

A Meta-Analysis of The Prevalence and Etiology of Infertility in Iran

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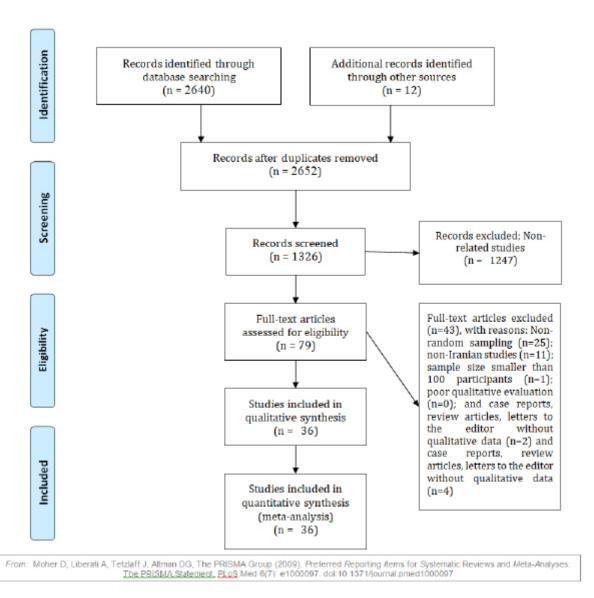
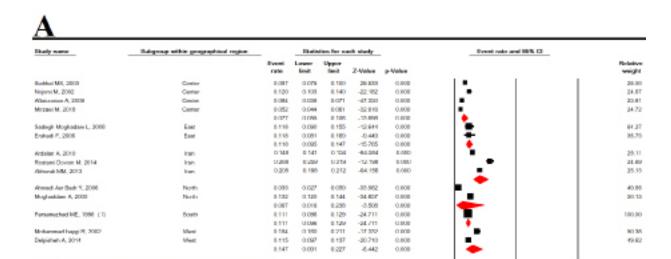


Fig.S1: PRISMA flowchart.

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В

Test for subgroup differences: Q-10.225, df(Q)-5, P-0.069

Study name	Subgroup within year of studies		Statio	tica for ea	ch mody		Cron	t rate and 95% C	1	
		Cross	Lower	Upper	Z-Value	p-Value				Relative
Parsanethed MC, 1999 1	1981-1985	0.111	6.060	0.129	-84.711	0.000	1 .	1	1	180.80
		0.111	0.086	0.125	-24.711	9.000	1 7			
Rightellan A. 2000	T088+3030	U.10M	0.120	9.144	-94.80V	0.000	•			/5081
Sriperi M, 2002	1995-2000	0.000	0.103	0.140	.37 192	0.000	•			27.16
		0.138	0.119	0.139	-40,700	0.000	l •			
Ahmed Air Badi Y, 2006	2001-2005	0.888	0.027	0.980	-85,962	0.000				24.70
Advancent large Pt, 2002	2001-2000	0.786	0.160	0.211	-17.332	0.000				24.93
edalan A. 2910	2001-2005	0.148	0.141	0.154	-64.554	0.000				25.20
MEAN MIX. 2003	2001-0000	12000	0.070	0.100	-29.310	0.000				24.00
		0.896	0.082	0.171	-6.816	0.000				
Sanlagh Maghanlam L, 2008	2006 2010	0.718	0.080	0.190	12.844	0.000	1 *			19.63
Massonian A. 2009	2010-2010	0.864	0.050	0.071	47.858	0.000				20.47
losterni Disvom Inl. 2914	2005-2010	0.268	4.290	0.319	-12,166	9.000				20.36
Irohanii F., 2008	2008-2010	0.710	0.081	0.169	-9.443	0.000				10.90
		0.116	0.000	0.200	-0.111	0.000	👚			
Johishoh A, 2014	2011-2015	0.115	0.067	0.157	-20.718	0.000				20.17
éhondi MN, 2013	2011-2016	0.208	0.198	0.212	-84,108	9.000				33.96
803e H, 2016	2011-2010	U SEM	0.004	0.091	-02.016	0.000	■_			23.20
							-			
and the continuous diffe	erences: O= 3.716, df(O)= 4, 1						0.00	0.50	1.00	

C

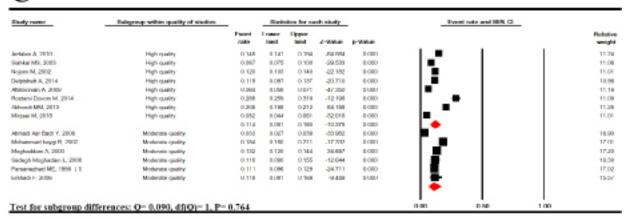


Fig.S2: The subgroup analysis of prevalence of infertility. A. Lifetime infertility based on region, B. Year and C. Quality of studies.



