

**Table 1** Data related to the references included in the review

#	Title	Authors	Country, year	Study design	Data Collection Method	Total number of participants (N) maternal Age in adolescent group(s) maternal Age in control group	Inclusion/Exclusion criteria	Reported outcomes
1	Complicaciones maternas en adolescentes y adultas afiliadas al régimen subsidiado, 2012	Díaz LM et al.	Colombia, 2015	Cohort	Survey	N=506 14-19 y.o=191 20-34 y.o=315	No data	Abortion, PREECLAMPSIA ECLAMPSIA SYNDROME, PRETERM DELIVERY, INTRAUTERINE GROWTH RESTRICTION, Multiple pregnancy, PLACENTA PRAEVIA, Ectopic pregnancy, abnormal presentation, INSTRUMENTAL VAGINAL DELIVERY, postpartum hemorrhage, Stillbirth
2	Prevalencia de desgarro de alto grado en parto de adolescentes mexicanas	Sanchez-Avila MT,et al	Mexico, 2018	Cohort	Medical Records	N=8847 Older than 19 y.o=6.443 19 y.o. or younger=2.404	Only 3rd and 4th grade perineal tears. Excluded presentations other than cephalic, multiple pregnancies, cesarean delivery or delivery before 36weeks.	High grade perineal tears
3	Epidemiología de la prematuridad y sus determinantes, en una población de mujeres adolescentes y	Mendoza Tascón LA et al. <sup>12</sup>	Colombia, 2016	Case-control	Medical Records	N=11.881 10-19 y.o=3.003 20 y.o. or older=8.878	Newborns and their teenage mothers aged 10-19, and adults 20y.o or older at the moment of delivery. Excluded incomplete medical records.	PRETERM DELIVERY

	adultas de Colombia						
4	Adolescencia como factor de riesgo para complicaciones maternas y neonatales	Ortiz Martínez RA et al.	Colombia, 2018	Case-control	Survey	N= 560 19 y.o. or younger= 140 Older than 19 y.o.= 420	No data
							Hypertensive disorders of pregnancy, preeclampsia with severe features, chorioamnionitis, maternal admission, preterm delivery
5	Embarazo adolescente como factor de riesgo para complicaciones obstétricas y perinatales en un hospital de Lima, Perú	Okumura JA et al.	Peru, 2014	Cohort	Medical Records	N= 67.693 10-19 y.o.= 15.685 20-35 y.o.= 52.008	Maternal age between 10 and 35 y.o. Gestacional age greater than 20 weeks and/or 500 grams birth weight. Having complete data on all the measured outcomes.
							PREECLAMPSIA ECLAMPSIA SYNDROME, Eclampsia, GESTATIONAL DIABETES, 2nd half metrorrhage, THREATENED PRETERM DELIVERY, PREMATURE RUPTURE OF MEMBRANES, Anaemia, cesarean delivery, INSTRUMENTAL VAGINAL DELIVERY, episiotomy, perineal tears, POSTPARTUM HEMORRHAGE, POSTPARTUM INFECTION, low birth weight, neonatal asphyxia, small for gestational age, large for gestational age
6	Tasas de fertilidad y resultados perinatales de embarazos adolescentes: un estudio retrospectivo poblacional	De Souza ML et al.	Brazil, 2017	Cohort	Medical Records	N= 685.525 10-14 y.o.= 4.397 15-19 y.o.= 111.162 20 y.o. or older= 569.966	All alive newborns between 2006 and 2013 in Santa Catarina state
							PRETERM DELIVERY, low birth weight, Cesarean delivery, 5-minute APGAR score less than 7 points
7	Características y riesgos de gestantes adolescentes	Bendezú G et al. <sup>6</sup>	Peru, 2015	Case-control	Medical Records	N= 354 10-19 y.o.= 177 20-34 y.o.= 177	Total deliveries in adolescents during the selected period. Same number of control cases between 20 and 34 y.o.
							Anaemia, URINARY TRACT INFECTION, PREMATURE RUPTURE OF MEMBRANES, hypertensive disorder of pregnancy, THREATENED PRETERM DELIVERY, INTRAUTERINE GROWTH RESTRICTION, Fetal

