## **Review Article**



## Prevalence of Group B Streptococcus in Vagina and Rectum of Pregnant Women of Islamic & Non-Islamic Countries: A Systematic Review and Meta-Analysis

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#### Abstract

**Background:** Group B streptococcus or streptococcus Agalactia is a gram positive beta hemolytic bacteria which is the main factor in neonatal infections. This study aimed at determining the prevalence of GBS in world and clarifying the rate of this infection in Islamic and non-Islamic countries.

**Methods:** We performed a systematic search by using different databases including Medline, Scopus, Science Direct, Psycho-Info ProQuest and Web of Science published up to Feb 2019. We undertook meta-analysis to obtain the pooled estimate of prevalence of GBS colonization in Islamic and non-Islamic countries.

**Results:** Among 3324 papers searched, we identified 245 full texts of prevalence of GBS in pregnancy; 131 were included in final analysis. The estimated mean prevalence of maternal GBS colonization was 15.5% (CI:95% (14.2-17)) worldwide; which was 14% (CI:95% (11-16.8)) in Islamic and 16.3% (CI:95% (14.6-18.1)) in non-Islamic countries and was statistically significant. Moreover, with regards to sampling area, prevalence of GBS colonization was 11.1 in vagina and 18.1 in vagina-rectum.

**Conclusion:** Frequent washing of perineum based on religious instructions in Islamic countries can diminish the rate of GBS colonization in pregnant women.

Keywords: Group B streptococcus; Vagina; Rectum; Pregnant women

## Introduction

Group B streptococcus or streptococcus Agalactia is a gram positive beta hemolytic bacteria which is the main factor in neonatal infections (1). This organism is able to abundantly colonize in genital and digestive tracts of pregnant women and enter amniotic fluid through chorioamniotic membranes (2). In various studies, different numbers of prevalence of this organism in pregnant women have been mentioned, 50%-70% of these women transmit GBS to infants (3). The effect of this bacteria in bringing about undesirable consequences in pregnancy such as pre-term labor, premature rupture of membranes, Chorioamnionitis, and fetal infections has been put



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forward (4). Furthermore, in recent systematic reviews, the infection in infants is considerably related to the vaginal colonization of mother with GBS during pregnancy (5). GBS can produce infections in infants such as Septicemia, Meningitis, Cellulitis, Conjunctivitis, Pneumonia, Adenitis, Osteomyelitis, Otitis media. Out of these infections, septicemia and meningitis are threatening the lives of the infants more than the others. Although they are put under treatment, they mostly lose their lives (6). Considering the importance of GBS infections and the health of mothers and infants exposed to post-partum infections, screening of pregnant in terms of GBS colonization has been suggested for the sake of treatment in due time and prevention of the bacterial transmission to the infants (7). Some revisions occurred in the protocol of (CDC) in order to make bacterial screening obligatory for all pregnant during 35 to 37 wk of the pregnancy (8).

Screening is carried out on the basis of vaginal secretion culture and that of rectum and in the case of positive culture pregnant, Antibiotic prophylaxis during pregnancy has been suggested (9,1). Variations in the rate of colonization due to difference in geographical regions, social conditions, pregnancy age of the study population, microbiological diagnostic methods, sexual activity, physical status, time and place of sampling and among religious and ethnical groups differ (10-14). Previous systematic review carried out in 2017 has stated that the prevalence of GBS is 18%. The maximum amount is related to Caribbean region with 35% and minimum amount is found in East Asia with 11%. Moreover, this study considers various serotypes in different regions of the world (15). According to the hypothesis of this study based on the possibility of low prevalence of Group B streptococcus in pregnant of Islamic countries due to the religious instructions concerning hygiene after urination and defecation, the outcomes of this study may propose some strategies for preventing GBS infection. Up to now, there has not been any systematic review considering the comparison between Islamic and non-Islamic countries in this respect. Therefore, this study aimed at clarifying the rate of vaginal and rectal colonization of this infection in Islamic countries and comparing it with that of non-Islamic countries.

## Materials and Methods

This systematic review and meta-analysis study concerning the prevalence of Group B Streptococcus (GBS) in the world and compares the prevalence of it in Islamic and non-Islamic countries, carried out in Iran in 2019.

#### Search strategy & selection criteria

We have searched papers dealing with prevalence of GBS in rectum and vagina of pregnant throughout the world. The search covers databases such as ScienceDirect, MedLine, Scopus, Web of Science (Web of Knowledge), Psycho-Info-ProQuest in which papers have been published up to Feb of 2019. Unpublished documents (gray literature) and documents presented in conferences have been searched too. We have even consulted with those involved in similar subjects in order to get more information about published and unpublished documents in this regard. Keywords (colonization, vaginal, rectal, pregnant women, pregnancy, prevalence, Group B streptococcus, streptococcal infections, GBS, streptococcus Agalactia) have been used in searching the papers. These terms have been derived from MeSh and EMTree.

#### The selection of papers

Inclusion criteria: The criteria for selecting papers concentrate on all studies which consider the prevalence of group B streptococcus of every age of pregnancy or delivery. They included those studies in which sampling of rectum and vagina was conducted. No time limitation has been considered.

Exclusion criteria: Those papers which met the following criteria were excluded from our study:

-Those papers which had clearly methodological defects.

-Those papers which had surveyed non-pregnant population or had not declared the prevalence in pregnant separately.

-Those papers surveyed the women with previous illness such as Diabetes or Immunocompromised disease.

-Those papers determined the Streptococcus with a method other than the culture like PCR.

#### Data extraction and survey of study quality

The papers have been selected in three stages after their extraction from related databases with the above mentioned keywords by an expert in the field. First, the titles and then the abstracts of all the papers were surveyed and those papers which were not compatible with the study aims were extracted. Afterwards full texts of the papers were studied and those which didn't meet our criteria or were weakly related to our subject were put aside. Selected materials were evaluated by two experts and their different ideas about the materials were referred to the third evaluator. The quality of materials before their extraction and separation was assessed with PRISMA checklist (checklist of all the papers are in the appendix). The necessary extracted data was summarized in Extraction form. They included the author's names, publication year, the kind of study, country, sample size, pregnancy age, average age of mothers, culture media, various bacterial serotype, sensitivity or antibiotic resistance and sampling place separately recorded. We have used source management software Endnote X5 to organize, and study the topic and abstracts, and even to identify the repeated materials. Furthermore, Islamic and non-Islamic countries were divided into two groups and then analyzed with reference to countries whose names were recorded in the site of Organization of Islamic Cooperation (OIC). F bias risk of all studies was evaluated by an epidemiologist. The quality of the included papers was assessed with the checklist related to studies about the prevalence of JBI.

#### Statistical Analysis

We have used frequency and percent to show the data, and the heterogeneity among the studies

was surveyed with Cochran and I<sup>2</sup> statistics which indicate the changes among the studies. We have assumed the rate of I<sup>2</sup> less than 0/50 as the presence of homogeneity among the studies. Random effects model was used to combine the results and the analysis of subgroups was conducted on the basis of pregnancy age, the kind of society (Islamic/non-Islamic). Statistical analysis was carried out using CMA v.3.1 software and p-value less than 0.05 was assumed as meaningful level. Moreover, we have surveyed the prevalence of GBS in minor subgroups which covered the survey of prevalence in different continents, antibiotic sensitivity and resistance, and the analysis based on GBS serotypes.

## Results

#### The results of the search and the characteristics of the studies

Overall, 3324 papers were identified, 1850 papers due to their repetition, 733 papers after considering their titles, and 496 papers after reviewing their abstract were excluded from our study. After we have surveyed full texts of papers, we excluded 114 papers from our study, therefore, 131 papers were included in our meta-analysis study (Fig. 1).

Out of 131 papers in our study, we found 99 papers in which pregnancy age at the time of sampling had been mentioned and three cases of sampling were conducted at delivery, but in one study, pregnancy age was not mentioned. The remaining studies were carried out during the second and third trimester.

We have found 127 studies in which the place of sampling was stated, that is, in 86 cases, the places of sampling were rectum and vagina and in 41 cases it was vagina. Different culture medias have been used in the studies. Among the 131 studies, only 91 studies had referred to the kind of culture media. In 56 cases, the sampling media Todd Hweit, in 17 cases Blood agar, in 6 cases CHROM, in 5 cases LIM Broth, in 3 cases Granada, and in 3 cases Clumbia were used.



Fig. 1: The characteristics of the study

Among the included papers, only 22 papers had surveyed different serotypes of GBS separately and 28 papers discussed antibiotic sensitivity.

In some studies, the sensitivity for one type of antibiotic was considered while in some others effects of various antibiotics were discussed. In other words, in 24 studies sensitivity to Penicillin, in 17 studies sensitivity to Ampicillin and Vancomycin, in 16 sensitivity to Erythromycin were surveyed. Moreover, 17 studies had considered antibiotic resistance that is, in 15 studies resistance to Erythromycin, in 14 papers resistance to Clindamycin, in 15 studies resistance to Tetracycline and in 3 studies resistance to Penicillin were discussed.

