Körperliche Aktivität und perinatale mentale Gesundheit von Müttern:

Evidenz und soziale Ungleichheiten

Perinatale mentale Gesundheit

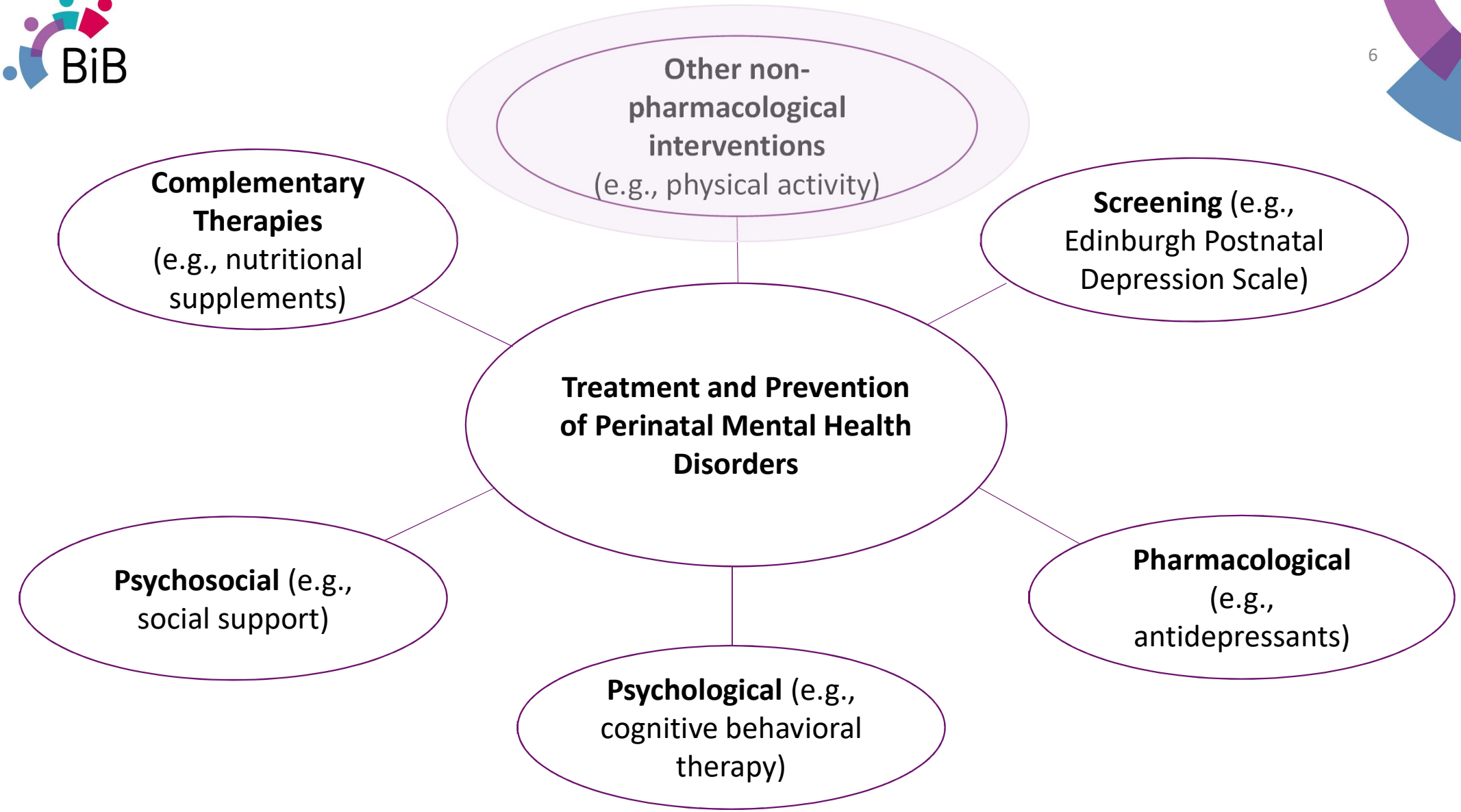
Perinatale Phase: Beginn der Schwangerschaft bis zu 12 Monaten nach der Geburt (WHO, 2022)