8	The Obstetric and Neonatal Outcomes of Teenage Pregnancy in Naresuan University Hospital	Narukhutrpichai P et al.	Thailand, 2016	Cohort	Medical Records	N= 957 Younger than 20 y.o= 268 20-34 y.o= 689	Deliveries at the centre between 2006 and 2013. Single pregnancies. Mothers younger than 35 y.o.	Macrosomia, cephalohaematoma, Respiratory distress syndrome, HIV, Cesarean delivery, POSTPARTUM HEMORRHAGE, perineal tear, surgical site infection, endometritis, mastitis, sepsis, persistent placental remains  Anaemia, GESTATIONAL DIABETES, HIV, Condyloms, Cesarean delivery, INSTRUMENTAL VAGINAL DELIVERY, Haemorrhage before delivery, INTRAUTERINE GROWTH RESTRICTION, Hypertensive disorders of pregnancy, Cephalopelvic disproportion, abnormal presentation, respiratory distress syndrome, PREMATURE RUPTURE OF MEMBRANES, POSTPARTUM HEMORRHAGE, preterm delivery, Stillbirth, fetal macrosomia, APGAR score lower than 7 points at 1 and 5 minutes.
9	Maternal and neonatal outcomes of adolescent pregnancy	Karataşl V et al.	Turkey, 2018	Case-control	Medical Records	N= 17.212 Younger than 15 y.o= 101 15-19 y.o= 3.611 25-30 y.o= 13.501	Deliveries after 20 weeks gestational age. At least 4 obstetric controls.	Threatened abortion, hyperemesis gravidarum, GESTATIONAL DIABETES, PREECLAMPSIA ECLAMPSIA SYNDROME, placental abruption, PLACENTA PRAEVIA, vaginal delivery, CESAREAN DELIVERY, presentation at vaginal delivery, PRETERM DELIVERY, birth weight, Apgar score, ICU admission, Stillbirth
10	Adolescent deliveries in rural Cameroon: an 8-year trend,	Agbor VN et al.	Cameroon, 2017	Cohort	Medical Records	N= 1.803 10-16 y.o= 57 17-19 y.o= 311	Deliveries at the centre during the study period. Excluded preterm deliveries, no data on	POSTPARTUM HEMORRHAGE, CESAREAN DELIVERY, 2nd to 4th grade perineal tears, low birth weight, high birth weight, perinatal

	prevalence and adverse maternofoetal outcomes				20 y.o. or older= 1.435	maternal age, birth weight lesser than 1000 grams, multiple pregnancies.	asphyxia, Stillbirth, PRETERM DELIVERY, posterm delivery.	
11	Adolescent deliveries in semi-urban Cameroon: prevalence and adverse neonatal outcomes	Njim T et al.	Cameroon, 2017	Cohort	Medical Records	N = 886 19 y.o. or younger= 77 Older than 19 y.o= 809	Single pregnancies. Expressed consent to participate, delivery after 28 weeks gestational age.	Apgar score lower than 7 points, Apgar score lower than 3 points, newborn mortality, low birth weight, high birth weight, CESAREAN DELIVERY, PRETERM DELIVERY
12	Adolescent pregnancies: complications birth outcomes and the possible solutions	Cift T et al.	Turkey, 2017	Cohort	Medical Records	N= 2.981 18 y.o. or younger= 243 19-36 y.o.= 2.783	Single and spontaneous pregnancies, without previous chronic pathologies, with at least 8 obstetric controls, delivery at the study centre.	Cesarean delivery, POSTPARTUM HEMORRHAGE, suspected fetal hypoxia, abnormal presentation, fetal macrosomia, PLACENTA PRAEVIA, eclampsia, preterm delivery, PREMATURE RUPTURE OF MEMBRANES, PREECLAMPSIA ECLAMPSIA SYNDROME, INTRAUTERINE GROWTH RESTRICTION, GESTATIONAL DIABETES, placental abruption
13	Maternal-fetal outcomes associated with adolescent pregnancy in a tertiary referral center: a cross sectional study	Bostanci Ergen E et al.	Turkey , 2017	Cohort	Medical Records	N= 3.385 13-16 y.o= 145 17-19 y.o= 1.655 20-21 y.o= 1.585	Maternal age between 13 and 21 y.o. Single pregnancies. Delivery after 20 weeks gestational age of more than 400grams of birth weight	PREECLAMPSIA ECLAMPSIA SYNDROME, PRETERM DELIVERY, PREMATURE RUPTURE OF MEMBRANES, INTRAUTERINE GROWTH RESTRICTION, newborn admitted to ICU, posterm delivery, episiotomy, LOW BIRTH WEIGHT, very LOW BIRTH WEIGHT, Cesarean delivery
14	Stillbirth among women in nine states in India: rate and risk factors in study of 886505 women	Altijani N et al.	India, 2018	Cohort	Medical Records	N= 886.505 15-19 y.o= 33.482 20-49 y.o= 853.023	Pregnancies older than 28 weeks gestational age. Known data of last pregnancy	Stillbirth