#### Meta-Analysis results

About 131 studies were included in the metaanalysis and 115680 individuals were surveyed. The rate of homogeneity was meaningful. (Q=4969.21, df=130, I<sup>2</sup>=97.5, P<0.001). Considering the results of the meta-analysis, we noticed that the prevalence of GBS in pregnant women of all the studied countries was 15.5%. (15.5%, CI=95% (14.2-17.0))

## The prevalence of GBS in pregnant women of Islamic and non-Islamic countries

About 44 cases of study had been conducted in countries where Moslem population were living and in the studies of Islamic countries 18359 individuals had been surveyed, so heterogeneity among the studies were meaningful. (Q=1102.17, df=43,  $I^2$ =96.09). According to the results of the meta-analysis, the prevalence of GBS in pregnant

women in Islamic countries was 14% (14%, CI=95%, (11.0-16.8)). In Fig. 2, the prevalence of GBS in pregnant has been illustrated.

Model	Study name	9	Statistic	s for each study	_		Event rate and 95% Cl				
	Event I	lower	Upper								
		rate	limit	limit Z-Value p	-Value						
	Abdelaziz Z. et al(2014)	0.040	0.020	0.078 -8.807	0.000		1				
	Abdollahi Fard S. et al(2008)	0.100	0.068	0.144-10.422	0.000						
	Ahmad Khan M. et al(2015)	0.130	0.113	0.149-23.297	0.000						
	Ahmadi A. et al(2018)	0.040	0.016	0.098 -6.502	0.000						
	Al-Sweih N. et al(2004)	0.160	0.103	0.241 -6.376	0.000				F		
	Clouse K. et al(2019)	0.200	0.150	0.261 -7.842	0.000						
	darabi R. et al(2017)	0.120	0.081	0.175 -8.830	0.000				_		
	Fatemi f. et al(2008)	0.210	0.169	0.257 -9.803	0.000						
	Ghaddar N. et al(2014)a	0.180	0.129	0.246 -7.551	0.000				Ē		
	Ghaddar N. et al(2014)b	0.210	0.189	0.232-20.127	0.000						
	Ghanbarzadeh N. et al(2017)	0.050	0.034	0.073-14.349	0.000						
	Habib zadeh SH. et al(1389)	0.150	0.119	0.187-12.693	0.000						
	Hadavand Sh. Et al(2015)	0.030	0.014	0.064 -8.593	0.000						
	Haghshenas Mojaveri M. et al(2014)	0.150	0.118	0.188-12.388	0.000						
	Hamedi A. et al(2012)	0.060	0.034	0.103 -9.241	0.000						
	Hassan zadeh P. et al(2011)	0.140	0.106	0.183-11.090	0.000						
	Jahromi B. et al(2008)	0.090	0.075	0.108-22.908	0.000						
	Javanmanesh F. et al(2012)	0.230	0.205	0.257-16.304	0.000						
	javanmanesh F. et al(2013)	0.230	0.205	0.257-16.304	0.000						
	Kabiri S. et al(2016)	0.200	0.164	0.242-11.132	0.000						
	Kadanali A. et al(2005)	0.170	0.118	0.239 -7.295	0.000				F		
	Le Doare K. et al(2016)	0.330	0.297	0.364 -9.120	0.000						
	Mansouri s. et al(2008)	0.090	0.070	0.116-16.246	0.000						
	Medugu N. et al(2017)	0.340	0.300	0.383 -7.026	0.000						
	Mozaffari A. et al(1385)	0.150	0.092	0.234 -6.194	0.000				⊢		
	Munir Sh. Et al(2018)	0.140	0.098	0.195 -8.908	0.000						
	Musleh J. et al(2017)	0.190	0.157	0.229-12.160	0.000						
	Najmi N. et al(2013)	0.170	0.136	0.210-11.986	0.000						
	Nasri Kh. Et al(2013)	0.160	0.114	0.220 -8.291	0.000				ł		
	Nazer M.R. et al(2011)	0.140	0.085	0.223 -6.299	0.000				-		
	Nkembe M. et al(2018)	0.140	0.085	0.223 -6.299	0.000				-		
	Norozi M. et al()	0.090	0.064	0.126-12.064	0.000						
	Oluwafunmilola B. et al(2017)	0.180	0.133	0.239 -8.239	0.000						
	Sadaka S.et al(2018)	0.270	0.213	0.336 -6.245	0.000				'₩		
	Saghafi N. et al(2017)	0.020	0.008	0.052 -7.705	0.000						
	Saha S. et al(2017)	0.150	0.131	0.172-21.013	0.000				1		
	Sahraee Sh. Et al(2019)	0.100	0.068	0.144-10.318	0.000						
	Sharifi Y. et al(1390)	0.840	0.789	0.880 9.612	0.000					X	
	Shirazi M. et al(2013)	0.050	0.038	0.066-20.089	0.000						
	Steenwinkel F. et al(2008)	0.020	0.005	0.071 -5.792	0.000			₽			
	Yasini M. et al()	0.090	0.065	0.123-12.941	0.000						
	Yasini. Et al(2014)	0.090	0.065	0.123-12.941	0.000						
	Yesildager U. et al(2015)	0.090	0.042	0.183 -5.540	0.000			∣■-			
	Zamzami T. et al(2011)	0.320	0.272	0.372 -6.445	0.000						
Random		0.140	0.116	0.168-16.559	0.000	1	I	♦	I		
						-0.75	-0.38	0.00	0.38	0.75	
							F		F		
							Favours A		ravours B		

Fig. 2: Prevalence of GBS in pregnants women of Islamic countries

About 87 studies have taken place in countries where non-Muslim population were living. In these studies, 97321 individuals had been considered and the result was that heterogeneity among the studies was meaningful (Q=3834.67, df=86,  $I^2=97.75$ ). According to our meta-analysis, the prevalence of GBS in pregnant women of non-Islamic countries was 16.3% (16.3%, CI=95%) (14.6-18.1)). The prevalence of GBS has been illustrated in (Fig. 3). The prevalence of GBS in pregnant of Islamic and non-Islamic countries is 14% and 16.3% respectively. Therefore, according to the ratio test, difference in the case of prevalence of GBS between Islamic and non-Islamic countries was meaningful statistically.

