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**eAppendix 1.** Search Strategies used for each database

**Medline (OVID)**

(“depress\*”.ab,ti. OR “depressive disorder”.ab,ti. OR “depressive disorder”.sh. OR “depression”.sh. OR “depression, postpartum”.sh.) AND (“postpartum”.ab,ti. OR “postnatal”.ab,ti. OR “puerperal”.ab,ti. OR “perinatal”.ab,ti. OR “prental”ab,ti. OR “antenatal”.ab,ti. OR “intrapartum”.ab.ti. OR “pregnancy”.ab.ti. OR “pregnancy”.sh. OR “pregnant women”.ab,ti. OR “pregnant women”.sh. OR “matern\*”.ab,ti.) AND (“prevent”.ab,ti.) AND (“intervention\*”.ab,ti. OR “program\*”.ab,ti. OR “strateg\*”.ab,ti. OR “course”.ab,ti.) AND (“randomized controlled trial”.pt. OR “random\*”.ab,ti. OR “controlled”.ab,ti. OR “trial”.ab,ti. OR “clinical trial”.ab,ti. OR “controlled clinical trial”.pt.)

**PubMed**

((((((("depressive disorder"[Title/Abstract]) OR depress\*[Title/Abstract]) OR depression[Title/Abstract])) AND (((((((((postpartum[Title/Abstract]) OR postnatal[Title/Abstract]) OR puerperal[Title/Abstract]) OR perinatal[Title/Abstract]) OR prenatal[Title/Abstract]) OR antenatal[Title/Abstract]) OR intrapartum[Title/Abstract]) OR pregnancy[Title/Abstract]) OR "pregnant women"[Title/Abstract] OR matern\*[Title/Abstract])) AND prevent\*[Title/Abstract]) AND ((((intervention\*[Title/Abstract]) OR program\*[Title/Abstract]) OR strateg\*[Title/Abstract]) OR course[Title/Abstract])) AND (("randomized controlled trial"[Title/Abstract]) OR trial[Title/Abstract])

**PsycINFO**

AB (“depressive disorder” OR depress\* OR “depression”)

AB (postpartum OR postnatal OR puerperal OR perinatal OR prenatal OR antenatal OR intrapartum OR pregnancy OR “pregnant women” OR matern\*)

TX prevent\*

TX (intervention\* OR program\* OR strateg\* OR course)

AB (randomized controlled trial OR trial)

**Web of Science**

Topic: ((“Depressive disorder” OR depress\* OR depression) AND Topic: (postpartum OR postnatal OR puerperal OR perinatal OR prenatal OR antenatal OR intrapartum OR pregnancy OR “pregnant women” OR matern\*)) AND Topic: (prevent\*) AND Topic:(intervention\* OR program\* OR strateg\* OR course) AND Topic: (“randomized controlled trial” OR trial))

**Scopus**

TITLE-ABS-KEY (“Depressive disorder” OR depress\* OR depression) AND TITLE-ABS-KEY (postpartum OR postnatal OR puerperal OR perinatal OR prenatal OR antenatal OR intrapartum OR pregnancy OR “pregnant women” OR matern\*) AND ALL(prevent\*) AND TITLE-ABS-KEY (intervention\* OR program\* OR strateg\* OR course) AND ALL (“randomized controlled trial“ OR trial)

**CINAHL**

AB (“depressive disorder” OR depress\* OR “depression”)

AB (postpartum OR postnatal OR puerperal OR perinatal OR prenatal OR antenatal OR intrapartum OR pregnancy OR “pregnant women” OR matern\*)

TX prevent\*

TX (intervention\* OR program\* OR strateg\* OR course )

AB (“randomized controlled trial” OR trial)

**Cochrane Central Register of Controlled Trials (CENTRAL)**

(Depressive disorder OR depress\* OR depression):ti,ab,kw AND (postpartum OR postnatal OR puerperal OR perinatal OR prenatal OR antenatal OR intrapartum OR pregnancy OR “pregnant women” OR matern\*): ti,ab,kw AND (prevent\*):ti,ab,kw AND (intervention\* OR program\* OR strateg\* OR course):ti,ab,kw AND (random\* OR controlled OR trial):ti,ab,kw

**Opengrey (System for Information on Grey Literature in Europe)**

prevent\* AND (postpartum OR postnatal OR puerperal OR perinatal OR prenatal OR antenatal OR intrapartum OR pregnancy OR pregnant women) AND depression AND (intervention\* OR program\* OR strateg\* OR course)

**Australian New Zealand Clinical Trial Registry (ANZCTR)**

Depression AND (postpartum OR postnatal OR puerperal OR perinatal OR prenatal OR antenatal OR intrapartum OR pregnancy OR pregnant women) AND prevention AND (intervention\* OR program\* OR strateg\* OR course) AND (random OR controlled)

**Clinicaltrial.gov**

Depression AND (postpartum OR postnatal OR puerperal OR perinatal OR prenatal OR antenatal OR intrapartum OR pregnancy OR pregnant women) AND prevention AND (intervention\* OR program\* OR strateg\* OR course) AND (random OR controlled)