	from the annual health survey							
15	Gynecologic age is an important risk factor for obstetric and perinatal outcomes in adolescent pregnancies	Kaplanoglu M et al.	Turkey, 2015	Cohort	Medical Records	N= 435 10-19 y.o= 233 20-35 y.o= 202	Single pregnancies. Complete medical records. Excluded: uncertain last menstrual period, elective cesarean delivery, previous uterine surgery.	ICU admission, APGAR score, INTRAUTERINE GROWTH RESTRICTION, gestational age, birth weight, preeclampsia, Cesarean delivery, weight gain during pregnancy, GESTATIONAL DIABETES, PRETERM DELIVERY, PREMATURE RUPTURE OF MEMBRANES, POSTPARTUM HEMORRHAGE.
16	Adverse perinatal outcomes in teenage pregnancies: an analysis of a 5-year period in southeastern Hungary	Karai A et al.	Hungary, 2018	Cohort	Medical Records	N= 12.845 Younger than 19 y.o= 274 All mothers in Hungary= 12.571	Deliveries at the study centre during the study period. At least 24 weeks gestational age.	GESTATIONAL DIABETES, PREECLAMPSIA ECLAMPSIA SYNDROME, THREATENED PRETERM DELIVERY, PRETERM DELIVERY, cesarean delivery, mean birth weight, INTRAUTERINE GROWTH RESTRICTION, congenital abnormalities, type of abnormalities, Apgar score lower than 7 points, umbilical cord blood pH lower than 7.2, newborn admitted to ICU.
17	Cesarean delivery in adolescents	Katz Eriksen JL et al.	USA, 2016	Cohort	No data	N= 32.901 Younger than 20 y.o= 2.967 20-34 y.o= 29.934	Deliveries at the study centre during the study period. Patients younger than 35 y.o, single pregnancies, cephalopelvic disproportion presentation. Excluded: multiparous women	Cesarean delivery, reason for Cesarean delivery, programmed Cesarean delivery/during labour, programmed/urgent cesarean delivery.
18	Pregnancy in adolescence: is it an obstetrical risk?	Kirbas A et al.	Turkey, 2015	Retrospective Case-control	Medical Records	N= 38.646 15-19 y.o= 2.920 20-34 y.o= 35.726)	Single pregnancies, without chronic pathologies, patients younger than 35 y.o.	PRETERM DELIVERY, PREMATURE RUPTURE OF MEMBRANES, Preeclampsia, eclampsia, INTRAUTERINE GROWTH RESTRICTION,

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							GESTATIONAL DIABETES, placental abruption, PLACENTA PRAEVIA, Cesarean delivery, POSTPARTUM HEMORRHAGE after vaginal delivery, POSTPARTUM HEMORRHAGE after cesarean delivery, reason for CESAREAN DELIVERY, gestational age, birth weight, APGAR score lower than 7 points at 1st minute, APGAR score lower than 7 points at 5 minutes , ICU admission, perinatal mortality	
19	Differences in pregnancy outcomes, prenatal care utilization, and maternal complications between teenagers and adult women in Korea	Hyung Lee S et al.	South Korea, 2016	Cohort	Medical Records	N= 463.847 13-19 y.o= 2.267 20 y.o. or older= 461.580	Deliveries during study period.	Abortion, Stillbirth, Cesarean delivery, PREECLAMPSIA ECLAMPSIA SYNDROME, ECPLAMPSIA, Hypertensive disorder of pregnancy, GESTATIONAL DIABETES, PLACENTA PRAEVIA, placental abruption, obstructed vaginal delivery, preterm delivery, perineal tear, obstetric hemorrhage, Suspected fetal hypoxia.
20	Maternal and perinatal outcomes among adolescents and mature women: a hospital-based study in the north of Mexico	Miljares-Granillo RO et al.	Mexico, 2016	Cohort	Survey	N= 957 Younger than 16 y.o = 37 16-19 y.o= 288 20-34 y.o= 632	Maternal age younger than 35	PRETERM DELIVERY, congenital abnormalities, large for gestational age, LOW BIRTH WEIGHT
21	Adverse maternal and neonatal outcomes in adolescent pregnancy	Kawakita T et al.	USA, 2017	Cohort	Medical Records	N= 43.537 15 y.o. or younger= 1.189 16-19 y.o= 14.703 20-25 y.o=	Maternal age younger than 25. Gestational age greater than 23 weeks. Single pregnancies. Excluded: major fetal abnormalities,	INSTRUMENTAL VAGINAL DELIVERY, CESAREAN DELIVERY, Anaemia, PREMATURE RUPTURE OF MEMBRANES, PRETERM DELIVERY, placental abruption, Urinary incontinence,