10% erleben eine psychische Erkrankung **während der Schwangerschaft.**

13% erleben eine psychische Erkrankung **nach der Geburt.**

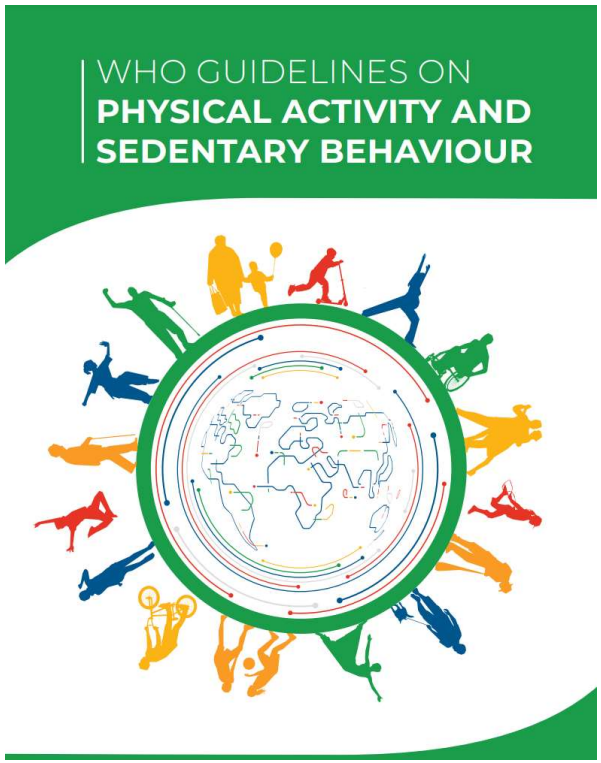
Depressionen und **Angststörungen** sind **die häufigsten** psychischen Erkrankungen.

Sozialer Kontext als **fördernder oder hemmender Faktor** für die Entstehung, Behandlung und Prävention von perinatalen mentalen Gesundheitsproblemen.



(Zeng et al. 2025; COPE 2023; Silverwood et al. 2023)

Körperliche Aktivität in der perinatalen Phase



2020

"All pregnant and postpartum women without contraindication should:

…undertake **regular physical activity** throughout pregnancy and postpartum.

…do **at least 150 minutes of moderate-intensity aerobic physical activity** throughout the week for substantial health benefits."

Körperliche Aktivität und perinatale mentale Gesundheit

- ↓**Risiko** für Depressionen und Angststörungen **während der Schwangerschaft**
- ↓ **Risiko** für Depressionen **nach der Geburt**
- Positiver Einfluss auf die **Schwere des Verlaufs**
- Körperliche Aktivität während der Schwangerschaft → verbesserte mentale Gesundheit nach der Geburt
- **Art**, **Frequenz** und **Intensität** der körperlichen Aktivität könnte ausschlaggebend sein

Archives of Women's Mental Health
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REVIEW ARTICLE

Prenatal exercise and its effects on postpartum mental health: systematic review and meta-analysis

Lauren E. Hicks[1] · Michelle D. Graf[1] · SeonAe Yeo[1]

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Abstract

Purpose The perinatal period, spanning from pregnancy through the first year after childbirth, is characterized by significant physiological, psychological, and socio-contextual changes. Women face complex stressors including psychosocial pressures, financial constraints, interpersonal dynamics, anticipatory stress related to parenthood, hormonal fluctuations, and societal expectations. These factors collectively influence the perinatal experience, increasing vulnerabilities and stress levels.

Methods A systematic review was conducted in October 2023 using PubMed, SPORTDiscus, PsycInfo, and Scopus data-

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Physical activity before and during pregnancy and maternal mental health: A systematic review and meta-analysis of observational studies

Chenxi Cai[a,*], Stephen Busch[b], Rachel Wang[b], Allison Sivak[c], Margie H. Davenport[d]

ARTICLE INFO

Keywords:
Active
Physical activity
Pregnancy
Depression
Anxiety

ABSTRACT

Objective: To examine the influence of physical activity before and during pregnancy on maternal mental health outcomes.