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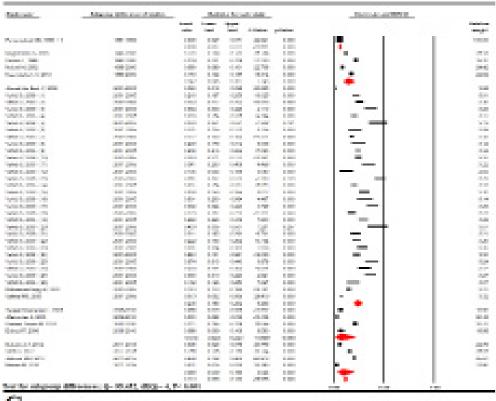


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Fig.S3: The subgroup analysis of prevalence of infertility. A. Current infertility based on region, B. Year and C. Quality of studies.

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10 Table 2 Table 2	Part .	1.00	1.00	499	4.76	100
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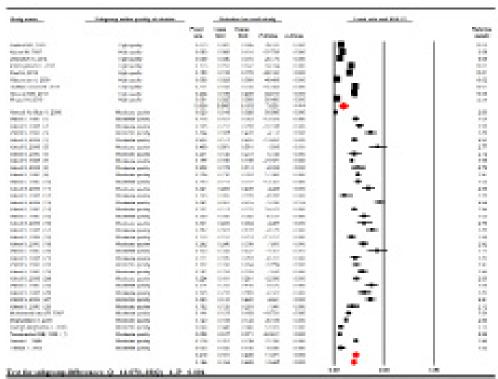
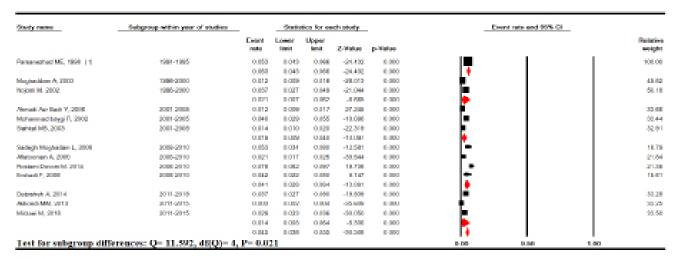


Fig.S4: The subgroup analysis of prevalence of infertility. A. Primary infertility based on region, B. Year and C. Quality of studies.



Study name	Subgroup within geographical region		Statio	tion for on	ch abody		Even	costs and 99% CI	_	
		Decret rate	Lauren Smit	Lippore Simile	2-Value	p-Walas				Relative weight
Robbal MR, 2003	Contr	0.014	0.010	0.000	30,376	0.000	+		ĺ	20.16
Najoni M, 2002	Center	0.867	0.007	0.046	-81,044	0.000				24.22
Affatomien A, 2008	Genter	9.883	0.017	9.888	-28,644	0.900	•			27.28
Michigan M., 20781	Cander	0.000	0.000	0.000	-00.000	0.000	-			26.00
		0.884	0.017	0.850	-29,907	0.000				
Sedegh Moghadow L, 2005	Cont	9,859	0.004	0.868	-12,681	0.900	•			66.74
British F, 2008	East	0.042	0.000	0.000	49.142	0.000	=			271.298
		0.846	11034	0.070	-15,540	0.000				
Planetared Discuss Mt. 2018	lease .	0.878	0.002	9.897	-16,795	0.900				-03.53
Aldread MM, 2013	lum .	0.000	0.000	0.000	.28 600	0.000				30,486
		0.848	8,000	0.308	4.435	0.015				
Alteredi Aur Bash V, 2000	North	0.843	8-009	0.817	-37.5%	0.000				53 86
Moghaddain A, 2000	North	0.012	0.009	0.046	-86.010	0.000				47.01
		0.012	0.010	0.018	-37,686	0:000				
Hardweighad Ma., Table	Sepulli	0.850	0.0420	0.098	-00.400	0.000				1999
		0.958	0.045	0.068	-28,482	0.000	∓			
Mohammad bassol R, 2012	West	0.040	0.000	0.058	-44,686	0:000				49.23
Delpadorio A, 2016	Virgi	0.000	0.007	0.808	-19,000	0.000	•			20,177
		0.058	0.000	0.048	-87,041	0.000	1.0			
		0.850	0.027	0.850	45,567	0.900	l (
Test for subgroup dif	ferences: Q= 102.520, df(Q)= 5, P<	0.001					0.00	0.50	1.00	