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22	Teenage pregnancy antenatal and perinatal morbidity: results from a tertiary centre in Greece	Pergialiotis V et al.	Greece, 2014	Cohort	Medical Records	N= 27.645 12-19 y.o= 244 20-34 y.o= 1.460	chromosomal abnormalities, stillbirth. Deliveries of single pregnancies at the study centre
23	Pregnancy outcomes among mothers aged 15 years or less	Traisrisilp K et al.	Thailand, 2015	Cohort	Medical Records	N= 1.704 15 y.o or younger = 298 16-19 y.o= 4.456 20-30 y.o= 29.023	POSTPARTUM INFECTIO, POSTPARTUM HEMORRHAGE, Blood transfusion, PREECLAMPSIA ECLAMPSIA SYNDROME, eclampsia, deep venous thrombosis/pulmonary embolism, perineal tear, mother admitted to ICU, maternal death. PRETERM DELIVERY, Anaemia, Stillbirth, PREMATURE RUPTURE OF MEMBRANES, INTRAUTERINE GROWTH RESTRICTION, GESTATIONAL DIABETES, hypertensive disorder of pregnancy, preeclampsia, Abnormal non-stress test, induction of labour, epidural analgesia, vacuum delivery, CESAREAN DELIVERY, length of labour, episiotomy, perineal tears, POSTPARTUM HEMORRHAGE, Apgar score lower than 7 points after 5 minutes. Abortion, PRETERM DELIVERY, LOW BIRTH WEIGHT, INTRAUTERINE GROWTH RESTRICTION, cephalopelvic disproportion, preeclampsia, gestational hypertension, POSTPARTUM HEMORRHAGE, suspected fetal hypoxia, APGAR score after 1 and 5 minutes, Stillbirth, CESAREAN DELIVERY, INSTRUMENTAL VAGINAL DELIVERY, PLACENTA PRAEVIA, CESAREAN DELIVERY, INSTRUMENTAL VAGINAL DELIVERY
24	Resultados obstetricos y perinatales de las	Jimenez Cabañas M et al.	Spain, 2017	Case-control	Medical Records	N= 1.358 19 y.o. or younger= 81	Deliveries at the study centre during the study period.

	gestantes adolescentes atendidas en el Hospital Central de la Defensa Gomez Ulla				20-30 y.o= 634		
25	Incremento del riesgo obstetrico en embarazo adolescente. Estudios de casos y controles	Izaguirre-Gonzalez et al.	Honduras, 2016	Case-control Survey	N= 300 19 y.o. or younger= 100 20-34 y.o= 200	Maternal age younger than 34 y.o. Excluded: great multiparous women, delivery outside a health care centre, referred to 3rd level hospital, newborn with congenital abnormalities.	URINARY TRACT INFECTION, non-reassuring fetal condition, PREMATURE RUPTURE OF MEMBRANES. PREECLAMPSIA ECLAMPSIA SYNDROME, postterm pregnancy, POLYHYDRAMNIOS, vaginitis/vaginosis, Anaemia, cephalopelvic disproportion, chorioamnionitis, PLACENTA PRAEVIA, Stillbirth, early neonatal sepsis, LOW BIRTH WEIGHT, PRETERM DELIVERY, respiratory distress, perinatal death, small for gestational age, neonatal Jaundice. INTRAUTERINE GROWTH RESTRICTION, convulsions, perineal tears, failed induction of labour, prolonged labour, endometritis, postpartum fever.
26	Resultados Perinatales del embarazo en adolescentes del municipio Jaruco	Guerra-Machado D et al.	Cuba, 2015	Cohort	Medical Records N= 87 19 y.o. or younger= 42 Older than 19 y.o= 45	All deliveries of adolescent patients in Mayabeque province during 2012. A random chosen control group with patients who were 20 y.o. or older.	Anaemia, THREATENED PRETERM DELIVERY, preeclampsia, PREMATURE RUPTURE OF MEMBRANES, GESTATIONAL DIABETES, URINARY TRACT INFECTION during pregnancy, INTRAUTERINE GROWTH RESTRICTION, congenital abnormalities, Stillbirth, abnormal presentation, PLACENTA PRAEVIA, oligohydramnios,

