: a full search query should allow complete replication)	Yes
Methodological rigor	Methods: Did the search strategy include non-published evidence? ("grey literature")	Yes
Methodological rigor	Methods: If the search is restricted for evidence generated after 1980, is there an indirect or direct justification related to the time range?	Yes
Methodological rigor	Methods: How many languages were considered for study eligibility?	2
Completeness	Methods: Is there a detailed explanation of eligibility criteria for PICOS elements? (Note: detailed explanation should allow complete replication)	Yes
Methodological rigor	Methods: Was the study selection carried out in duplicate?	Yes
Methodological rigor	Methods: Was the data extraction carried out in duplicate?	Yes
Methodological rigor	Methods: Is there a description of the assessment of risk of biases?	Yes
Methodological rigor	Methods: Was the assessment of risk of biases carried out in duplicate?	No
Outcome	Methods: Is there a description of the statistical combination (meta-analysis) regarding the effect measure (e.g., relative risk or mean difference), statistical method (e.g., inverse variance), and effects approach (fixed or random)?	Yes
Outcome	Methods: Is there a description regarding the assessment of statistical heterogeneity?	Yes
Completeness	Results: Is there a full description regarding the numbers of references (retrieval, eligibility, synthesis)?	Yes
Completeness	Results: Is there a description about the sample sizes of individual studies?	Yes
Participants, Intervention / Exposure	Results: Is there a full description of characteristics? (Note: the available PICOS elements should be considered)	Yes

Completeness	Results: Is there a description of study duration (follow-up lengths)?	Yes
Outcome	Results: Is there a minimally recommended description of meta-analytic summary estimates? (Note: binary outcomes as frequencies with and without the event (or as proportions such as 12/45); continuous outcomes as the mean, standard deviation, and sample size for each group)	Yes
Outcome	Results: Is there a full description of individual results for studies composing the meta-analysis? (Note: effects size, imprecision measure and percentage weight should be considered)	No
Critical appraisal	Results: Is there a description of risk of bias within studies? (Note: your assessment should be based on the characteristic of the RoB tool)	Yes (FULL description)
Critical appraisal	Results: Is there a description for non-planned modifications to the synthesis during the course of the review? (e.g.: change in eligibility criteria or RoB tools; please, what was changed and its justification [why] should be considered).	Yes (FULL description)
Critical appraisal	Discussion: Is there a potential spin bias based on a specific reporting strategy to highlight that the experimental treatment (or condition of interest) leads to the hypothesized result?	Yes
Critical appraisal	Discussion: Are the results discussed in light of the risk of biases in individual studies?	No
Critical appraisal	Discussion: Are limitations discussed at the study/outcome and/or at the review level?	Yes, BOTH for study and review levels
Transparency	Is there a statement regarding the data availability (data sharing plan)?	No
Completeness	Is there a statement regarding the sources of funding? (Note: funding for the review itself)	Yes
Completeness	Did the review authors declare whether they had any conflicts of interest (COI)?	Yes, authors declare financial and non-financial COIs



Strengthening the Evidence in Exercise Sciences Initiative (SEES Initiative)

Assessment Report for Individual Study

Study title

The association of resistance training with mortality: A systematic review and meta-analysis