	Study nume	statistics for each study					Event rate and 95% CI					
		Event	limit	Upper limit	Z-Value	-Value						
	Abarzua E. et al(2014)	0.140	0 121	0.161	.21.646	0.000						
	Africa Ch. Et al(2018)	0.170	0.132	0.217	-10.334	0.000						
	Alboury-Liaty M. et al(2011)a	0.150	0.141	0.159	-47.603	0.000						
	Alboury-Liaty M. et al(2011)b	0.130	0.116	0.145	-28.960	0.000						
	Alboury-Liaty M. et al(2011)c	0.180	0.164	0.197	-26.956	0.000						
	Armer T. et al (1993)	0.230	0.192	0.272	-10.471	0.000						
	Assera S. et al(2018) Bacaite F. et al(2011)	0.150	0.113	0.174	-10.383	0.000						
	Badri M. et al(1977)a	0.180	0.150	0.215	-13.399	0.000						
	Badri M. et al(1977)b	0.100	0.069	0.143	-10.629	0.000						
	Baker C. et al(1973)	0.230	0.177	0.293	-7.281	0.000						
	Bayo M. et al(2002)	0.070	0.052	0.093	-16.473	0.000						
	Benedetto C. et al(2004)	0.150	0.138	0.163	-35.130	0.000						
	Bertoncello A. et al(2018)	0.140	0.122	0.160	-22.482	0.000						
	Carrol K C et al(1996)	0.200	0.186	0.274	-27.707	0.000						
	Chukwu, M. et al(2015)	0.310	0.267	0.356	-7.520	0.000						
	cruz Alverez A. et al(2014)	0.280	0.207	0.367	-4.645	0.000						
	Dangor Y. et al(2016)	0.250	0.203	0.304	-8.017	0.000						
	Defez m. et al(2016)	0.080	0.047	0.134	-8.302	0.000						
	Dos Reis Costa A. et al(2008)	0.200	0.150	0.261	-7.862	0.000						
	Enweronu-laryea C. et al(2001)	0.190	0.164	0.219	-15.897	0.000						
	Garcia D. et al(2010)	0.004	0.000	0.236	-3.927	0.000						
	Gizachew M. et al(2017)	0.260	0.219	0.306	-9.002	0.000						
	Grimwood K. et al(2002)	0.220	0.172	0.277	-8.122	0.000						
	Gutierrez G. et al(2005)	0.001	0.000	0.018	-4.781	0.000						
	Hakansson S. et al(2008)	0.250	0.229	0.272	-18.843	0.000						
	Hassan A. et al(2014)	0.190	0.125	0.279	-5.688	0.000						
	nyun Kim d. et al(2018)	0.120	0.101	0.141	-20.617	0.000						
	K low K, et al(2013)	0.230	0.186	0.281	-8.479	0.000						
	Khalili M. et al(2017)	0.120	0.100	0.143	-19.445	0.000						
	Klewis S. et al(2015)	0.260	0.250	0.270	-40.288	0.000						
	Linhares J. et al(2011)	0.100	0.066	0.148	-9.620	0.000						
	Lucovnik M. et al(2014)	0.170	0.152	0.189	-23.555	0.000						
	Lysakowska M. et al(2011)	0.300	0.220	0.394	-3.979	0.000						
	Marchaim D. et al(2003)a	0.120	0.098	0.147	-16.896	0.000						
	Marchaim D. et al(2003)b	0.190	0.123	0.283	-5.486	0.000						
	Matani Ch. Et al(2016)	0.250	0.210	0.317	-7.326	0.000						
	Mehiretie Mengist H. et al(2017)	0.120	0.080	0.176	-8.687	0.000						
	Mengist A. et al(2016)	0.190	0.131	0.268	-6.385	0.000						
	Mitima K. et al(2014)	0.200	0.167	0.237	-12.510	0.000						
	Mohammad Ali M. et al(2019)	0.160	0.122	0.208	-10.172	0.000						
	Motlova J. et al(2004)	0.290	0.255	0.328	-9.835	0.000						
	Mukesi M. et al(2019)	0.140	0.113	0.172	-14.501	0.000						
	Namugongo A. et al (2005)	0.250	0.180	0.330	-5.108	0.000						
	Ocamp-Torres M. et al(2000)	0.090	0.073	0.110	-19.974	0.000						
	Orrett F.A. et al(1993)	0.310	0.250	0.377	-5.285	0.000						
	Orrett F.A. et al(2003)	0.330	0.269	0.398	-4.721	0.000						
	Page-Ramsey S. et al(2011)	0.190	0.136	0.259	-7.150	0.000						
	Peterson K. et al(2014)	0.040	0.037	0.043	-80.207	0.000						
	Price D. et al(2006)	0.190	0.151	0.236	-10.333	0.000						
	Puapornpong P. et al(2008)a	0.030	0.030	0.082	-10.853	0.000						
	Rausch A. et al(2009)	0.210	0.189	0.233	-19.577	0.000						
	Rick A. et al(2017)	0.170	0.147	0.196	-17.829	0.000						
	Rocchetti T. et al(2010)	0.250	0.210	0.294	-9.574	0.000						
	Rojo-Bezarez B. et al(2016)	0.140	0.127	0.154	-32.911	0.000						
	Romanic m. et al(2014)	0.290	0.201	0.398	-3.634	0.000						
	Sabaini de Melo S. et al(2017)	0.280	0.242	0.321	-9.444	0.000						
	Savoia D. et al(2007)	0.180	0.145	0.139	-11.512	0.000						
	Seale A. et al(2017)	0.120	0.113	0.127	-57.791	0.000						
	seto M. et al(2019)	0.200	0.171	0.232	-14.375	0.000						
	Siqueira MS. Et al(2019)	0.140	0.103	0.187	-10.215	0.000						
	Toresani I. et al(2001)	0.040	0.026	0.060	-14.351	0.000						
	Tor-Udom S. et al(2006)	0.160	0.127	0.199	-12.249	0.000						
	Trieau L. et al(2009)	0.160	0.104	0.237	-6.632	0.000						
	Isui M. et al(2014)	0.100	0.083	0.120	-20.866	0.000						
	Vinnemeier C.D. et al(2015)	0.190	0.159	0.230	-12.959	0.000						
	Wenjing J. et al(2017)	0.080	0.074	0.086	-58.240	0.000						
	Whitney C. et al(2004)a	0.120	0.082	0.173	-9.157	0.000						
	Whitney C. et al(2004)b	0.150	0.107	0.206	-8.759	0.000						
	Whitney C. et al(2004)d	0.120	0.083	0.171	-9.383	0.000						
	Whitney C. et al(2004)e	0.070	0.043	0.111	-9.922	0.000						
	Whitney C. et al(2004)f	0.120	0.082	0.172	-9.225	0.000						
	Whitney C. et al(2004)g	0.110	0.074	0.161	-9.251	0.000						
	woldu Z. et al(2014)	0.070	0.046	0.333	-11,431	0.000						
	Wollheim C. etal(2016)	0.230	0.177	0.293	-7.263	0.000						
	Yadeta T. et al(2018)	0.140	0.124	0.157	-25.879	0.000						
	Young B. et al(2011)	0.200	0.169	0.235	-13.111	0.000						
	Zusman A. et al(2006)	0.180	0.151	0.213	-14.246	0.000						
	6	0.163	0.146	0.181	-24.906	0.000						
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Fig. 3: Prevalence of GBS in pregnants women of non-Islamic countries

#### The prevalence of GBS in pregnant according to the sampling region

The sampling region in 41 studies was vagina and the heterogeneity among included studies was meaningful (Q=1550.32, df=40, I<sup>2</sup>=97.42, P<0.001). According to the results of the metaanalysis, the prevalence of GBS in pregnant undergone sampling in the vagina was 11.1% (11.1%, CI=95% (9.2-13.4)). The prevalence of GBS in the vagina of pregnant is illustrated in (Fig. 4). The sampling region in 86 studies was vagina-rectum, and heterogeneity was meaningful statistically (Q=2561.78, df=85, I<sup>2</sup>=96.68, P<0.001). According to the results obtained from meta-analysis, the prevalence of GBS in the pregnant from whose vaginal-rectal region samples had been drown was 18.1% (18.1, CI=95% (16.4-19.9)). The prevalence of GBS in vaginal-rectal region of pregnant women has been shown in (Fig. 5).