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27	Caracteristicas epidemiologicas y complicaciones del embarazo y del recien nacido en primigestas adolescentes y jovenes atentidas en la clinica Gonzalez-Lince enero 2013-diciembre 2015	Rengifo Molina JI et al.	Peru, 2017	Cohort	Medical Records	N= 134 12-17 y.o= 67 18-29 y.o= 67	POLYHYDRAMNIOS, Preterm delivery, CESAREAN DELIVERY, INSTRUMENTAL VAGINAL DELIVERY, birth weight, APGAR score, respiratory distress, neonatal asphyxia, hyaline membrane disease, congenital infection, jaundice, hypoglycemia, POSTPARTUM HEMORRHAGE, postpartum endometritis, postpartum URINARY TRACT INFECTION, respiratory insufficiency during puerperium, surgical site infection, surgical site haematoma  Threatened abortion, THREATENED PRETERM DELIVERY, cephalopelvic disproportion, Anaemia, URINARY TRACT INFECTION, PREMATURE RUPTURE OF MEMBRANES, preeclampsia, placental insufficiency, placental abruption, birth weight, length, apgar score at 1st minute, suspected fetal hypoxia, INTRAUTERINE GROWTH RESTRICTION.
28	Analisis comparativo de complicaciones materno-neonatales en adolescentes embarazadas y madres en edad reproductiva optima	Ramirez Criollo YC	Ecuador, 2015	Cohort	Medical Records	N= 3.171 10-19 y.o= 910 20-29 y.o= 2.261	Maternal age younger than 29 y.o. Nulliparous women, single pregnancies. Excluded: incomplete or illegible medical records.  Deliveries at the study centre. Maternal age between 10 and 30 y.o.  incomplete abortion, delayed abortion, threatened abortion, THREATENED PRETERM DELIVERY, URINARY TRACT INFECTION, hypertensive disorder of pregnancy, PREECLAMPSIA ECLAMPSIA SYNDROME, Anaemia, PREMATURE RUPTURE OF MEMBRANES, perineal tear, CESAREAN DELIVERY, prolonged labour, congenital abnormalities, Stillbirth,

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												suspected fetal hypoxia, LOW BIRTH WEIGHT, INTRAUTERINE GROWTH RESTRICTION, PRETERM DELIVERY, respiratory distress syndrome
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**Table 2** Regarding pregnancy complications

	Study	Abortion	Threatened abortion	Preeclampsia-eclampsia syndrome	Threatened preterm delivery	Gestational Diabetes	Urinary Tract Infection	Anaemia	Premature rupture of membranes	Chorioamnionitis	Intrauterine growth restriction	Stillbirth	Maternal admission to ICU
1	Diaz LM, 2015	50% vs 20,7% P=0,005		3.33% vs 8,9% P=0,481							0% vs 1% P=0,340	0% vs 1% P=0,340	
2	Sanchez-Avila MT, 2018												
3	Mendoza Tascón LA, 2016												
4	Ortiz Martinez RA, 2018			OR 2,06 [1,31 – 3,25]						OR 2,28 [1,26 – 4,13]			OR 3,51 [1,08 – 11,37]
5	Okumura JA, 2014			OR 1,04 [0,98-1,10]	OR 0,92 [0,86-0,99]	OR 0,66 [0,47-0,94]		32,8% vs 30,0% p<0,01		OR 1,08 [1,04-1,13]			
6	De Souza ML, 2017												
7	Bendezú G, 2015			3,9% vs 17,5% P>0,05	6,8% vs 6,8% p>0,05	14,1% vs 9,6% p>0,05		18,1% vs 8,5% p>0,05		6,8% vs 10,7% p>0,05		1,7% vs 0,06% p>0,05	
8	Narukhutrpichai P, 2017			1,1% vs 1,7% p=0,57	0,7% vs 3% p=0,03	25% vs 21,5 % p=0,26		4,1% vs 4,6% p=0,86		1,8% vs 2,7% p=0,49		1,5% vs 0% p=0,006	
9	Karataş V, 2019	OR 0,23 [0,03– 1,67] OR 0,82 [0,76–	OR 0,27 [0,03–1,19] OR 0,70 [0,55–0,88]	OR 0,19 [0,20– 1,42] OR 0,22 [0,16–	1%-1,1% vs 4,8% P<0,001							1%-1,4% vs 1,5% p= 0,871	