**eAppendix 2.** References of the RCTs included.

Barrera, A. Z., Wickham, R. E., & Muñoz, R. F. (2015). Online prevention of postpartum depression for Spanish- and English-speaking pregnant women: A pilot randomized controlled trial. *Internet Interventions*, *2*(3), 257–265. https://doi.org/10.1016/j.invent.2015.06.002

Brugha, T. S., Morrell, C. J., Slade, P., & Walters, S. J. (2011). Universal prevention of depression in women postnatally: Cluster randomized trial evidence in primary care. *Psychological Medicine*, *41*(4), 739–748. https://doi.org/10.1017/S0033291710001467

†Crockett, K., Zlotnick, C., Davis, M., Payne, N., & Washington, R. (2008). A depression preventive intervention for rural low-income African-American pregnant women at risk for postpartum depression. *Archives of Women’s Mental Health*, *11*(5–6), 319–325. https://doi.org/10.1007/s00737-008-0036-3

Fonseca, A., Monteiro, F., Alves, S., Gorayeb, R., & Canavarro, M. C. (2019). Be a Mom, a web-based intervention to prevent postpartum depression: The enhancement of self-regulatory skills and its association with postpartum depressive symptoms. Frontiers in psychology, 10, 265.

Ginsburg, G. S., Barlow, A., Goklish, N., Hastings, R., Baker, E. V., Mullany, B., Tein, J.-Y., & Walkup, J. (2012). Postpartum Depression Prevention for Reservation-Based American Indians: Results from a Pilot Randomized Controlled Trial. *Child & Youth Care Forum*. https://doi.org/10.1007/s10566-011-9161-7

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†Hagan, R., Evans, S. F., & Pope, S. (2004). Preventing postnatal depression in mothers of very preterm infants: A randomised controlled trial. *BJOG: An International Journal of Obstetrics and Gynaecology*, *111*(7), 641–647. https://doi.org/10.1111/j.1471-0528.2004.00165.x

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Le, H.-N., Perry, D. F., & Stuart, E. A. (2011). Randomized controlled trial of a preventive intervention for perinatal depression in high-risk latinas. *Journal of Consulting and Clinical Psychology*, *79*(2), 135–141. https://doi.org/10.1037/a0022492

Muñoz, R. F., Le, H.-N., Ippen, C. G., Díaz, M., Urizar Jr., G. G., Soto, J., Mendelson, T., Delucchi, K., & Lieberman, A. F. (2007). Prevention of Postpartum Depression in Low-Income Women: Development of the Mamás y Bebés/ Mothers and Babies Course. *Cognitive and Behavioral Practice*, *14*, 70–83.

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Zlotnick, C, Capezza, N. M., & Parker, D. (2011). An interpersonally based intervention for low-income pregnant women with intimate partner violence: a pilot study. *Archives of Women’s Mental Health*, *14*(1 CC-Common Mental Disorders CC-Pregnancy and Childbirth), 55–65. https://doi.org/10.1007/s00737-010-0195-x

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† RCTs included only in the RS.