$\overline{\mathbf{B}}$



C

Minely corner	Subgroup within spatity of studies	_	- Bladds	itas ka sa	adication day			levent native and 90% (2	_	
		Hereni anda	Lames Smit	Upper Smit	Z-Wates	p-Value				Relative weight
20d Auf 160, 2002	High specify	0.014	0.010	0.020	100,000	0.000		ı		19.17
Nojomi M. 2002	High quality	0.857	4.007	0.040	-21,044	0.000			- 1	10.41
Delphilabah A, 2018	High equality	0.002	0.027	0.000	-39 80%	Delicon			- 1	12.70.
Affahrundur F., 2009	High spelly	0.821	4.072	0.006	28,864	0.000			- 1	12.71
Rosseri Davon M. 2014	High quality	0.079	0.063	0.097	-11,750	0.600			- 1	10.58
Aktrone Mild, 2010	High quality	0.008	0.000	0.804	-56,680	0.800			- 1	12.08
Militari M. 2010	High quality	0.029	0.000	0.008	-60,050	0.800			- 1	10.00
		0.825	0.014	0.009	-10.554	0.800	•		- 1	
About the Back V, 2000	Mexiconia quality	0.012	0.00%	0.002	.37 366	0.000			- 1	12 12
Michaemad baygi R, 2000	Modernne quality	0.040	0.009	0.058	-44,680	0.000			- 1	17,04
Minghaddan A, 2000	Moderate quality	0.012	0.000	0.046	-21,013	0.000			- 1	17,04
Sadagh Minchadam L, 2008	Modurate quality	0.058	9.004	0.080	-12.681	0.000			- 1	18.40
Personaghed Ma, 1964	Moderate quality	0.050	0.000	0.000	-001.4300	0.000			- 1	10.46
Emhadi F., 2006	Moderate quality	0.040	0.002	0.080	4.147	0.000			- 1	14.92
		0.000	0.0780	0.006	19,797	0.000				
		0.000	0.007	0.000	-17.3000	0.000	l i			
Test for subgroup dif	ferences: Q= 0.335, d@Q)= 1, P=	0.563					0.00	0.50	1.00	

Fig. S5: The subgroup analysis of prevalence of infertility. A. Secondary infertility based on region, B. Year and C. Quality of studies.

Study name		Statis	tics for ea	ch study		Even	t rate and 95%	CI	
	Event rate	Lower limit	Upper limit	Z-Value	p-Value				Relative weight
Kamali M, 2007	0.677	0.658	0.695	17.272	0.000			1	14.57
Bakhtiari A, 1999	0.464	0.432	0.496	-2.174	0.030				14.44
Karimpour Malekshah AK, 2011	0.505	0.489	0.521	0.556	0.578				14.61
Karimpour A, 2005	0.475	0.437	0.513	-1.287	0.198				14.35
Aflatoonian A, 2009	0.500	0.410	0.590	0.000	1.000		#		13.07
Masoumi SZ, 2015	0.459	0.430	0.488	-2.806	0.005				14.48
Taghavi R, 2011	0.770	0.749	0.790	20.280	0.000			I	14.48
	0.556	0.457	0.652	1.109	0.268		*		
						0.00	0.50	1.00	

Meta Analysis

Fig.S6: Abnormal semen analysis.

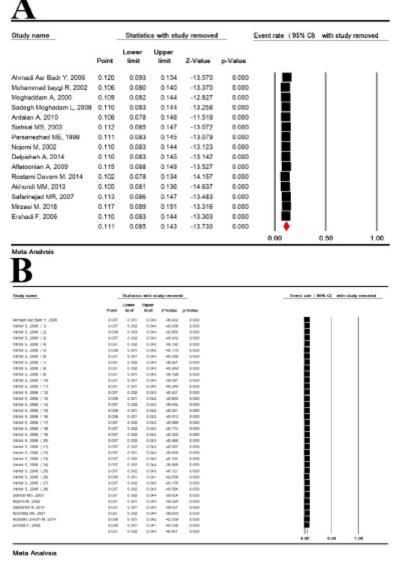


Fig.S7: Sensitivity analysis for the prevalence of infertility. A. Lifetime and B. Current infertility.