Fig. 4: Prevalence of GBS in pregnants undergone sampling in the vagina

	odel	Study name	2	Statistic	cs for ea	ach study		Event rate and 95% CI	
Arbura F. et al (2011)   1.0   0.11   0.17   0.13   0.17     Barati F. et al (2011)   0.10   0.17   0.18   0.00     Barati F. et al (2011)   0.10   0.17   0.18   0.00     Cheknowski F. et al (2011)   0.10   0.17   0.18   0.00     Cheknowski F. et al (2011)   0.10   0.17   0.18   0.00     Cheknowski F. et al (2011)   0.10   0.17   0.18   0.00     Cheknowski F. et al (2011)   0.10   0.10   0.11   0.11   0.11     Cheknowski F. et al (2011)   0.10   0.11 <td< th=""><th></th><th></th><th>Event I rate</th><th>Lower limit</th><th>Upper limit</th><th>Z-Value p</th><th>Value</th><th></th><th></th></td<>			Event I rate	Lower limit	Upper limit	Z-Value p	Value		
Accel C. 5: 14(2013)   0.12   0.12   0.12   0.12   0.12   0.12     Asset 5: 4: 14(2011)   0.13   0.13   0.13   0.13   0.13   0.14     Baset 5: 4: 14(2011)   0.13   0.13   0.13   0.14   0.15   0.000     Chulwu, M. et al(2013)   0.13   0.27   0.26   0.26   0.000   0.000     Disper, Y. et al(2010)   0.00   0.00   0.000   0.000   0.000   0.000     Disper, Y. et al(2017)   0.00   0.000   0.000   0.000   0.000   0.000     Disper, Y. et al(2017)   0.000   0.000   0.000   0.000   0.000   0.000     Disper, Y. et al(2017)   0.000   0.000   0.000   0.000   0.000   0.000     Disper, Y. et al(2017)   0.000   0.000   0.000   0.000   0.000   0.000   0.000     Disper, Y. et al(2017)   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.0		Abarzua F. et al(2014)	0.140	0.121	0.161	-21.646	0.000		
Actic S. et al (2011)   110   110   117   117   117   117     Baschie C. et al (2011)   120   120   120   120   120   120     Chulken A. et al (2011)   120   120   120   120   120   120     Chulken A. et al (2012)   120   120   120   120   120   120     Chulken A. et al (2012)   120 <t< td=""><td></td><td>Africa Ch. Et al(2018)</td><td>0.170</td><td>0.132</td><td>0.217</td><td>-10.334</td><td>0.000</td><td></td><td></td></t<>		Africa Ch. Et al(2018)	0.170	0.132	0.217	-10.334	0.000		
missible 2. et al (2011)   0.19   0.19   0.19   0.19   0.19   0.19     ctristict 2. et al (2011)   0.20   0.20   0.20   0.20   0.20   0.20     ctristict 2. et al (2011)   0.20   0.20   0.20   0.20   0.20   0.20     Das Barc (0.2011)   0.20   0.20   0.20   0.20   0.20   0.20     Circla (0.2011)   0.20   0.20   0.20   0.20   0.20   0.20     Das Barc (0.2012)   0.20   0.20   0.20   0.20   0.20   0.20     Circla (0.2011)   0.20   0.20   0.20   0.20   0.20   0.20   0.20     Circla (1.2011)   0.20   0.20   0.21   0.21   0.20   0.20   0.20   0.20     Circla (1.2012)   0.20   0.21   0.21   0.20		Assefa S. et al(2018)	0.150	0.113	0.197	-10.383	0.000		
Batchon, Lat et al (2011)     0.120     0.127     0.127     0.127     0.127     0.127     0.127     0.000       Current Al et al (2011)     0.200     0.207     0.207     0.207     0.000       Dangert - 4 at al (2010)     0.200     0.207     0.207     0.207     0.000       Destine Costa A. et al (2001)     0.200     0.200     0.201     0.207     0.200     0.000       Gurent - 4 (al (2010)     0.200     0.201     0.207     -1.202     0.000       Gurent - 6 (al (2020)     0.200     0.212     0.217     -1.212     0.000       Habasson - 5 (al (2002)     0.200     0.212     0.227     1.848     0.000       Habasson - 5 (al (2002)     0.200     0.211     0.211     0.200     0.000       Habasson - 5 (al (2002)     0.200     0.211     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201     0.201		Bacaite E. et al(2011)	0.150	0.129	0.174	-19.290	0.000		
Botho A. et al (2015)   0.20   0.20   0.20   0.20   0.20   0.20     Donger Y. et al (2015)   0.20   0.20   0.20   0.20   0.20   0.20     Donger Y. et al (2015)   0.20   0.20   0.20   0.20   0.20   0.20     Garca D. et al (2015)   0.20   0.20   0.20   0.20   0.20   0.20     Garca D. et al (2017)   0.20   0.20   0.21   0.20   0.20   0.20     Guarda D. et al (2017)   0.20   0.22   0.27   1.848   0.000     Hussan S. et al (2010)   0.20   0.21   0.22   0.27   1.848   0.000     Junchine M. et al (2017)   0.20   0.21   0.22   0.22   0.22   0.22   0.22   0.22   0.22   0.20		Bertoncello A. et al(2018)	0.140	0.122	0.160	-22.482	0.000		
Chickovi, M. et al (2015)     0.10     0.20     0.30     0.20     0.30     0.20       Des Seta Cota A. et al (2001)     0.00     0.10     0.21     0.21     0.20       Garachew C. et al (2001)     0.00     0.00     0.00     0.00     0.00       Garachew C. et al (2001)     0.00     0.00     0.00     0.00     0.00       Garachew C. et al (2001)     0.00     0.00     0.00     0.00     0.00       Garachew C. et al (2001)     0.00     0.00     0.00     0.00     0.00       Hassenson, A. et al (2001)     0.00     0.00     0.00     0.00     0.00     0.00       Hassenson, A. et al (2001)     0.00     0.00     0.00     0.00     0.00     0.00     0.00       Hassenson, A. et al (2001)     0.00 <td></td> <td>Botelho A. et al(2018)</td> <td>0.260</td> <td>0.246</td> <td>0.274</td> <td>-27.707</td> <td>0.000</td> <td></td> <td></td>		Botelho A. et al(2018)	0.260	0.246	0.274	-27.707	0.000		
curved A. et al (2004)     0.200     0.200     0.200     0.200     0.200     0.200       Doro ther. (12000)     0.000     0.000     0.000     0.000     0.000       Gurde D. et al (2000)     0.000     0.000     0.000     0.000     0.000       Gurde D. et al (2000)     0.000     0.000     0.000     0.000     0.000       Gurde D. et al (2000)     0.000     0.000     0.000     0.000     0.000       Joachism A. et al (2010)     0.000     0.000     0.000     0.000     0.000       Joachism A. et al (2010)     0.000     0.000     0.000     0.000     0.000     0.000       Joachism A. et al (2010)     0.000 </td <td></td> <td>Chukwu. M. et al(2015)</td> <td>0.310</td> <td>0.267</td> <td>0.356</td> <td>-7.520</td> <td>0.000</td> <td></td> <td></td>		Chukwu. M. et al(2015)	0.310	0.267	0.356	-7.520	0.000		
Don Meti-Chart #12000)     0.20     0.2		cruz Alverez A. et al(2014)	0.280	0.207	0.367	-4.645	0.000		
Deside 10:01:A. et al.(2005)   0.00   0.00   0.00   0.00     Grance L. et al.(2005)   0.00   0.00   0.00   0.00     Grance L. et al.(2005)   0.00   0.00   0.00   0.00     Grance L. et al.(2005)   0.00   0.00   0.00   0.00     Hassenson A. et al.(2005)   0.00   0.00   0.00   0.00     Hassenson A. et al.(2005)   0.00   0.00   0.00   0.00     Kursen K. et al.(2005)   0.00   0.00   0.00   0.00     Kursen K. et al.(2005)   0.00   0.00   0.00   0.00     Kursen K. et al.(2015)   0.00   0.00   0.00   0.00     Kursen K. et al.(2015)   0.00   0.00   0.00   0.00     Machaner K. et al.(2015)   0.00   0.00   0.00   0.00     Machaner K. et al.(2015)   0.00   0.00   0.00   0.00   0.00     Machaner K. et al.(2015)   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00		Dangor Y. et al(2016)	0.250	0.203	0.304	-8.017	0.000		
bit with the stal (2017)   1.00   0.014   0.014   0.000     Git allowski with stal (2017)   0.000   0.000   0.000   0.000     Hassan A. et al (2007)   0.200   0.220   0.227   1.84.8   0.000     Hassan A. et al (2013)   0.200   0.200   0.200   0.000   0.000     Jackhum A. et al (2013)   0.200   0.200   0.200   0.000   0.000     Luharers J. et al (2013)   0.200   0.200   0.200   0.000   0.000     Luharers J. et al (2013)   0.200   0.201   0.201   0.000   0.000     Luharers J. et al (2013)   0.200   0.201   0.201   0.000   0.000     Marchamin D. et al (2001)   0.200   0.201   0.201   0.000   0.000     Marchamin D. et al (2001)   0.200   0.201   0.000		Dos Reis Costa A. et al(2008)	0.200	0.150	0.261	-7.862	0.000		
Norma     Norma     Norma     Norma     Norma       Stringer     Stringer     Norma     Norma     Norma     Norma       Stringer     Stringer     Stringer     Norma     Norma     Norma     Norma     Norma       Stringer     Stringer     Stringer     Stringer     Norma		Enweronu-laryea C. et al(2001)	0.190	0.164	0.219	-15.897	0.000		
Subset     Subset     Subset     Subset       Subset     Subset     Subset     Subset       Subset     Subset     Subset     Subset       Subset     Subset     Subset     Subset       Hassan, St et al(2001)     Subset     Subset     Subset       Justeins A. et al(2013)     Subset     Subset     Subset       Justeins A. et al(2014)     Subset     Subset     Subset       Justeins A. et al(2013)     Subset     Subset     Subset       Justeins A. et al(2014)     Subset     Subset     Subset       Justeins A. et al(2011)     Subset     Subset     Subset       Marcham D. et al(2001)     Subset     Subset     Subset     Subset       Marcham D. et al(2011)     Subset     Subset     Subset     Subset     Subset       Marcham D. et al(2011)     Subset		Garcia D. et al(2010)	0.004	0.000	0.058	-3.927	0.000		