Methods: Ten electronic databases were searched up to May 11, 2021. Studies of all observational designs (except case studies and reviews) were included, which contained information on the relevant population (women before and or during pregnancy), exposures (objective or subjective measures of physical activity), comparator (low or no physical activity), and outcomes (diagnosis and symptom severity of depression or anxiety, quality of life scores, stress and emotions).

Results: Forty-four observational studies (N = 132,399) were included. 'Low' to 'very low' certainty evidence revealed that compared with low levels of PA during pregnancy, high levels of PA were associated with a reduced odds of developing prenatal depression (odds ratio (OR): 0.68, 95% confidence interval (CI): 0.58 to 0.80) and anxiety (OR: 0.67, 95% CI: 0.54 to 0.83). We also found a reduction in the severity of prenatal depressive symptoms (standardized mean difference (SMD): −0.37, 95% CI −0.57 to −0.17), prenatal anxiety symptoms (SMD: −0.45, 95% CI −0.64 to −0.27), and prenatal stress (SMD: −0.33, 95% CI −0.55 to −0.11), concurrent with improved quality of life (SMD: 0.38, 95% CI 0.23 to 0.54). PA before pregnancy did not impact the outcomes of interest.

Conclusion: Physical activity during pregnancy is associated with a reduction in the odds and severity of prenatal depression and anxiety, as well as reduced stress and improved quality of life.

PROSPERO registration number: CRD42020208469.

BMC Public Health

RESEARCH Open Access

Effect of different physical activity interventions on perinatal depression: a systematic review and network meta-analysis

Yu Shuai[1,4†], Jinlong Wu[2†], Chenmu Li[3] and Dong Li[4*]

Abstract

Background Perinatal depression can have profound impacts on both families and society. Exercise therapy is gradually becoming a widely used adjunct treatment for perinatal depression. Some studies have already focused on the relationship between physical activity and perinatal depression (PND). However, there is currently a lack of systematic and comprehensive evidence to address the crucial question of making optimal choices among different forms of physical activity. This study aims to compare and rank different physical activity intervention strategies and identify the most effective one for perinatal depression.

Methods Four databases, namely PubMed, Cochrane Library, Embase, and Web of Science, were searched for randomized controlled trials assessing the impact of physical activity interventions on perinatal depression. The search covered the period from the inception of the databases until May 2024. Two researchers independently conducted literature screening, data extraction, and quality assessment. Network meta-analysis was performed using Stata 15.1.

Results A total of 48 studies were included in the analysis. The results indicate that relaxation therapy has the most effective outcome in reducing perinatal depression (SUCRA = 99.4%). Following that is mind-body exercise (SUCRA = 80.6%). Traditional aerobics and aquatic sports were also effective interventions (SUCRA = 70.9% and 67.1%, respectively).

Conclusion Our study suggests that integrated mental and physical (MAP) training such as relaxation therapy and mind-body exercise show better performance in reducing perinatal depression. Additionally, while exercise has proven to be effective, the challenge lies in finding ways to encourage people to maintain a consistent exercise routine.

Trial registration This study has been registered on PROSPERO (CRD 42,023,469,537).

Keywords Physical activity, Women, Perinatal depression, Network meta-analysis

(Cai et al. 2022; Sánchez-Polan et al. 2021; Xu et al. 2023; Yuan et al. 2022; Hicks et al. 2024; Shuai et al. 2024)