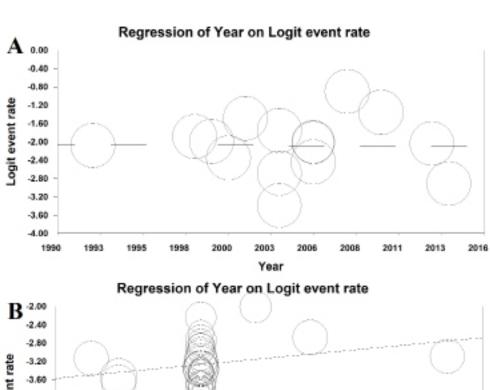
Study name		Statisti	CS WILL SEE	dy removed		Event rate (be	PARCE WILLIAM	tudy remove
	Point	Lower limit	Upper limit	Z-Value	p-Value			
Ahmadi Asr Badr Y, 2006	0.186	0.154	0.223	-12.755	0.000	1 .	1	
Vahidi S, 2006 (1)	0.178	0.148	0.215	-12.699	0.000			
Vahid 5, 2006 (2)	0.177	0.145	0.214	-12.774	0.000			
Vehici S. 2006 (3)	0.178	0.144	0.212	-12.985	0.000			
/ahid 5, 2006 (4)	0.178	0.146	0.216	-12.666	0.000			
/shidi S, 2006 (5)	0.175	0.144	0.211	-13.068	0.000			
/ehidi S. 2006 (6)	0.178	0.146	0.215	-12.782	0.000			
/ahid S, 2006 (7)	0.179	0.146	0.217	-12.455	0.000			
Vahidi S, 2006 (8)	0.178	0.148	0.214	-12.805	0.000			
/ahld 5, 2006 (9)	0.177	0.145	0.216	-12.647	0.000			
/ahidi S, 2006 (10)	0.177	0.148	0.216	-12.718	0.000			
/ahld 5, 2006 (11)	0.176	0.144	0.212	-12.942	0.000			
/ahidi S, 2006 (12)	0.181	0.148	0.218	-12.671	0.000			
/ahld 5, 2006 (13)	0.174	0.143	0.210	-13.243	0.000			
/shidi S, 2006 (14)	0.178	0.148	0.216	-12,651	0.000			
/ethici S, 2006 (15)	0.178	0.145	0.213	-12.876	0.000			
/ahidi S, 2006 (16)	0.177	0.145	0.213	-12.883	0.000			
/ahidi S, 2006 (17)	0.175	0.144	0.212	-13.022	0.000			
/ahidi 5, 2006 (18)	0.179	0.147	0.216	-12.685	0.000			
/ehidi S, 2006 (19)	0.177	0.145	0.213	-12.857	0.000			
/ahld 5, 2006 (20)	0.175	0.144	0.211	-13.037	0.000			
/ahidi S, 2006 (21)	0.178	0.146	0.215	-12.751	0.000			
/ahld 5, 2006 (22)	0.178	0.146	0.216	-12.736	0.000			
/shidi S, 2006 (23)	0.177	0.145	0.214	-12.842	0.000			
/ahidi S, 2006 (24)	0.178	0.146	0.215	-12.718	0.000			
/ahidi S, 2006 (25)	0.175	0.144	0.212	-12.999	0.000			
/ahidi S, 2006 (26)	0.176	0.146	0.213	-12.883	0.000			
/ahld 5, 2006 (27)	0.176	0.144	0.212	-12.994	0.000			
/ahidiS, 2006 (28)	0.179	0.147	0.216	-12.741	0.000			
Wohammad baygi R, 2002	0.180	0.147	0.217	-12.677	0.000			
Woghaddam A, 2000	0.180	0.148	0.219	-12.378	0.000			
Sadegh Moghadam L, 2008	0.182	0.150	0.220	-12.571	0.000			
Siahkal MS, 2003	0.182	0.150	0.220	-12.604	0.000			
Persensched ME, 1998 (1)	0.183	0.151	0.220	-12.610	0.000	■		
Beroufi E, 1999	0.178	0.145	0.216	-12.507 -12.577	0.000			
Nojomi M, 2002 Delpisheh A, 2014	0.182	0.149	0.219		0.000			
Gelpishen A, 2014 Gezemijalisch H, 2015	0.183	0.161	0.220	-12.584 -12.585	0.000			
Shafi H, 2012	0.179	0.147	0.216	-12.860 -12.864	0.000			
Matoonian A, 2009	0.179	0.147	0.217	-12.094	0.000			
Rostemi Dovom M. 2014	0.178	0.146	0.215	-12.639	0.000			
Hostern Dovom M. 2014 Whondi MM, 2013	0.178	0.140	0.216	-12.638	0.000			
Safarineiad MR, 2007	0.184	0.155	0.217	-14.205	0.000			
Virzaei M. 2018	0.104	0.153	0.217	-12.768	0.000			
Erahadi F, 2008	0.182	0.150	0.222	-12.700	0.000			
2000	0.179	0.147	0.216	-12.903	0.000	_		
	0.110	0.147	0.216	-12.003	0.000	0.00	0.50	1.00