Set Windows L. H. HULDON)     L. 200     L. 200     L. 200       Hakanson A. et al (2014)     L. 200     L. 200     L. 200       Jacktisma A. et al (2015)     L. 200     L. 200     L. 200       Jacktisma A. et al (2015)     L. 200     L. 200     L. 200       Jacktisma A. et al (2011)     L. 200     L. 200     L. 200       Linneres. J. et al (2011)     L. 200     L. 200     L. 200       Marchain D. et al (2003)     L. 200     L. 200     L. 200       Marchain D. et al (2003)     L. 200     L. 200     L. 200       Marchain D. et al (2003)     L. 200     L. 200     L. 200       Marchain D. et al (2003)     L. 200     L. 200     L. 200       Marchain D. et al (2003)     L. 200     L. 200     L. 200       Marchain D. et al (2003)     L. 200     L. 200     L. 200       Marchain D. et al (2003)     L. 200     L. 200     L. 200       Marchain D. et al (2001)     L. 200     L. 200     L. 200       Marchain D. et al (2001)     L. 200     L. 200     L. 200       Namuege A. et al (2001)		Gizachew M. et al(2017)	0.260	0.219	0.306	-9.002	0.000		
unclement     unclement     unclement     unclement		Grimwood K. et al(2002)	0.220	0.172	0.277	-8.122	0.000		
memory A: 1: (2010)     0:01     0:02     0:02     0:00       hyun Kim d: 1: (2010)     0:02     0:02     0:00       hyun Kim d: 1: (2011)     0:00     0:00     0:00       histis: A: et al (2011)     0:00     0:01     0:01     0:00       Marcham D: et al (2011)     0:00     0:01     0:01     0:01     0:01       Marcham D: et al (2011)     0:00     0:01     0:01     0:01     0:00       Mustis: M: et al (2011)     0:00     0:01     0:01     0:01     0:01     0:00       Mustis: M: et al (2011)     0:01     0:02     0:02     0:00     0:00     0:00     0:00       Numeyres A: et al (2011)     0:00     0:01     0:01 <td< td=""><td></td><td>Gutierrez G. et al(2005)</td><td>0.001</td><td>0.000</td><td>0.018</td><td>-4.781</td><td>0.000</td><td></td><td></td></td<>		Gutierrez G. et al(2005)	0.001	0.000	0.018	-4.781	0.000		
muxtum d. et al(2019)     0.20     0.21     2.20     0.000       Klew K. et al(2015)     0.20     0.28     3.87     0.000       Klew K. et al(2011)     0.10     0.22     0.28     0.000       Uncomik M. et al(2011)     0.10     0.22     0.28     0.000       Uncomik M. et al(2011)     0.10     0.22     0.28     0.000       Warcham D. et al(2011)     0.10     0.22     0.28     0.000       Marcham D. et al(2011)     0.20     0.21     0.21     0.25     0.000       Marcham D. et al(2010)     0.20     0.21     0.22     0.000     0.000       Marcham D. et al(2010)     0.20     0.22     0.21     0.22     0.000       Muselik A. et al(2010)     0.20     0.22     0.21     0.22     0.000       Muselik A. et al(2010)     0.20     0.22     0.21     0.20     0.21     0.22     0.21       Namegerada A. et al(2010)     0.20     0.23     0.21     0.23     0.21     0.23     0.21     0.22     0.22     0.21 <td></td> <td>Hassan A. ot al(2014)</td> <td>0.250</td> <td>0.229</td> <td>0.272</td> <td>-18.843</td> <td>0.000</td> <td></td> <td></td>		Hassan A. ot al(2014)	0.250	0.229	0.272	-18.843	0.000		
market     market     market     market     market     market       Klow, K.et     14(2013)     122     0.23     0.24     0.000       Klow, K.et     14(2011)     0.10     0.000     0.000     0.000       Luhares, J.et     12(2011)     0.10     0.000     0.000     0.000       Marchaim D.et     14(2001)     0.10     0.22     0.29     0.37     0.000       Marchaim D.et     14(2001)     0.10     0.12     0.000     0.000     0.000       Marchaim D.et     14(2001)     0.10     0.12     0.20     0.01     0.000       Marchaim D.et     14(2001)     0.20     0.21     0.20     0.20     0.20     0.20     0.20     0.20     0.21     0.20     0.20     0.20     0.20     0.20     0.20		hun Kim d. et al(2014)	0.130	0.125	0.279	-3.000	0.000		
n.tow     etailon13     0.22     0.23     0.24     0.00       Lucowitk     etailon13     0.10     0.06     0.14     -0.00       Lucowitk     etailon13     0.10     0.06     0.14     -0.00     0.00       Marchaim D.etail(2011)     0.20     0.22     0.23     0.20     0.00     0.00       Marchaim D.etail(2010)     0.20     0.23     0.23     0.23     0.00       Marchaim D.etail(2010)     0.20     0.21     0.23     0.23     0.00       Marconic C.etail(2010)     0.20     0.21     0.23     0.23     0.20       Marconic C.etail(2010)     0.20     0.10     0.13     0.22     0.10     0.11     0.12     0.00       Mulesi M. etail(2010)     0.20     0.10     0.13     0.22     0.10     0.10     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11     0.11		loophism A at al(2000)	0.120	0.101	0.141	-20.017	0.000		
Nithows, Streid(201)     120		Joachistin A. et al(2005)	0.230	0.100	0.201	-0.007	0.000		
numbers is et al (2011)     0:10     0:00     0:14     -0:80     0:00       Lursowikh A. et al (2011)     0:00     0:22     0:18     -23:6     0:00       Marchaim D. et al (2001)     0:19     0:12     0:28     -5:48     0:00       Marconic C. et al (2010)     0:29     0:21     0:28     -5:48     0:00       Marconic C. et al (2010)     0:29     0:21     0:28     0:28     0:00       Marconic C. et al (2010)     0:29     0:21     0:28     0:28     0:00       Marconic C. et al (2010)     0:29     0:21     0:28     0:28     0:00       Mohommad Ali M. et al (2017)     0:14     0:13     0:17     1:40:00     0:00       Martowic A. et al (2017)     0:12     0:28     0:28     0:00     0:00       Martowic A. et al (2017)     0:12     0:13     0:22     0:00     0:00       Rosch et al (2020)     0:14     0:12     0:13     0:22     0:00     0:00       Rosch et al (2020)     0:14     0:128     0:23     0:00		K LOW K. et al(2013)	0.230	0.184	0.283	-8.478	0.000		
Lucomic A. et al (2014)     0.10     0.00     0.47     9.90     0.00       Marchaim D. et al (2001)     0.120     0.09     0.147     1.838     0.000       Marchaim D. et al (2001)     0.220     0.210     0.29     -9.374     0.000       Marchaim D. et al (2001)     0.220     0.210     0.247     -9.374     0.000       Marchaim D. et al (2001)     0.220     0.210     0.317     -7.328     0.000       Matani Ch. Et al (2015)     0.190     0.131     0.226     0.210     0.000       Mukeisi A. et al (2015)     0.190     0.131     0.226     -0.31     0.000       Mukeisi A. et al (2015)     0.130     0.220     -1.31     0.000     0.000       Mukeisi A. et al (2017)     0.130     0.220     -1.31     0.000     0.000       Sabain de Moles S. et al (2017)     0.100     0.011     0.223     -1.32     0.000       Sabain de Moles S. et al (2017)     0.20     0.210     0.232     -1.32     0.000       Sabain de Moles S. et al (2017)     0.20     0.210		Linharos L et al (2011)	0.200	0.250	0.270	-40.288	0.000		
unclosed     unclosed     unclosed     unclosed     unclosed       Uprakowska     unclosed     unclosed     unclosed     unclosed       Marcanica     unclosed     unclosed     unclosed     unclosed     unclosed       Marcanica     unclosed     unclosed     unclosed     unclosed     unclosed     unclosed       Muclose     unclosed     unclosed <td></td> <td>Lucovnik M. et al/2014)</td> <td>0.100</td> <td>0.006</td> <td>0.148</td> <td>-32 555</td> <td>0.000</td> <td></td> <td></td>		Lucovnik M. et al/2014)	0.100	0.006	0.148	-32 555	0.000		
upper transmission   0.200   0.200   0.200   0.000     Marchain D. et al (2003)   0.130   0.213   0.224   0.000     Marchain D. et al (2003)   0.200   0.213   0.224   0.000     Marchain D. et al (2003)   0.200   0.225   0.224   0.000     Marchain C. H. Et al (2014)   0.200   0.225   0.224   0.000     Mohammad I.M. et al (2003)   0.200   0.225   0.224   0.000     Mides M. et al (2003)   0.200   0.220   0.235   0.200   0.000     Mules M. et al (2003)   0.200   0.200   0.200   0.200   0.000     Mules M. et al (2003)   0.200   0.200   0.200   0.200   0.000     Rusch A. et al (2003)   0.200   0.200   0.200   0.200   0.200   0.200     Rusch A. et al (2013)   0.200   0.200   0.201   0.201   0.201   0.201   0.201   0.200   0.200   0.201   0.201   0.201   0.201   0.201   0.200   0.201   0.201   0.201   0.201   0.201   0.201   0.200		Lucovnik IVI. et al(2014)	0.170	0.152	0.189	-23.555	0.000		