PMID

31104484

Journal

Eur J Prev Cardiol

Type of Publication and Period of assessment

Systematic Review with Meta-Analysis, SEES Pack 5

Component	Item	SEES assessment
Transparency	Registration: Is the review registered in a public database?	No
Transparency	Protocol: Is there referral of a publicly available methodological protocol? (Note: if so, you must also use the protocol to consult information about the review)	No
Completeness	Title: Is the study identified as a systematic review, meta-analysis, or both?	Yes
Completeness	Abstract: Does the abstract list the data sources used in the review? (Note: if more than five databases were used, simplified or partial referral should be considered as "Yes")	No
Completeness	Abstract: Does the abstract inform key eligibility criteria for study selection?	No
Participants	Abstract: Is there a description regarding the population (participants) or main condition(s) addressed in the review?	No
Intervention / Exposure	Abstract: Is there a description regarding the interventions/exposures (or, broadly, independent variables) addressed in the review?	Yes
Completeness	Abstract: Is there a description of the number of included studies?	Yes
Outcome	Abstract: Is there a result description for the main outcome of interest?	Yes
Completeness	Introduction: Is there a description for the research question (with PICOS elements) or precisely stated objectives (with PICOS) ?	Yes
Transparency	Methods: Is there at least one search query fully available? (Note: a full search query should allow complete replication)	Yes
Methodological rigor	Methods: Did the search strategy include non-published evidence? ("grey literature")	Yes
Methodological rigor	Methods: If the search is restricted for evidence generated after 1980, is there an indirect or direct justification related to the time range?	The searches were carried out from the database inception (earliest date)
Methodological rigor	Methods: How many languages were considered for study eligibility?	No restriction
Completeness	Methods: Is there a detailed explanation of eligibility criteria for PICOS elements? (Note: detailed explanation should allow complete replication)	Yes
Methodological rigor	Methods: Was the study selection carried out in duplicate?	Yes
Methodological rigor	Methods: Was the data extraction carried out in duplicate?	Yes
Methodological rigor	Methods: Is there a description of the assessment of risk of biases?	Yes
Methodological rigor	Methods: Was the assessment of risk of biases carried out in duplicate?	No
Outcome	Methods: Is there a description of the statistical combination (meta-analysis) regarding the effect measure (e.g., relative risk or mean difference), statistical method (e.g., inverse variance), and effects approach (fixed or random)?	Yes
Outcome	Methods: Is there a description regarding the assessment of statistical heterogeneity?	Yes
Completeness	Results: Is there a full description regarding the numbers of references (retrieval, eligibility, synthesis)?	Yes
Completeness	Results: Is there a description about the sample sizes of individual studies?	Yes
Participants, Intervention / Exposure	Results: Is there a full description of characteristics? (Note: the available PICOS elements should be considered)	Yes

Completeness	Results: Is there a description of study duration (follow-up lengths)?	Yes
Outcome	Results: Is there a minimally recommended description of meta-analytic summary estimates? (Note: binary outcomes as frequencies with and without the event (or as proportions such as 12/45); continuous outcomes as the mean, standard deviation, and sample size for each group)	Yes
Outcome	Results: Is there a full description of individual results for studies composing the meta-analysis? (Note: effects size, imprecision measure and percentage weight should be considered)	Yes
Critical appraisal	Results: Is there a description of risk of bias within studies? (Note: your assessment should be based on the characteristic of the RoB tool)	Yes (FULL description)
Critical appraisal	Results: Is there a description for non-planned modifications to the synthesis during the course of the review? (e.g.: change in eligibility criteria or RoB tools; please, what was changed and its justification [why] should be considered).	Unclear
Critical appraisal	Discussion: Is there a potential spin bias based on a specific reporting strategy to highlight that the experimental treatment (or condition of interest) leads to the hypothesized result?	Yes
Critical appraisal	Discussion: Are the results discussed in light of the risk of biases in individual studies?	No
Critical appraisal	Discussion: Are limitations discussed at the study/outcome and/or at the review level?	Yes, BOTH for study and review levels
Transparency	Is there a statement regarding the data availability (data sharing plan)?	No
Completeness	Is there a statement regarding the sources of funding? (Note: funding for the review itself)	Yes
Completeness	Did the review authors declare whether they had any conflicts of interest (COI)?	Yes, authors declare non-financial COIs



Strengthening the Evidence in Exercise Sciences Initiative (SEES Initiative)

Assessment Report for Individual Study

Study title

Exercise-based cardiac rehabilitation in patients with reduced left ventricular ejection fraction: The Cardiac Rehabilitation Outcome Study in Heart Failure (CROS-HF): A systematic review and meta-analysis