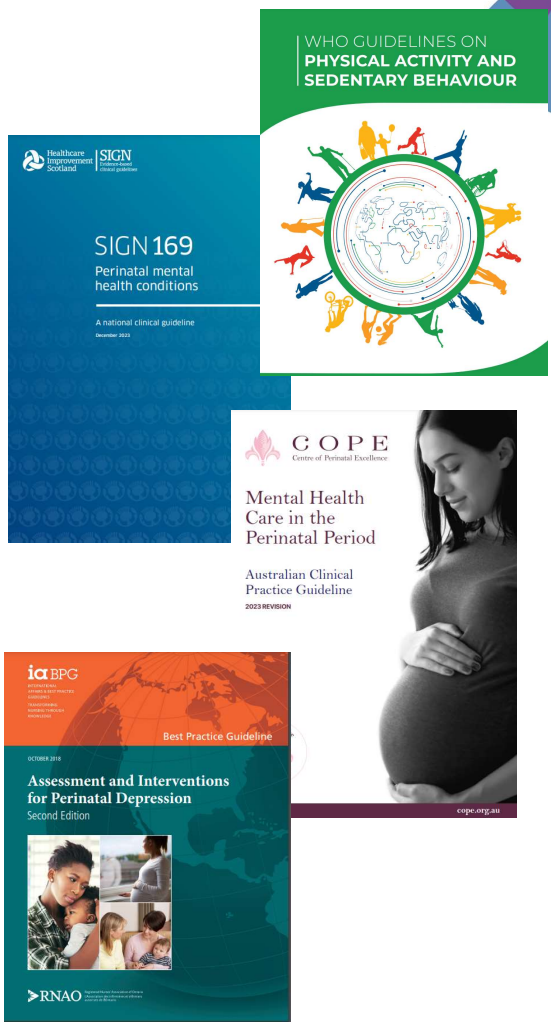
Forschungslücken

Forschung

- **Heterogene Evidenz**
- Unklar: **Besonders effektive Interventionen?**
- Fehlender Fokus auf **Angststörungen** und andere psychische Erkrankungen

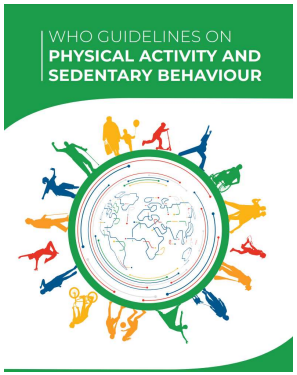
Praxis

- **Abnahme der körperlichen Aktivität** während der Schwangerschaft
- **Fehlende Leitlinien** und **Informationen** zur perinatalen körperlichen Aktivität
- **Unklare Empfehlungen** zur körperlichen Aktivität und perinatalen mentalen Gesundheit

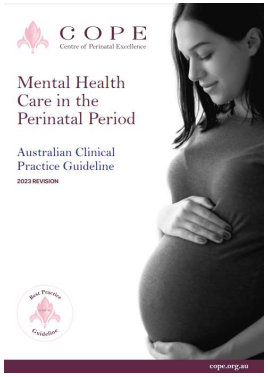


(Lopez-Gil et al. 2022, Ussery et al. 2020; Budler & Budler 2022)

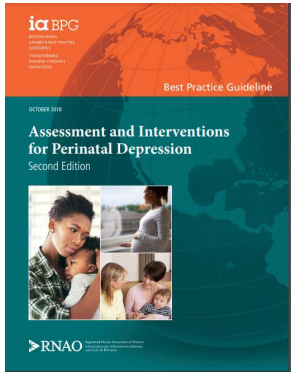
Welchen Effekt hat körperliche Aktivität auf die perinatale mentale Gesundheit und welche Interventionen sind besonders wirksam?