marchain     Disk		Lysakowska M. et al(2011)	0.300	0.220	0.394	-3.979	0.000		
marconic de al(2010)     0.159     0.149     0.428     0.284     0.000       Marconic de al(2010)     0.200     0.210     0.211     0.236     0.000       Mengiti A et al(2010)     0.200     0.210     0.211     0.236     0.000       Mengiti A et al(2010)     0.200     0.210     0.211     0.216     0.000       Mulesi M et al(2010)     0.200     0.220     0.221     0.231     0.220       Nulesi M et al(2010)     0.200     0.230     0.237     0.200     0.000       Rusch et al(2000)     0.200     0.230     0.237     0.200     0.000       Rusch et al(2001)     0.200     0.221     0.231     0.231     0.200       Rusch et al(2010)     0.200     0.221     0.231     0.231     0.200       Santhamar Stal(2017)     0.200     0.232     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231     0.231 </td <td></td> <td>Marchaim D. et al(2003)a</td> <td>0.120</td> <td>0.098</td> <td>0.147</td> <td>-10.890</td> <td>0.000</td> <td></td> <td></td>		Marchaim D. et al(2003)a	0.120	0.098	0.147	-10.890	0.000		
matani C. tra en (2010)     0.260     0.267     0.268     0.000       Matani C. St en (2010)     0.000     0.000     0.000     0.000       Mohammad Lih, et al (2010)     0.000     0.251     0.232     0.231     0.231       Mutheri M. et al (2010)     0.200     0.251     0.232     0.231     0.231       Mutheri M. et al (2010)     0.200     0.221     0.231     0.231     0.000       Mutheri M. et al (2010)     0.200     0.231     0.231     0.000     0.000       Mutheri M. et al (2010)     0.200     0.231     0.231     0.000     0.000       Page-Famise S. et al (2011)     0.200     0.201     0.231     0.231     0.000       Rouch A. et al (2007)     0.200     0.201     0.231     0.231     0.000       Stabain de Mols S. et al (2017)     0.200     0.201     0.231     0.231     0.000       Stabain de Mols S. et al (2001)     0.200     0.201     0.232     0.200     0.000       Stabain de Mols S. et al (2017)     0.200     0.201     0.232     0.200<		Marconi C. ot al(2003)b	0.190	0.123	0.283	-5.486	0.000		
memory Cu. L: en (2010)     0.200     0.210     0.211     0.226     0.000       Medigita A. et al (2020)     0.200     0.112     0.200     0.000       Michicova J. et al (2010)     0.200     0.220     0.221     0.000       Mulder vangen (00 A. et al (2010)     0.200     0.220     0.221     0.200     0.000       Nuller vangen (00 A. et al (2010)     0.200     0.220     0.221     0.231     0.517     0.000       Orrett F. A. et al (2003)     0.300     0.220     0.231     1.577     0.000       Base A. et al (2010)     0.200     0.221     1.514     0.200     0.000       Rouge A. et al (2017)     0.200     0.221     1.514     0.200     0.000       Stantharma S. et al (2017)     0.200     0.111     0.222     0.200     0.000       Stantharma S. et al (2017)     0.200     0.121     0.222     0.000     0.000       Stantharma S. et al (2017)     0.200     0.127     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000		Marconi C. et al(2010)	0.250	0.210	0.294	-9.574	0.000		
more and (AIM. et al (2003)     0.129     0.141     0.028     0.000       Michaim Mad AIM. et al (2003)     0.200     0.225     0.228     0.283     0.000       Mukesi M. et al (2003)     0.200     0.225     0.228     0.283     0.000       Mukesi M. et al (2003)     0.200     0.220     0.131     0.127     1.480     0.000       Orrett F. A. et al (2013)     0.130     0.220     0.177     5.288     0.000       Rusch A. et al (2010)     0.230     0.180     0.235     0.235     0.000       Rusch A. et al (2010)     0.200     0.181     0.231     5.71.50     0.000       Rusch A. et al (2010)     0.200     0.213     0.214     0.186     0.200       Sobalin de Meio S. et al (2017)     0.200     0.213     0.213     0.000       Sabalin de Meio S. et al (2017)     0.200     0.213     0.213     0.000       Sobalin de Meio S. et al (2017)     0.200     0.217     0.200     0.200       Sabalin de Meio S. et al (2017)     0.200     0.216     0.200     0.200 <td></td> <td>Managint A at al(2016)</td> <td>0.260</td> <td>0.210</td> <td>0.317</td> <td>-7.326</td> <td>0.000</td> <td></td> <td></td>		Managint A at al(2016)	0.260	0.210	0.317	-7.326	0.000		
model was 14 model at 12(202)   0.200   0.202   0.203   0.203     Model was 14 at 12(203)   0.200   0.201   0.203   0.201     Multifer variantities A. et al (2003)   0.200   0.201   0.203   0.201     Orrett F. A. et al (2003)   0.200   0.201   0.201   0.201   0.201     Page-Kamies A. et al (2003)   0.200   0.201   0.201   0.201   0.201     Page-Kamies A. et al (2003)   0.200   0.201   0.201   0.201   0.201     Rusch A. et al (2003)   0.200   0.201   0.201   0.201   0.201   0.201     Rusch A. et al (2017)   0.200   0.201   0.201   0.201   0.201   0.201   0.201   0.201     Santhan et el (2017)   0.200   0.201   0.202   0.201 <t< td=""><td></td><td>Mehammad Aliza -t -1(2010)</td><td>0.190</td><td>0.131</td><td>0.268</td><td>-6.385</td><td>0.000</td><td></td><td></td></t<>		Mehammad Aliza -t -1(2010)	0.190	0.131	0.268	-6.385	0.000		
mouses.ex.ex.ex.ex.ex.ex.ex.ex.ex.ex.ex.ex.ex.		Monammad All M. et al(2019)	0.160	0.122	0.208	-10.172	0.000		
multer vincet at (2017)   0.400   0.112   0.124   0.430     Multer vingenge A, et al (2016)   0.220   0.224   0.234   0.714   0.000     Namugenge A, et al (2016)   0.230   0.237   0.728   0.000     Orrestt F, A, et al (2007)   0.120   0.130   0.238   0.727   0.000     Ruck A, et al (2017)   0.120   0.127   0.127   0.120   0.000     Rousch A, et al (2017)   0.200   0.221   0.238   -15.77   0.000     Rousch A, et al (2017)   0.200   0.212   0.218   -3.841   0.000     Sabain de Melo S, et al (2017)   0.200   0.221   0.238   -3.841   0.000     Savoia D, et al (2007)   0.100   0.117   0.122   -1.437   0.000     Savoia D, et al (2007)   0.100   0.117   0.122   0.120   0.000     Savoia D, et al (2017)   0.200   0.127   0.291   0.202   0.200   0.000     Savoia D, et al (2017)   0.200   0.127   0.292   0.000   0.000   0.000   0.000   0.000   0.000		Notiova J. et al(2004)	0.290	0.255	0.328	-9.835	0.000		
mumuer-vranges A. et al (2009)   0.200   0.300   5-168   0.000     Orrett F. A. et al (2039)   0.310   0.220   0.377   5-288   0.000     Page-Ramisey S. et al (2011)   0.190   0.180   0.225   7-110   0.000     Rusch A. et al (2001)   0.100   0.180   0.225   7-100   0.000     Rusch A. et al (2017)   0.120   0.140   0.225   7-100   0.000     Rochetti T. et al (2010)   0.240   0.241   0.243   5.481   0.000     Sabini de Melo S. et al (2017)   0.260   0.221   0.232   5.241   0.000     Santhanam S. et al (2017)   0.200   0.110   0.127   7.102   0.000     Santhanam S. et al (2017)   0.200   0.113   0.227   7.277   0.000     Stower M. et al (2014)   0.000   0.030   0.220   0.232   1.437   0.000     Stower M. et al (2011)   0.000   0.020   0.110   0.237   7.268   0.000     Vancemburg-vanden Berg et al (2006)   0.100   0.137   7.225   0.000     Vancemburg-vanden Berg et a		Mukesi M. et al(2019)	0.140	0.113	0.172	-14.501	0.000		
Namugongo A, et al (12016)   0.290   0.242   0.237   7.142   0.000     Orrett F, A, et al (12003)   0.330   0.220   0.377   7.528   0.000     Rusch A, et al (2007)   0.120   0.136   0.229   0.277   7.122   0.000     Rusch A, et al (2007)   0.120   0.130   0.229   0.271   0.230   0.000     Rochechti T, et al (2017)   0.200   0.220   0.221   0.396   -3.571   0.000     Rochechti T, et al (2017)   0.200   0.201   0.396   -3.684   0.000     Sabaini Ge Melo S, et al (2007)   0.100   0.011   0.322   -3.791   0.000     Savoia D, et al (2007)   0.100   0.137   0.127   0.120   0.100   0.000     Savoia D, et al (2007)   0.100   0.101   0.202   0.200   0.000   0.000     Savoia D, et al (2017)   0.200   0.100   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000		Muller-vranjes A. et al(2009)	0.250	0.180	0.336	-5.168	0.000		
Orrett F.A. et al (203)   0.30   0.20   0.277   -5.28   0.000     Page-Hamsey S. et al (2021)   0.19   0.18   0.259   -7.19   0.000     Rusch A. et al (2001)   0.210   0.18   0.235   -5.15   0.000     Rick A. et al (2011)   0.170   0.147   0.186   -5.25   0.000     Rick A. et al (2011)   0.220   0.220   0.221   0.251   0.000     Rick A. et al (2011)   0.220   0.221   <		Namugongo A. et al(2016)	0.290	0.242	0.343	-7.142	0.000		