PMID

31177833

Journal

Eur J Prev Cardiol

Type of Publication and Period of assessment

Systematic Review with Meta-Analysis, SEES Pack 6

Component	Item	SEES assessment
Transparency	Registration: Is the review registered in a public database?	Yes - Registered in PR
Transparency	Protocol: Is there referral of a publicly available methodological protocol? (Note: if so, you must also use the protocol to consult information about the review)	No
Completeness	Title: Is the study identified as a systematic review, meta-analysis, or both?	Yes
Completeness	Abstract: Does the abstract list the data sources used in the review? (Note: if more than five databases were used, simplified or partial referral should be considered as "Yes")	No
Completeness	Abstract: Does the abstract inform key eligibility criteria for study selection?	Yes
Participants	Abstract: Is there a description regarding the population (participants) or main condition(s) addressed in the review?	Yes
Intervention / Exposure	Abstract: Is there a description regarding the interventions/exposures (or, broadly, independent variables) addressed in the review?	Yes
Completeness	Abstract: Is there a description of the number of included studies?	Yes
Outcome	Abstract: Is there a result description for the main outcome of interest?	Yes
Completeness	Introduction: Is there a description for the research question (with PICOS elements) or precisely stated objectives (with PICOS) ?	Yes
Transparency	Methods: Is there at least one search query fully available? (Note: a full search query should allow complete replication)	Yes
Methodological rigor	Methods: Did the search strategy include non-published evidence? ("grey literature")	Yes
Methodological rigor	Methods: If the search is restricted for evidence generated after 1980, is there an indirect or direct justification related to the time range?	Yes
Methodological rigor	Methods: How many languages were considered for study eligibility?	No restriction
Completeness	Methods: Is there a detailed explanation of eligibility criteria for PICOS elements? (Note: detailed explanation should allow complete replication)	Yes
Methodological rigor	Methods: Was the study selection carried out in duplicate?	Yes
Methodological rigor	Methods: Was the data extraction carried out in duplicate?	Yes
Methodological rigor	Methods: Is there a description of the assessment of risk of biases?	Yes
Methodological rigor	Methods: Was the assessment of risk of biases carried out in duplicate?	No
Outcome	Methods: Is there a description of the statistical combination (meta-analysis) regarding the effect measure (e.g., relative risk or mean difference), statistical method (e.g., inverse variance), and effects approach (fixed or random)?	Yes
Outcome	Methods: Is there a description regarding the assessment of statistical heterogeneity?	Yes
Completeness	Results: Is there a full description regarding the numbers of references (retrieval, eligibility, synthesis)?	Yes
Completeness	Results: Is there a description about the sample sizes of individual studies?	Yes
Participants, Intervention / Exposure	Results: Is there a full description of characteristics? (Note: the available PICOS elements should be considered)	Yes
Completeness	Results: Is there a description of study duration (follow-up lengths)?	Yes

Outcome	Results: Is there a minimally recommended description of meta-analytic summary estimates? (Note: binary outcomes as frequencies with and without the event (or as proportions such as 12/45); continuous outcomes as the mean, standard deviation, and sample size for each group)	Yes
Outcome	Results: Is there a full description of individual results for studies composing the meta-analysis? (Note: effects size, imprecision measure and percentage weight should be considered)	No
Critical appraisal	Results: Is there a description of risk of bias within studies? (Note: your assessment should be based on the characteristic of the RoB tool)	Yes (FULL description)
Critical appraisal	Results: Is there a description for non-planned modifications to the synthesis during the course of the review? (e.g.: change in eligibility criteria or RoB tools; please, what was changed and its justification [why] should be considered).	Does not apply
Critical appraisal	Discussion: Is there a potential spin bias based on a specific reporting strategy to highlight that the experimental treatment (or condition of interest) leads to the hypothesized result?	No
Critical appraisal	Discussion: Are the results discussed in light of the risk of biases in individual studies?	No
Critical appraisal	Discussion: Are limitations discussed at the study/outcome and/or at the review level?	Yes, ONLY for the study and/or outcome level (review processes not mentioned)
Transparency	Is there a statement regarding the data availability (data sharing plan)?	No
Completeness	Is there a statement regarding the sources of funding? (Note: funding for the review itself)	Yes
Completeness	Did the review authors declare whether they had any conflicts of interest (COI)?	Yes, authors declare financial COIs



Strengthening the Evidence in Exercise Sciences Initiative (SEES Initiative)

Assessment Report for Individual Study

Study title

The effect of exercise training on blood pressure in African and Asian populations: A systematic review and meta-analysis of randomized controlled trials