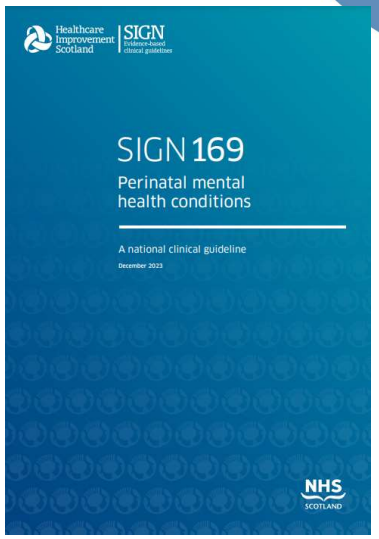
„Associated with lower levels of postpartum depression (low certainty of evidence)“



„Emerging evidence“ for exercise and yoga

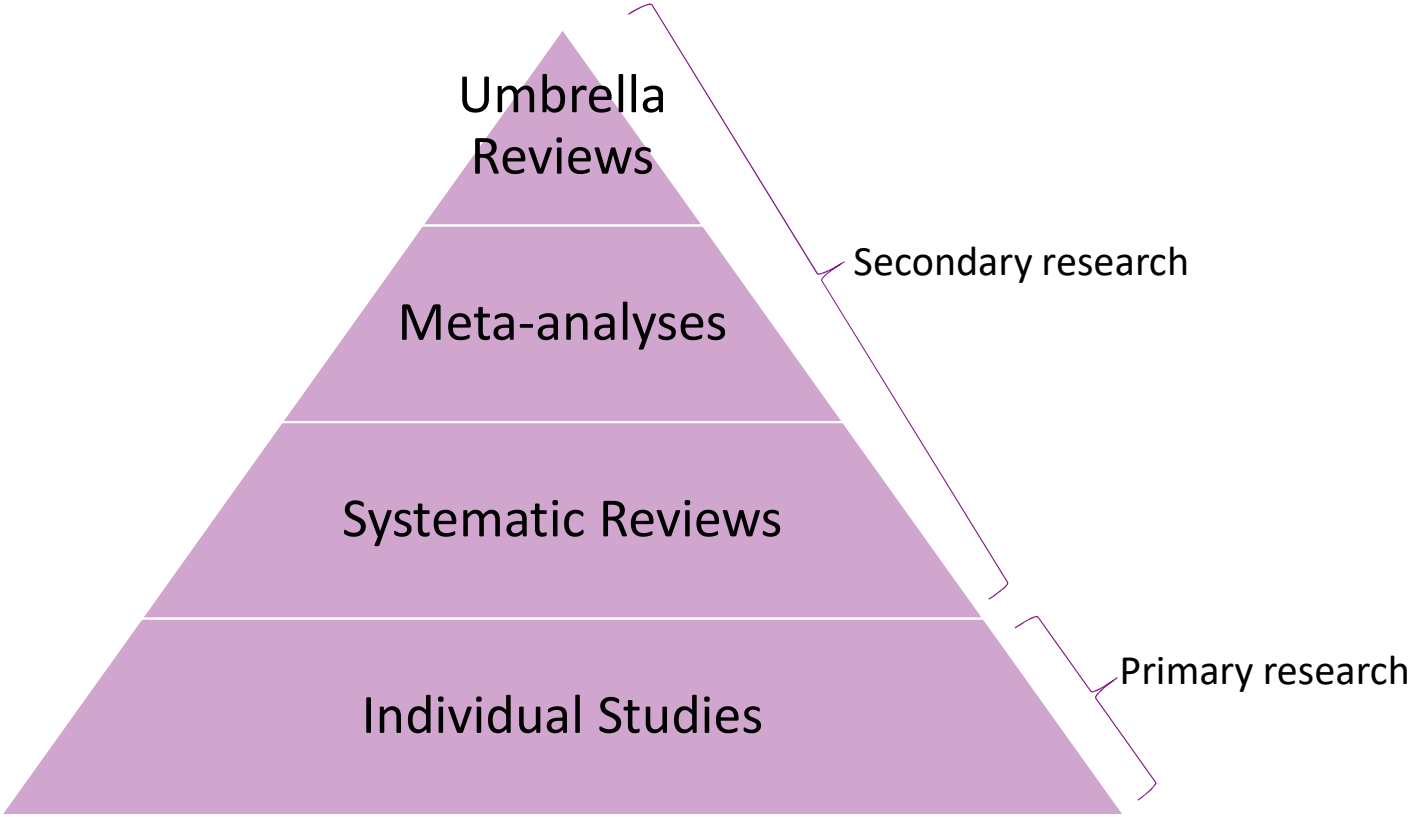


Exercise as a self care intervention but limited evidence due to population and timing (predominantly postnatal)