**eAppendix 3.** Risk of bias of included studies.



**eAppendix 4.** Subgroup analysis.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Subgroup analysis** | **N** | **SMD** | **95% CI** | **P** | **I2** | | **Between-group heterogeneity** |
| **Age** | | | | | | | |
| Adults | 13 | -0.176 | -0.276 to -0.076 | 0.001 | 30.17% | | Q= .099; d.f. (Q)=1; p=.753 |
| Adolescents | 2 | -0.227 | -0.684 to 0.229 | 0.329 | 0% | |
| **Intervention focused on an ethnic minority** | | | | | | | |
| Yes | 4 | -0.218 | -0.520 to 0.085 | 0.158 | 46.05% | | Q= 0.09; d.f. (Q)=1; p=0.761 |
| No | 11 | -0.167 | -0.260 to -0.073 | <0.001 | 18.063% | |
| **Previous deliveries** | | | | | | | |
| Primiparous | 2 | -0.467 | -0.737 to -0.198 | 0.001 | 0% | | Q= 5.48; d.f. (Q)= 1; p=0.019 |
| Primiparous and multiparous | 13 | -0.137 | -0.205 to -0.068 | <0.001 | 2.364% | |
| **Type of prevention** | | | | | | | |
| Indicated/Selective | 11 | -0.197 | -0.339 to -0.054 | 0.007 | 11.25% | | Q=0.47; d.f. (Q)= 1; p= 0.493 |
| Universal | 4 | -0.163 | -0.300 to -0.027 | 0.019 | 51% | |
| **Intervention time** | | | | | | | |
| Prepartum | 3 | -0.351 | -0.676 to -0.27 | 0.034 | 29.31% | | Q= 4.417; d.f. (Q)= 3; p=0.22 |
| Postpartum | 4 | -0.139 | -0.358 to 0.089 | 0.231 | 45.12% | |
| Prepartum and postpartum | 7 | -0.121 | -0.229 to -0.014 | 0.026 | 0% | |
| Prepartum or postpartum† | 1 | -0.360 | -0.866 to 0.147 | 0.164 | 0% | |
| **Previous history of depression** | | | | | | | |
| Yes and no | 14 | -0.140 | -0.240 to -0.075 | <0.001 | 0% | | Q= 4.92; d.f. (Q)= 1; p= 0.026 |
| No | 1 | -0.487 | -0.787 to -0,188 | 0.001 | 0% | |
| **Intervention orientation** |  |  |  |  | |  |  |
| CBT | 8 | -0.155 | -0,317 to 0.006 | 0.060 | | 40.2% | Q= 1.05; d.f. (Q)= 2; p= 0.591 |
| IPT | 5 | -0.251 | -0.447 to -0.055 | 0.012 | | 0% |
| Other | 2 | -0.225 | -0.564 to 0.114 | 0.194 | | 70.1% |
| **Risk of bias (quantitative)** |  |  |  |  | |  |  |
| Low | 5 | -0.165 | -0.259 to -0.071 | 0.001 | | 20.1% | Q= 3.24; d.f. (Q)= 2; p=0.198 |
| Moderate | 5 | -0.064 | -0.303 to -0.313 | 0.613 | | 28.5% |
| High | 5 | -0.304 | -0.508 to -0.100 | 0.004 | | 0% |
| **Risk of bias (qualitative)** |  |  |  |  | |  |  |
| Low/moderate | 7 | -0.149 | -0.253 to -0.046 | 0.005 | | 25.1% | Q=1.02; d.f. (Q)= 1; p=0.312 |
| High | 8 | -0.233 | -0.412 to -0.053 | 0.011 | | 19.8% |
| **Risk of bias (qualitative)** |  |  |  |  | |  |  |
| Low | 2 | -0.101 | -0.241 to 0.038 | 0.154 | | 0% | Q=0.72; d.f. (Q)= 1; p=0.397 |
| Moderate/High | 13 | -0.196 | -0.310 to -0.061 | 0.001 | | 25.8% |
| **Sample size** |  |  |  |  | |  |  |
| ≤100 | 7 | -0.154 | -0.362 to 0.054 | 0.146 | | 0% | Q= 1.13; d.f. (Q)= 2; p= 0.569 |
| 101-400 | 5 | -0.226 | -0.451 to -0.001 | 0.049 | | 46.1% |  |
| >400 | 3 | -0.148 | -0.263 to -0.034 | 0.011 | | 40.2% |  |

†One RCT (Tandon et al., 2011, 2014) included pregnant women and women that had given birth in the past six months at baseline intervention, so it can be said that the intervention was prepartum or postpartum depending on the pregnancy status (prenatal or postpartum) of each woman.

**eAppendix 5.** Unadjusted and adjusted beta coefficients for risk of bias from meta-regressions on the association between reduction of depressive symptoms (SMD) and other covariates.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent variables** | **β Coefficient†**  **(Unadjusted)** | **P** | **β Coefficient†**  **(Adjusted for risk of bias)** | **P** |
| **Age (adolescent)** | -0.493 (-0.598 to 0.499) | 0.849 | -0.6535 (-0.652 to .525) | 0.818 |
| **Interventions focused on an ethnic minority (no)** | -0.218 (-0.268 to .0311) | 0.873 | -0.001 -0.295 to 0.298) | 0.992 |
| **Previous deliveries (primiparous)** | -0.330 (-0.635 to -0.253) | 0.036 | -0.309 (0.660 to 0.423) | 0.079 |
| **Type of prevention (universal)** | -0.031 (-0.203 to 0.266) | 0.776 | 0.006 (-0.242 to 0.255) | 0.975 |
| **Intervention time (prepartum)** | -0.244 (-0.537 to 0.0479) | 0.094 | -0.224 (-0.623 to 0.173) | 0.243 |
| **Previous history of depression (no)** | -0.347 (-0.685 to -0.009) | 0.045 | -0.339 (-0.772 to 0.093) | 0.113 |
| **Intervention orientation (IPT)** | -0.090 (-0.361 to 0,179) | 0.481 | -0.077 (-0.346 to 0.190) | 0.540 |
| **Sample size** | -0.005 (-0.143 to 0.153) | 0.942 | -0.066 (-0.276 to 0.143) | 0.503 |
| **†**The coefficient indicates the change in the dependent variable (SMD: standardized mean difference of depressive symptoms between intervention and control groups) for each unit increase in the independent variables. A negative coefficient increases the preventive effect (reduction of symptoms) and a positive coefficient the opposite. | | | | |

**eAppendix 6.** Normal probability plot of standardized shrunken residuals of the final meta-regression model



**eAppendix 7.** Forest plot of the stratified meta-analysis according to the variable “previous deliveries”.





Note: Group 0 includes RCTs focused on primiparous and multiparous women together. Group 1 includes RCTs focused on primiparous women only.