PMID

31450966

Journal

Eur J Prev Cardiol

Type of Publication and Period of assessment

Systematic Review with Meta-Analysis, SEES Pack 8

Component	Item	SEES assessment
Transparency	Registration: Is the review registered in a public database?	Yes - Registered in PR
Transparency	Protocol: Is there referral of a publicly available methodological protocol? (Note: if so, you must also use the protocol to consult information about the review)	No
Completeness	Title: Is the study identified as a systematic review, meta-analysis, or both?	Yes
Completeness	Abstract: Does the abstract list the data sources used in the review? (Note: if more than five databases were used, simplified or partial referral should be considered as "Yes")	Yes
Completeness	Abstract: Does the abstract inform key eligibility criteria for study selection?	Yes
Participants	Abstract: Is there a description regarding the population (participants) or main condition(s) addressed in the review?	Yes
Intervention / Exposure	Abstract: Is there a description regarding the interventions/exposures (or, broadly, independent variables) addressed in the review?	Yes
Completeness	Abstract: Is there a description of the number of included studies?	Yes
Outcome	Abstract: Is there a result description for the main outcome of interest?	Yes
Completeness	Introduction: Is there a description for the research question (with PICOS elements) or precisely stated objectives (with PICOS) ?	Yes
Transparency	Methods: Is there at least one search query fully available? (Note: a full search query should allow complete replication)	Yes
Methodological rigor	Methods: Did the search strategy include non-published evidence? ("grey literature")	No
Methodological rigor	Methods: If the search is restricted for evidence generated after 1980, is there an indirect or direct justification related to the time range?	The searches were carried out from the database inception (earliest date)
Methodological rigor	Methods: How many languages were considered for study eligibility?	No restriction
Completeness	Methods: Is there a detailed explanation of eligibility criteria for PICOS elements? (Note: detailed explanation should allow complete replication)	Yes
Methodological rigor	Methods: Was the study selection carried out in duplicate?	Yes
Methodological rigor	Methods: Was the data extraction carried out in duplicate?	Yes
Methodological rigor	Methods: Is there a description of the assessment of risk of biases?	Yes
Methodological rigor	Methods: Was the assessment of risk of biases carried out in duplicate?	No
Outcome	Methods: Is there a description of the statistical combination (meta-analysis) regarding the effect measure (e.g., relative risk or mean difference), statistical method (e.g., inverse variance), and effects approach (fixed or random)?	Yes
Outcome	Methods: Is there a description regarding the assessment of statistical heterogeneity?	Yes
Completeness	Results: Is there a full description regarding the numbers of references (retrieval, eligibility, synthesis)?	Yes
Completeness	Results: Is there a description about the sample sizes of individual studies?	Yes

Participants, Intervention / Exposure	Results: Is there a full description of characteristics? (Note: the available PICOS elements should be considered)	Yes
Completeness	Results: Is there a description of study duration (follow-up lengths)?	Yes
Outcome	Results: Is there a minimally recommended description of meta-analytic summary estimates? (Note: binary outcomes as frequencies with and without the event (or as proportions such as 12/45); continuous outcomes as the mean, standard deviation, and sample size for each group)	Yes
Outcome	Results: Is there a full description of individual results for studies composing the meta-analysis? (Note: effects size, imprecision measure and percentage weight should be considered)	Yes
Critical appraisal	Results: Is there a description of risk of bias within studies? (Note: your assessment should be based on the characteristic of the RoB tool)	Yes (FULL description)
Critical appraisal	Results: Is there a description for non-planned modifications to the synthesis during the course of the review? (e.g.: change in eligibility criteria or RoB tools; please, what was changed and its justification [why] should be considered).	No
Critical appraisal	Discussion: Is there a potential spin bias based on a specific reporting strategy to highlight that the experimental treatment (or condition of interest) leads to the hypothesized result?	Yes
Critical appraisal	Discussion: Are the results discussed in light of the risk of biases in individual studies?	No
Critical appraisal	Discussion: Are limitations discussed at the study/outcome and/or at the review level?	Yes, BOTH for study and review levels
Transparency	Is there a statement regarding the data availability (data sharing plan)?	No
Completeness	Is there a statement regarding the sources of funding? (Note: funding for the review itself)	Yes
Completeness	Did the review authors declare whether they had any conflicts of interest (COI)?	Yes, authors declare non-financial COIs



Strengthening the Evidence in Exercise Sciences Initiative (SEES Initiative)

Assessment Report for Individual Study

Study title

Comparative efficacy of exercise and anti-hypertensive pharmacological interventions in reducing blood pressure in people with hypertension: A network meta-analysis.