“There is some evidence of the benefit of yoga, exercise and mindfulness to reduce the risk of stress and depression in the perinatal period, but it is insufficient to support a recommendation”

Overview of Reviews/Umbrella Review



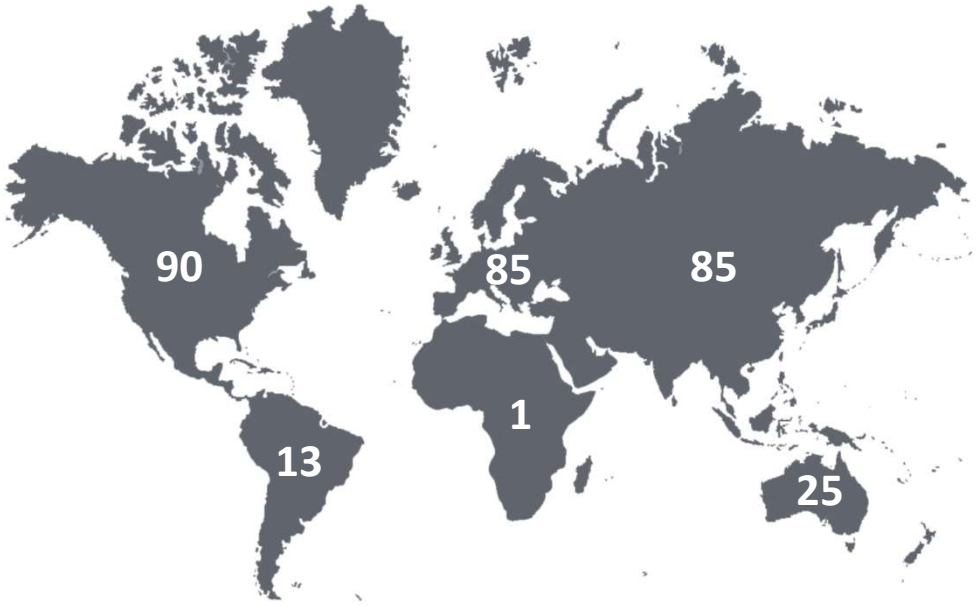
(Adapted from: Fusar-Poli P, Radua J (2018) "Ten simple rules for conducting umbrella reviews", BMJ Ment Health, 21, pp.95-100)

Deskriptive Ergebnisse

19 systematische Reviews mit Meta-analysen

321 randomisierte Kontrollstudien

245 567 Teilnehmende (Intervention & Kontrolle)



Country of origin, primary studies (not recorded for 3 reviews)

Deskriptive Ergebnisse

Yoga/Mind-body
(89)

Aerobic
(73)

Walking
(27)

Swimming
(27)

…u.v.m.

Frauen	Depressionen	Angststörungen
• Keine Altersbeschränkung • Ohne weitere Erkrankung • Allgemeinbevölkerung, Diagnose, Risikogruppe • **Unklar:** Einnahme von Psychopharmaka	• 19 Reviews • Effekt zwischen -0.21 und -0.81 (SMD)	• 2 Reviews • MD = -1.06 (Zhu et al. 2021)

Potenzial im Kontext sozialer Ungleichheiten

Aufbau des sozialen Netzwerks
z.B. Gruppenkurse (Yoga)

Niedrigschwellige Zugänge
z.B. digitale Angebote

Möglichkeit bedarfsorientierter Ansätze

Wirksamkeit über Depressionen hinaus?
Weitere Forschung notwendig

- Unterstützung im eigenen Umfeld
- Zugängliche Informationen
- Akzeptanz und Adhärenz
- Rolle des Gesundheitssystems

(Zhang et al. 2024; Liu et al. 2022; Ng et al. 2019; Budler & Budler 2022; Sun et al. 2023)

Vielen Dank

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