	1.01]	0.31]			
10	Agbor VN, 2017				OR 1,5[0,6-3,7] p=0,233
11	Njim T, 2017				
12	Çift T, 2017	OR 2.14 [1.3-3.51]	OR 0,62[0,22-1,77]	OR 1.68 [0.75-3.76]	OR 1,33[0,80-2,19]
13	Bostancı Ergen E, 2017	OR 1.14 [0.52-2.5] OR 0.44[0.31-0.63]		OR 5.7 [4.1-8.2] OR0,92[0,74-1,1]	OR 2.2[1.2-3.9] OR 0.61[0.42-0.83]
14	Altijani N, 2018				OR 1.52 (1,35- 1.72)
15	Kaplanoglu M et al,2015	6% vs 4% P=0,13	3,9% vs 4% P=0,575	10,7% vs 4,5% P=0,019	9,9% vs 4% P=0,017
16	Karai A,2018	8% vs 8% P=1	7,6% vs 6% P=0,250	1,8% vs 6,3% P<0,001	9.4% vs 8.0% P=0.37
17	Katz Eriksen JL, 2016				
18	Kirbas A, 2016	OR 2.14 [1.30–3.51] p=0.002	OR 0,62 [0,22-1,77]	OR 1,68[0,75-3,76]	OR 1,33[0,8-2,19]
19	Hyung Lee S, 2016	33.4% vs 20.8 % 0.5% vs 0.6% P=0.869 P<0.001	0% vs 0.6% P<0.001	0.3% vs 0.1 P=0.29	0,7% vs 0,2% p= 0.001
20	Minjares-Granillo RO, 2016			17% vs 13% P=0.56	6% vs 10% P=0.55
21	Kawakita T, 2017	OR 1.44 [1.17–1.77] OR 1,06 [0,98-1,16]		OR 1.25[ 1.07–1.45] OR 1.15[1.09– 1.22)	OR 0.63 [0.47–0.84] OR 0.83[0.75–0.91] OR1,31[0,9 6-1,78]
22	Pergialiotis V, 2014	OR 5.19 [1.29 – 20.96] 0.021	1.6% vs0.4% P=0.04	OR 2.76 [2.00– 3.82] P= 0.001	OR 4.63 [1.87 – 11.45] P<0.001 11.5% vs 15.2% P=0.12
23	Traisrisi lp K, 2015	RR 2.05[1.22-3.4]			RR 1.647 [1.203– 2.254] P= 0.002
24	Jiménez Cabañas M, 2017				
25	Izaguirre-González, 2016	6% vs 5% P=0,13	16% vs 5% vs 2%	6% vs 1% vs 2% P=0,41	0% vs 0,6% P=0,5

				9,5% P=2,72	P=2,06	5,5% P=0,03		
26	Guerra Machado D, 2015	RR 1,81[1,22- 2,70] p<0,05	RR 2,04[1,45- 2,87] p<0,05	RR1.04[0.25-4.22]	RR 1.43[0.93- 2.17]	RR 1.6[0.87-2.94]	RR 1.54[0.91- 2.61]	RR 2.1[0.77-2.62]
27	Rengifo Molina JI, 2017	RR 52 (10,4% vs 19,4%)	RR=0.2(1.5 % vs 6%)	RR 1.27 (14,9% vs 11,9%)	RR 1.4(14.9 % vs 10.4 %)	RR=3.2(16 % vs vs 119%)	RR=0.45(6%	
28	Ramirez Criollo YC, 2015	3.85% vs 1.99% P=0.02	2.53% vs 1.86% P=0.22	9.235 vs 5.62% P=0.002	8.68% vs 4.2% 5 P<0.001	2.09% vs 0.97% P=0.01		1.43% vs 0.66% P=0.03

**Table 3** Complications during childbirth

Study	Suspected fetal hypoxia	Presentation abnormalities	Cephalopelvic disproportion	Cesarean section	Instrumental vaginal delivery	Perineal tear	Episiotomy
1	Diaz LM, 2015	0% vs 0,5% p=0241			0% vs 2,5% p=0,567		
2	Sanchez-Avila MT, 2018					RR 1.36 [ 0.99-1.86] p=0,05	
3	Mendoza Tascón LA, 2016						
4	Ortiz Martinez RA, 2018						
5	Okumura JA, 2014			OR 0,72 [0,69- 0,73]	OR 0,97 [0,80-1,19]	OR 0,65 [0,60- 0,70]	OR 2,68 [2,59-2,79]
6	De Souza ML, 2017			43,2%-42.1% vs 59,7% p<0,001			
7	Bendezú G, 2015					8.5% vs 4% p<0,05	
8	Narukhutripi chai P, 2017	4,8% vs 5,9% p=0,64	2,2% vs 4,6% p=0,09	14,5% VS 26,4% P<0,001	11,8% vs 15,7% p<0,001 OR 2.61 (1.76- 4.02)	28,5%vs47,9% p<0,001	
9	Karataş V, 2019				OR 1.96 (1.82-2.11)		
10	Agbor VN, 2017				OR 0,6[0,1-2,6] p=0,337		OR 2.9 [1.8-4.7] p < 0.001
11	Njim T, 2017				0,7 [0,4-1,2] P=0,2		