PMID

31615283

Journal

Eur J Prev Cardiol

Type of Publication and Period of assessment

Systematic Review with Meta-Analysis, SEES Pack 10

Note: The COVID-19 pandemics we are going through is very challenging and totally unprecedented. However, through it we can see that science conducted in an open, transparent and reproducible way is more than an ideal, it is a necessity. In this sense, we decided to keep our activities. However, we emphasize this evaluation was possibly not reviewed/questioned by the article authors due to the moment we are all going through. Thank you for your time and consideration.
SEES Initiative team.

Component	Item	SEES assessment
Transparency	Registration: Is the review registered in a public database?	Yes – Registered in PROSPERO
Transparency	Protocol: Is there referral of a publicly available methodological protocol? (Note: if so, you must also use the protocol to consult information about the review)	Yes
Completeness	Title: Is the study identified as a systematic review, meta-analysis, or both?	Yes
Completeness	Abstract: Does the abstract list the data sources used in the review? (Note: if more than five databases were used, simplified or partial referral should be considered as "Yes")	No
Completeness	Abstract: Does the abstract inform key eligibility criteria for study selection?	Yes
Participants	Abstract: Is there a description regarding the population (participants) or main condition(s) addressed in the review?	Yes
Intervention / Exposure	Abstract: Is there a description regarding the interventions/exposures (or, broadly, independent variables) addressed in the review?	Yes
Completeness	Abstract: Is there a description of the number of included studies?	Yes
Outcome	Abstract: Is there a result description for the main outcome of interest?	Yes
Completeness	Introduction: Is there a description for the research question (with PICOS elements) or precisely stated objectives (with PICOS) ?	Yes
Transparency	Methods: Is there at least one search query fully available? (Note: a full search query should allow complete replication)	Yes
Methodological rigor	Methods: Did the search strategy include non-published evidence? ("grey literature")	Yes
Methodological rigor	Methods: If the search is restricted for evidence generated after 1980, is there an indirect or direct justification related to the time range?	The searches were carried out from the database inception (earliest date)
Methodological rigor	Methods: How many languages were considered for study eligibility?	1
Completeness	Methods: Is there a detailed explanation of eligibility criteria for PICOS elements? (Note: detailed explanation should allow complete replication)	Yes
Methodological rigor	Methods: Was the study selection carried out in duplicate?	Partial Yes (e.g., a sample of 50% of studies were checked by two independent researchers)
Methodological rigor	Methods: Was the data extraction carried out in duplicate?	Yes
Methodological rigor	Methods: Is there a description of the assessment of risk of biases?	Yes
Methodological rigor	Methods: Was the assessment of risk of biases carried out in duplicate?	No

Outcome	Methods: Is there a description of the statistical combination (meta-analysis) regarding the effect measure (e.g., relative risk or mean difference), statistical method (e.g., inverse variance), and effects approach (fixed or random)?	Yes
Outcome	Methods: Is there a description regarding the assessment of statistical heterogeneity?	No
Completeness	Results: Is there a full description regarding the numbers of references (retrieval, eligibility, synthesis)?	Yes
Completeness	Results: Is there a description about the sample sizes of individual studies?	No
Participants, Intervention / Exposure	Results: Is there a full description of characteristics? (Note: the available PICOS elements should be considered)	Yes
Completeness	Results: Is there a description of study duration (follow-up lengths)?	Yes
Outcome	Results: Is there a minimally recommended description of meta-analytic summary estimates? (Note: binary outcomes as frequencies with and without the event (or as proportions such as 12/45); continuous outcomes as the mean, standard deviation, and sample size for each group)	No
Outcome	Results: Is there a full description of individual results for studies composing the meta-analysis? (Note: effects size, imprecision measure and percentage weight should be considered)	No
Critical appraisal	Results: Is there a description of risk of bias within studies? (Note: your assessment should be based on the characteristic of the RoB tool)	Yes (FULL description)
Critical appraisal	Results: Is there a description for non-planned modifications to the synthesis during the course of the review? (e.g.: change in eligibility criteria or RoB tools; please, what was changed and its justification [why] should be considered).	Does not apply
Critical appraisal	Discussion: Is there a potential spin bias based on a specific reporting strategy to highlight that the experimental treatment (or condition of interest) leads to the hypothesized result?	No
Critical appraisal	Discussion: Are the results discussed in light of the risk of biases in individual studies?	Yes
Critical appraisal	Discussion: Are limitations discussed at the study/outcome and/or at the review level?	Yes, BOTH for study and review levels
Transparency	Is there a statement regarding the data availability (data sharing plan)?	Yes
Completeness	Is there a statement regarding the sources of funding? (Note: funding for the review itself)	Yes
Completeness	Did the review authors declare whether they had any conflicts of interest (COI)?	Yes, authors declare financial COIs