Drret F.A. et al(2003) Page-Hamsey. st at (2017) Rick A. et al(2017) Rick A. et al(2016) Rick A. et al(2017) Rick A. et al(2017) Rick A. et al(2017) Rick A. et al(2017) Rick A. et al(2016) Rick A. et al(2017) Rick A. et al(2017)		Orrett F.A. et al(1993)	0.310	0.250	0.377	-5.285	0.000		
Page-Ramsey S. et al (201)   0.19   0.13   0.25   7.13   0.000     Rausch A. et al (201)   0.10   0.14   0.19   1.75   0.000     Rick A. et al (201)   0.12   0.14   0.12   1.55   0.000     Rochetti T. et al (2010)   0.220   0.220   0.224   0.221   0.94   9.574     Romanic m. et al (2014)   0.220   0.221   0.244   0.000   0.000   Sachanams et al (2017)   0.100   0.011   0.0127   0.135   0.000     Sachanams et al (2017)   0.100   0.113   0.127   7.191   0.000   0.000   0.000   0.000     Siquera MS. Et al (2019)   0.104   0.127   0.139   0.224   0.200   0.001   0.013   0.127   0.199   0.224   0.000     Tur-Udon S. et al (2017)   0.100   0.103   0.127   0.139   0.224   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000		Orrett F.A. et al(2003)	0.330	0.269	0.398	-4.721	0.000		
matrix A. et al (2007)   0.210   0.130   0.231   -13.27   0.000     Rick A. et al (2017)   0.220   0.220   0.224   -3.57   0.000     Roochetti T. et al (2017)   0.200   0.220   0.224   -3.57   0.000     Roomanic m. et al (2017)   0.200   0.220   0.221   0.531   -3.644   0.000     Sabani de Melos. et al (2017)   0.100   0.171   0.132   1.515   0.000     Savoia D. et al (2007)   0.100   0.127   0.127   1.521   0.000     Savoia D. et al (2007)   0.100   0.127   0.123   0.000   0.000     Savoia D. et al (2007)   0.100   0.127   0.123   0.000   0.000     Savoia D. et al (2005)   0.140   0.123   0.127   0.223   0.000     Tor-Udons Et al (2013)   0.100   0.052   1.123   0.000   0.000     Valkemburg-unden Berg et al (2013)   0.100   0.066   0.125   0.113   0.020     Valket A. et al (2014)   0.070   0.66   0.125   0.126   0.000     Vadeta T. et al (2013)		Page-Ramsey S. et al(2011)	0.190	0.136	0.259	-7.150	0.000		
Nick A. et al (2017)   0.170   0.147   0.147   0.196   -1.4229   0.000     Rochett T. et al (2016)   0.210   0.221   0.154   -3.257   0.000     Bromanic m. et al (2011)   0.220   0.221   0.314   0.000     Santhaams S. et al (2017)   0.200   0.210   0.313   1.1512   0.000     Santhaams S. et al (2017)   0.120   0.113   0.127   5.7571   0.000     Santhaams S. et al (2017)   0.120   0.113   0.127   5.757   0.000     Santhaams S. et al (2013)   0.200   0.127   0.127   0.120   0.000     Truit M. et al (2014)   0.100   0.103   0.120   0.126   0.000     Valkenburg-maden Berg et al (2005)   0.100   0.026   0.026   0.000     Vould Z. et al (2011)   0.020   0.150   0.226   1.2395   0.000     Valkenburg-maden Berg et al (2005)   0.100   0.666   0.414   0.020   0.000     Vould Z. et al (2011)   0.200   0.150   0.217   1.838   0.000     Vades T. et al (2013)   0.200		Rausch A. et al(2009)	0.210	0.189	0.233	-19.577	0.000		
Rocchetti T, et al (2016)   0.230   0.220   0.221   0.235   0.200     Rojn-Bezrare B, et al (2017)   0.200   0.201   0.325   0.320   0.000     Sabani de Melo S, et al (2017)   0.100   0.071   0.139   0.151   0.000     Savoia Lo et al (2007)   0.100   0.071   0.139   0.151   0.000     Savoia Lo et al (2017)   0.100   0.012   0.139   1.1512   0.000     Savoia Lo et al (2017)   0.100   0.012   0.137   1.020   0.000     Vinnemeire C.D. et al (2015)   0.140   0.100   0.88   5.204   0.000     Vinnemeire C.D. et al (2014)   0.000   0.88   5.204   0.000     Vinnemeire C.D. et al (2014)   0.020   0.157   1.257   0.000     Vinnemeire C.D. et al (2014)   0.020   0.150   0.213   1.141   0.000     Void Lo et al (2014)   0.020   0.150   0.215   1.257   0.000     Vang B. et al (2011)   0.200   0.206   0.235   1.211   0.000     Mobilami F. et al (2013)   0.200   0.215		Rick A. et al(2017)	0.170	0.147	0.196	-17.829	0.000		
Roje-Jecarez B. et al (2015)   0.140   0.127   0.154   -3.291   0.000     Santhane et al (2014)   0.220   0.202   0.202   0.203   0.203     Santhanes, et al (2017)   0.100   0.071   0.322   0.000     Santhanes, et al (2017)   0.100   0.071   0.322   0.000     Seale A. et al (2017)   0.100   0.071   0.322   0.000     Seale A. et al (2015)   0.100   0.027   0.139   0.120   0.000     Siduerra MS. Et al (2015)   0.100   0.081   0.122   0.000   0.000     Tor-UdomS. et al (2015)   0.100   0.085   0.122   0.000   0.000     Valkenburg-vanden Berg et al (2006)   0.100   0.085   0.126   0.000   0.000     Valkenburg-vanden Berg et al (2005)   0.100   0.086   0.127   0.138   0.000     Valkenburg-vanden Berg et al (2005)   0.100   0.026   0.153   0.100   0.027   0.000     Valeta T. et al (2018)   0.100   0.026   0.153   0.000   0.000   0.000   0.000   0.000     A		Rocchetti T. et al(2010)	0.250	0.210	0.294	-9.574	0.000		
Nomanic M. et al (2017)   0.20   0.20   0.23   -3.44   0.000     Sabain de Meio S. et al (2017)   0.100   0.07   0.132   -1.1512   0.000     Savoia D. et al (2007)   0.100   0.07   0.132   -1.1512   0.000     Savoia D. et al (2001)   0.100   0.137   0.122   5.771   0.000     Savoia D. et al (2001)   0.100   0.187   -1.025   0.000     Tor-Udon S. et al (2005)   0.100   0.83   0.120   2.2264   0.000     Tor-Udon S. et al (2013)   0.100   0.83   0.122   2.2254   0.000     Vinnemeirer C.D. et al (2013)   0.020   0.157   7.258   0.000     Vinde S. et al (2011)   0.020   0.157   7.258   0.000     Vong B. et al (2011)   0.020   0.150   0.235   0.131   0.000     Vades T. et al (2018)   0.140   0.124   0.125   0.000     Vades T. et al (2013)   0.100   0.036   0.41   0.420   0.000     Abcoliani Fard S. et al (2017)   0.120   0.261   0.757   0.800   0.000		Rojo-Bezarez B. et al(2016)	0.140	0.127	0.154	-32.911	0.000		
Santh de Meior S, et al (2017)   0.200   0.242   0.213   9.143   0.000     Santh de Meior S, et al (2017)   0.100   0.445   0.227   5.71.000   0.000     Sevoia D. et al (2007)   0.120   0.117   0.222   1.000   0.000     Siqueira MC, Et al (2015)   0.100   0.020   0.117   0.222   0.000     Siqueira MC, Et al (2015)   0.100   0.033   0.122   0.000   0.000     Valkenburg-vanden Berg et al (2006)   0.100   0.026   0.129   0.000     Wenjing: et al (2017)   0.190   0.126   0.125   0.000     Wollbein: C.et al (2016)   0.100   0.026   0.126   0.000     Wollbein: Set al (2016)   0.100   0.026   0.125   0.000     Vold Z.et al (2011)   0.100   0.066   0.144   0.142   0.000     Valeta T. et al (2015)   0.100   0.056   0.141   0.000   0.000     Abolitahi Fard S. et al (2017)   0.120   0.155   0.151   0.000   0.000     Hadvand Sh. Et al (2017)   0.120   0.157   0.000   0.000 </td <td></td> <td>Romanic m. et al(2014)</td> <td>0.290</td> <td>0.201</td> <td>0.398</td> <td>-3.634</td> <td>0.000</td> <td></td> <td></td>		Romanic m. et al(2014)	0.290	0.201	0.398	-3.634	0.000		
Savoi D. 41 (2007)   0.100   0.071   0.133   1.1512   0.000     Savoi D. 41 (2007)   0.120   0.113   0.122   1.161   0.000     Sele A. et al (2017)   0.120   0.113   0.127   5.7751   0.000     Siqueira MS. Et al (2016)   0.140   0.102   0.222   1.1512   0.000     Tor-Udom S. et al (2006)   0.140   0.102   0.222   0.000   0.000     Vinnemeier C.D. et al (2015)   0.100   0.688   0.102   0.000   0.000     Wold Nz et al (2011)   0.600   0.77   0.486   0.58.240   0.000     Wold Nz et al (2011)   0.600   0.100   0.688   0.102   0.000     Yadeta T. et al (2011)   0.200   0.124   0.157   7.263   0.000     Volk Set et al (2017)   0.100   0.686   0.144   0.420   0.000     Volk Set et al (2015)   0.100   0.666   0.144   0.000   0.000     Al-Sweih N. et al (2015)   0.100   0.150   0.116   0.128   0.000     Hadbulah Fard S. et al (2015)   0.300   0.1		Sabaini de Melo S. et al(2017)	0.280	0.242	0.321	-9.444	0.000		
Sevia D. et al (2007)   0.180   0.445   0.222   1.061   0.000     Sevia D. et al (2013)   0.200   0.17   0.222   5.000     Sique ira M. et al (2013)   0.100   0.087   0.127   0.000     Tor Udom S. et al (2013)   0.100   0.081   0.022   0.000     Tor Udom S. et al (2014)   0.000   0.081   0.022   0.000     Wenjing I. et al (2017)   0.190   0.230   0.227   0.000     Wold Z. et al (2014)   0.070   0.406   0.228   0.000     Wold Z. et al (2014)   0.070   0.406   0.235   0.000     Wold Z. et al (2011)   0.100   0.068   0.235   0.000     Young B. et al (2011)   0.100   0.066   0.241   0.637   0.000     Abdollahi Fard S. et al (2008)   0.101   0.026   0.241   6.376   0.000     Al-Sweih N. et al (2013)   0.103   0.241   6.376   0.000   0.000     Al-Sweih N. et al (2012)   0.050   0.138   1.242   0.000   0.000     Hadayand Sh. Et al (2013)   0.230   0.257		Santhanam S. et al(2017)	0.100	0.071	0.139	-11.512	0.000		