12	Çift T, 2017	OR 1,30 [0,84- 2,00]	OR 0,59 [0,40-1,58]	OR 0.8[(0.71–1.06]		
13	Bostancı Ergen E, 2017			OR 0.5 (0.3–0.8) OR 0.9 (0.7–1)	OR 1.6[1.1- 2.4]	OR 0.9[0.8- 1.1]
14	Altijani N, 2018					
15	Kaplanoglu M, et al			19,7% vs 23,8% P=0.350		
16	Karai A,2018			33,5% vs 34,8% P=0,660		
17	Katz Eriksen JL, 2016			OR 0.48 (0.43-0.54)		
18	Kirbas A, 2016	OR 1,30[0,84- 2,00]	OR 0,59[0,40-1,58]	OR 0,87[0,71-1,06]		
19	Hyung Lee S, 2016	2.7% vs 2.5% P=0.8		20,1% vs39,6% P<0.001	2.9% vs 1.6% P<0.001	
20	Minjares-Granillo RO, 2016					
21	Kawakita T, 2017			OR 0.75[0.71- 0.79] OR 0.49[0.42- 0.59]	OR 1,05[0,84-,1,33] OR 0,99[0,91-1.08]	OR 1.00[0,68-1,46] OR0,82[0,71-,095]
22	Pergialiotis V, 2014			OR 0,40 [0,28- 0,57] p<0,001	OR 0.58 [0.30– 1.09] P=0.091	115% vs 20.2% P=0.005 64.6% vs 60% P=0.23
23	Traisrisilp K, 2015			RR 0.54[0.35- 0.83] P=0.005	RR 0.67[0.47-0.96]	
24	Jiménez Cabañas M, 2017			18,5% vs 23,3% p>0.05	13,6% vs 20% p>0.05	
25	Izaguirre-González, 2016					
26	Guerra Machado D, 2015	OR 1.42[0.77-2.62]		OR 1.29[0.84- 1.98]	OR 0.68[0.21-2.14]	
27	Rengifo Molina JI, 2017	7.5% vs 11.9% RR 0.63				
28	Ramirez Criollo YC, 2015	1.87% vs 1.19% P=0.14				

**Table 4** Puerperal Complications

<b>Study</b>	<b>Postpartum hemorrhage</b>	<b>Puerperal infection</b>
1 Diaz LM, 2015	0% vs 3% p=1	
2 Sanchez-Avila MT, 2018		
3 Mendoza Tascón LA, 2016		
4 Ortiz Martinez RA, 2018		
5 Okumura JA, 2014	OR 0,81 [0.70-0.94]	OR 1,55 [1,40-1,73]
6 De Souza ML, 2017		
7 Bendezú, 2015	13% vs 10,2% p<0,05	2,8% vs 0,6% p<0,05
8 Narukhutrpichai P, 2017	3,8% vs 8,4% P=0,016	
9 Karataşl V, 2019		
10 Agbor VN, 2017	0% vs 0,5%	
11 Njim T, 2017		
12 Çift T, 2017	OR 0,88 [0,43-1,81]	
13 Bostancı Ergen E, 2017		
14 Altajani N, et al, 2017		
15 Kaplanoglu M, 2015	20% vs 16% P=0.471	
16 Karai A,2018		
17 Katz Eriksen JL, 2016		
18 Kirbas A, 2016	0,84[0,29-2,45]	
19 Hyung Lee S, 2016	3.4% vs 3.9% P=0.42	
20 Minjares-Granillo RO, 2016		
21 Kawakita T, 2017	OR 1.6 [1.10–1.95] OR 1,10[0,98-1,24]	OR 1,08[0,68-1,72] OR 1,11[0,92-1,33]
22 Pergialiotis V, 2014	2.5% vs 5.3% P=0.05	
23 Traisrisilp K, 2015	RR 1.180 [0.532–2.619]	
24 Jiménez Cabañas M, 2017		
25 Izaguirre-González, 2016	OR 3.1 P=0.02	OR 3.1 P=0.02
26 Guerra Machado D, 2015		