Our team

Akemy Neubert Kamitoyo

Pontifícia Universidade Católica do Rio Grande do Sul

Andresa Ignácio

Universidade Federal do Rio Grande do Sul

Angélica T. De Nardi

Universidade Federal do Rio Grande do Sul

Bruna Goés Moraes

Pontifícia Universidade Católica do Rio Grande do Sul

Cíntia E. Botton

Universidade Federal de Pelotas

Daniel Umpierre

Universidade Federal do Rio Grande do Sul

Douglas dos Santos Soares

Universidade Federal do Rio Grande do Sul

Leony Morgana Galliano

Hospital de Clínicas de Porto Alegre

Lucas Helal

Universidade do Extremo Sul Catarinense

Lucas P. Santos

Hospital de Clínicas de Porto Alegre

Luiza Isnardi Cardoso Ricardo

Universidade Federal de Pelotas

Marcelo R. dos Santos

Instituto do Coração – FMUSP

Nórton L. Oliveira

Hospital de Clínicas de Porto Alegre

Raíssa Borges Monteiro

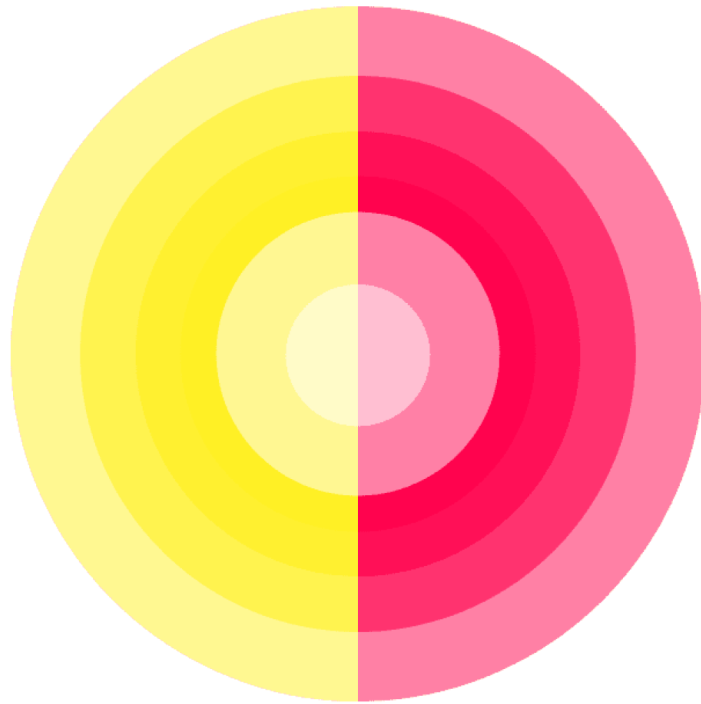
Universidade do Vale do Rio dos Sinos

Tainá Silveira Alano

Universidade Federal de Ciências da Saúde de Porto Alegre

Faculty director - **Daniel Umpierre**

Technical director - **Nórton L. Oliveira**



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Universidade Federal do Rio Grande do Sul
Hospital de Clínicas de Porto Alegre
sees.initiative@gmail.com

www.sees-initiative.org