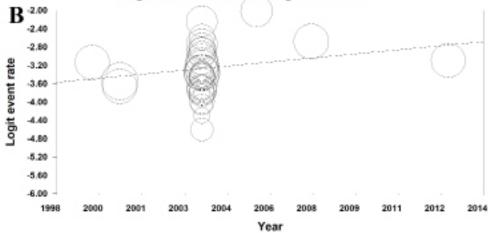
Fig.S8: Sensitivity analysis for the prevalence of primary infertility.

Study name	_	Statistic	s with stu	ıdy remov	ed	Event	rate (95%	(CI)
	Point	Lower limit	Upper limit	Z-Value	p-Value	with	study rem	oved
Ahmadi Asr Badr Y, 2006	0.027	0.018	0.040	-17.481	0.000			
Mohammad baygi R, 2002	0.025	0.017	0.038	-17.569	0.000			
Moghaddam A, 2000	0.028	0.019	0.041	-17.701	0.000			
Sadegh Moghadam L, 2008	0.025	0.017	0.037	-17.970	0.000			
Siahkal MS, 2003	0.027	0.019	0.040	-17.540	0.000			
Parsanezhad ME, 1998 (1)	0.025	0.017	0.037	-17.764	0.000			
Nojomi M, 2002	0.025	0.017	0.038	-17.417	0.000			
Delpisheh A, 2014	0.025	0.017	0.038	-17.485	0.000			
Aflatoonian A, 2009	0.027	0.018	0.040	-16.695	0.000			
Rostami Dovom M. 2014	0.024	0.016	0.035	-19.076	0.000			
Akhondi MM, 2013	0.031	0.024	0.041	-24.100	0.000			
Safarinejad MR, 2007	0.026	0.016	0.040	-15.065	0.000			
Mirzaei M, 2018	0.026	0.017	0.039	-16.882	0.000			
Ershadi F, 2006	0.025	0.017	0.037	-17.943	0.000			
	0.026	0.018	0.038	-18.465	0.000			
						0.00	0.50	1.0

Meta Analysis

Fig.S9: Sensitivity analysis for the prevalence of secondary infertility.





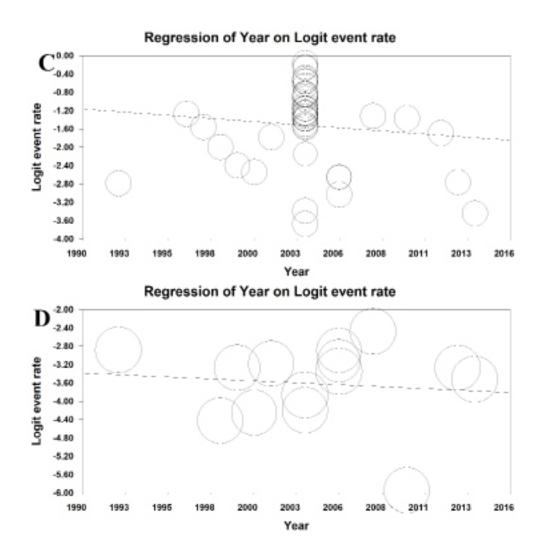


Fig.S10: Publication bias for studies about the prevalence of prevalence of infertility. A. Lifetime and B. Current infertility, C. Primary infertility, and D. Secondary infertility.