27	Rengifo Molina JI, 2017	12.4% vs 22.4% RR=0.59
28	Ramirez Criollo YC, 2015	

**Table 5** Neonatal complications

Study	Preterm delivery	Low Birth weight	Large for gestational age	Apgar-score less than 7 points at 1st minute	Apgar-score less than 7 points at 5 minutes	Newborn admission to ICU	Neonatal Death	Congenital abnormalities	Neonatal Sepsis
1	Diaz LM, 2015	4,4% vs 3.3% p=1							
2	Sanchez-Avila MT, 2018								
3	Mendoza Tascón LA, 2016	74,4% vs 34,2% p<0,0001							
4	Ortiz Martinez RA, 2018	OR 1,74 [1,02 – 2,99]							
5	Okumura JA, 2014		OR 1,18 [1,11-1,25]	OR 0,54 [0,49-0,60]		OR 1,13 [1,06-1,21]			
6	De Souza ML, 2017	OR 1,71 [1,57-1,86] p<0,001	OR 1,53 [1,40-1,68] p<0,001 OR 1,1 [1,10-1,1] p<0,001		OR 1,82 [1,56-2,13] p<0,001 OR 1,39 [1,34-1,45] p<0,001				
7	Bendezú, 2015			9,5% vs 22% p>0,05					
8	Narukhutripi chai P, 2017	16,2% vs 5,5% P<0,001		0,7% vs 0,7% p=1	7,1% vs 3,1% p=0,01	1,5% vs 0,8% p=0,47			
9	Karataşl V, 2019	OR 2.44 (1.61–3.72)	OR 1.59 (0.97–2.60) OR 1.10 (0.99–1.21)			5%-3,8% vs 3,5% p0.003	16,8%-1,4% vs 1,5% p=0,871		
10	Agbor VN, 2017	OR 0,9[0,7-1,2] p=0,396	OR 1.7[1,1–2,6] p = 0,009	OR 0,4[0,2-0,9] p=0,004		OR 3.2[1.9–5.5] p < 0.001			
11	Njim T, 2017	OR 1,5 [0,6-3,8] P=0,2	OR 2.4 [1.3–4.4] p < 0.01	OR 0,4[0,03-4] p=0,07	OR 4,7[0,7-31] P=0,1		OR 3,0[0,8-10,9] P= 0,1		

12	Çift T, 2017	2,46[1,80-3,37]	1.33 [0.8-2.19]	1,71[0,34-1,46]			
13	Bostancı Ergen E, 2017	OR7.19[5.01-1.03] OR2.7[2.1-3.5]	OR 1.4[0.9-2.3] OR 0.9[0.8-1.1]		OR 1.8[1.2-2.8] OR 1.1[0.9-1.4]		
14	Altijani N, et al						
15	Kaplanoglu M, 2015	40% vs 19% P=0.024	31% vs 18% P=0.14			34% vs 17% P=0.03	
16	Karai A,2018	10.2% vs 8.86% P=0.45				12.4% vs 8% P=0.014	8.0% vs 5.0% P=0.03
17	Katz Eriksen JL, 2016						
18	Kirbas A, 2016	OR 2.46[1.80–3.37] p<0.001	OR 1,71[0,34-1,46]	7% vs 4% P=<0,001	5,2% vs 2,8% P=<0,001	6,3% vs 3,6% P=0,05	1% vs 0,85% P=0,35
19	Hyung Lee S, 2016	3.7% vs 1.3% P<0.001					
20	Minjares- Granillo RO, 2016	11%-1% vs 12% P=0.94	6%-8% vs 10% P=0.55	3%-5% vs 10% P=0.2			5%-2% vs 2% P=0.47
21	Kawakita T, 2017	OR 1.36 [1.14–1.62] OR 1.16[1.08–1.25]				OR 0.80[0.65–0.9] OR 0.89[0.83–0.96]	
22	Pergialiotis V, 2014	27% vs 10.5% P<0.001			3.3% vs 12.3% P=0.015		
23	Traisrisilp K, 2015	OR 1.4 [1.18-1.67] P<0.001	OR 1,4 [1,16-1,69] OR 1,96[1,63-2,34]	OR 1.35[1,00-1,834] OR 1,59[1,19-2,13]	OR 1,41[0,93-2,12] OR2,06[1,39-3,07]		
24	Jiménez Cabañas M, 2017	OR 1,74 [1,02 – 2,99]					
25	Izaguirre- González, 2016	3% vs 4,5% p=0,39	8% vs 8,5% p=0,02			1% vs 1,5% p=0,13	13%vs8, 5% p=1,5
26	Guerra Machado D, 2015	RR 1,98 [1,38-2,83] p<0,05					2.1[1.68-2.62]
27	Rengifo Molina JI, 2017		4,5% vs 6% p=0,8	22,4% vs 10,4% p=2,2			

28	Ramrez Criollo YC, 2015	0.11% vs 0.04% P=0.5	0.3% vs 0.13% P=0.23	1.43% vs 0.66% p=0.01
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