Sele A. et al (2017)   0.120   0.131   0.127   5.7.731   0.000     Sito M. et al (2013)   0.120   0.127   0.222   0.000     Tor-Udon S. et al (2005)   0.140   0.103   0.187   1.022   0.000     Tur M. et al (2014)   0.100   0.088   0.120   0.000   0.000     Valkenburg-vanden Berg et al (2015)   0.001   0.017   0.226   0.000     Wonlping J. et al (2017)   0.080   0.027   0.226   0.000     Wollbeim C. et al (2016)   0.210   0.117   0.239   7.238   0.000     Young B. et al (2011)   0.200   0.166   0.235   1.111   0.000     Abdollahi Fard S. et al (2008)   0.100   0.686   0.44   1.042   0.000     Clouse K. et al (2017)   0.100   0.106   0.117   1.175   1.238   0.000     Habbi Zadeh SH. et al (1208)   0.100   0.116   0.127   1.238   0.000     Hadswand ASh. Et al (2012)   0.600   0.117   1.128   0.000   0.000     Javarnanaesh F. et al (2012)   0.600   0.627   <		Savoia D. et al(2007)	0.180	0.145	0.221	-11.651	0.000		
siguer action   0.200   0.171   0.222   1.43.57   0.000     Siguer action   0.112   0.127   0.129   0.000     Tor-Udom S. et al(2006)   0.160   0.127   0.129   0.000     Tor Udom S. et al(2013)   0.100   0.083   0.122   0.000     Wenjing: et al(2013)   0.100   0.086   0.020   0.000     Wolduz. et al(2014)   0.070   0.066   0.020   0.000     Wolduz. et al(2013)   0.020   0.169   0.225   0.000     Yadeta T. et al(2013)   0.100   0.068   0.144   1.0422   0.000     Abdollahi Fard S. et al(2003)   0.160   0.235   1.311   0.000   0.000     Al-Sweih N. et al(2013)   0.200   0.150   0.217   8.230   0.000     Habbi zadeh SH. et al(2013)   0.100   0.068   0.141   1.0422   0.000     Hassan zadeh P. et al(2011)   0.100   0.061   0.137   1.820   0.000     Javanmanesh F. et al(2012)   0.200   0.527   1.630   0.000   0.001     Javanmanesh F. et al(2017)		Seale A. et al(2017)	0.120	0.113	0.127	-57.791	0.000		
Sigueira MS. Et al (2006)   0.140   0.033   0.167   1.02.15   0.000     Tor-Udons et al (2006)   0.100   0.038   0.120   2.03.66   0.000     Yalkenburg-vanden Berg et al (2015)   0.019   0.230   2.22.64   0.000     Winnemeier C.D. et al (2015)   0.020   0.026   1.239   0.000     Wolkenburg-vanden Berg et al (2013)   0.020   0.026   1.023   0.000     Wolkenburg-vanden Serg et al (2014)   0.000   0.000   0.000   0.000     Wolkenburg-vanden Serg et al (2013)   0.120   0.127   0.233   -13.111   0.000     Valkenburg-vanden Serg et al (2013)   0.100   0.668   0.414   -0.637   0.000     Young B. et al (2017)   0.120   0.681   0.414   -0.637   0.000     Al-Sweith N. et al (2017)   0.120   0.616   0.135   0.118   0.000     Hadbizache SH. et al (2017)   0.120   0.618   0.123   0.000   0.001     Hadbizache SH. et al (2012)   0.200   0.257   1.634   0.000   0.001     Javarmanesh F. et al (2012)   0.200		seto M. et al(2019)	0.200	0.171	0.232	-14.375	0.000		
Tor-Udom S. et al (2016)   0.160   0.127   0.199   1.2.2.49   0.000     Tsui M. et al (2011)   0.100   0.083   0.120   2.0.86   0.000     Valkenburg-vanden Berg et al (2015)   0.190   0.086   0.226   1.2.000     Wenjing J. et al (2011)   0.070   0.046   0.026   1.2.959   0.000     Wollbain C. etal (2016)   0.020   0.159   0.226   1.2.753   0.000     Young B. et al (2011)   0.100   0.046   0.056   1.1.41   0.000     Young B. et al (2011)   0.100   0.046   0.125   1.2.357   0.000     Young B. et al (2011)   0.100   0.686   0.144   1.0.422   0.000     Al-Sweih N. et al (2021)   0.100   0.681   0.7.842   0.000     darabi R. et al (2015)   0.030   0.011   0.064   -8.533   0.000     Hadwand Sh. Et al (2015)   0.030   0.014   0.064   -8.533   0.000     Jahrom B. et al (2012)   0.206   0.257   1.080   0.000   0.075   0.225   0.000     Jahrom B. et al (2017) <t< td=""><td></td><td>Siqueira MS. Et al(2019)</td><td>0.140</td><td>0.103</td><td>0.187</td><td>-10.215</td><td>0.000</td><td></td><td></td></t<>		Siqueira MS. Et al(2019)	0.140	0.103	0.187	-10.215	0.000		
Toti M. et al (2014)   0.100   0.083   0.120   0.206   0.000     Valkenburg-vanden Berg et al (2005)   0.190   0.210   0.195   0.222   0.100     Wenjing L et al (2017)   0.086   0.627   0.686   0.627   0.000     Wonjing L et al (2013)   0.200   0.166   0.777   0.293   7.203   0.000     Yadeta T. et al (2013)   0.200   0.166   0.777   0.293   7.203   0.000     Yadeta T. et al (2013)   0.200   0.166   0.737   0.293   7.203   0.000     Yadeta T. et al (2013)   0.200   0.166   0.737   0.738   0.000   0.000     Al-Sweih N. et al (2024)   0.100   0.068   0.144   1.042   0.000   0.000     Hadbib zadeh SH. et al (1289)   0.120   0.150   0.261   7.784   0.000   0.000     Hadswand Sh. Et al (2013)   0.200   0.118   0.118   0.128   0.000   0.000     Hadswand Sh. Et al (2013)   0.200   0.257   1.63.04   0.000   0.000   0.000   0.000   0.000   0.000		Tor-Udom S. et al(2006)	0.160	0.127	0.199	-12.249	0.000		
Vincender G.D. et al (2015)   0.210   0.139   0.220   0.220   0.000     Winnering J. et al (2017)   0.060   0.074   0.065   58.240   0.000     Wollawin C. et al (2016)   0.200   0.074   0.065   58.240   0.000     Young B. et al (2011)   0.120   0.127   2.233   7.263   0.000     Young B. et al (2011)   0.120   0.126   0.235   1.11   0.000     Abdollahi Fard S. et al (2004)   0.160   0.130   0.241   6.357   6.000     Clouse K. et al (2017)   0.120   0.161   0.103   0.241   6.353   0.000     Habib zack B. H. et al (2015)   0.001   0.014   0.664   -8.593   0.000     Hashbi zack B. M. et al (2012)   0.060   0.024   0.103   -9.241   0.000     Hashbi zack B. M. et al (2012)   0.060   0.024   0.000   0.000   0.000     Javorm Ase F. et al (2012)   0.200   0.205   0.257   1.634   0.000   0.000     Javorm Ase F. et al (2013)   0.200   0.275   0.225   0.000   0.000 <t< td=""><td></td><td>Tsui M. et al(2014)</td><td>0.100</td><td>0.083</td><td>0.120</td><td>-20.866</td><td>0.000</td><td></td><td></td></t<>		Tsui M. et al(2014)	0.100	0.083	0.120	-20.866	0.000		
Wennjner, et al (2015)   0.190   0.195   0.226   1.2399   0.000     Wenjney, et al (2017)   0.080   0.074   0.086   5.236   0.000     Woldhuz, et al (2016)   0.220   0.177   0.233   7.233   7.233   7.233     Young B. et al (2013)   0.200   0.169   0.235   1.131   0.000     Abdollahi Fard S. et al (2004)   0.160   0.686   5.23   1.011   0.000     Al-Sweih N. et al (2004)   0.160   0.686   0.44   1.042   0.000     Clouse K. et al (2017)   0.120   0.611   0.175   -8.80   0.000     Hadbuand Sh. Et al (2011)   0.100   0.066   0.414   1.042   0.000     Hadswand Sh. Et al (2011)   0.100   0.061   0.133   1.135   0.100     Hadswand Sh. Et al (2011)   0.100   0.061   0.133   0.237   1.630   0.000     Javanmanesh F. et al (2011)   0.140   0.156   0.223   0.000   0.000   0.000     Javanmanesh F. et al (2013)   0.230   0.257   0.130   0.000   0.000   0.		Valkenburg-vanden Berg et al(2006)	0.210	0.191	0.230	-22.264	0.000		
Wenjing J. et al (2017)   0.080   0.074   0.086   -58.240   0.000     Wold Z. et al (2013)   0.070   0.066   0.105   -11.41   0.000     Yadeta T. et al (2018)   0.140   0.124   0.157   -25.879   0.000     Abdollahi Fard S. et al (2001)   0.200   0.160   0.135   -15.7   0.000     Abdollahi Fard S. et al (2013)   0.200   0.160   0.130   0.214   -6.375   0.000     Clouxe K. et al (2017)   0.120   0.068   0.414   -10.422   0.000     darabi R. et al (2017)   0.120   0.061   0.135   -12.633   0.000     Hadbizachel SH. et al (2012)   0.030   0.141   0.618   -12.88   0.000     Hadswand Sh. Et al (2011)   0.140   0.046   -8.593   0.000   0.000     Javanmanesh F. et al (2011)   0.140   0.164   -8.593   0.000   0.000     Javanmanesh F. et al (2013)   0.230   0.235   0.257   -16.34   0.000   0.000     Javanmanesh F. et al (2013)   0.230   0.257   -16.34   0.000   0.000		Vinnemeier C.D. et al(2015)	0.190	0.159	0.226	-12.959	0.000		
woldu Z. et al (2014)   0.070   0.066   0.105   1.1.431   0.000     Wollheam C. etal (2016)   0.220   0.177   0.293   7.283   7.283   7.200     Young B. et al (2011)   0.100   0.066   0.144   1.0422   0.000     Abdoliahi Fard S. et al (2003)   0.100   0.066   0.243   1.111   0.000     Clouse K. et al (2017)   0.120   0.161   0.261   7.842   0.000     darabi R. et al (2017)   0.120   0.181   0.175   -8.830   0.000     Hadburand Sh. Et al (2015)   0.030   0.014   0.064   -8.593   0.000     Hasburandeh SH. et al (2012)   0.030   0.014   0.064   -8.593   0.000     Hasburandeh P. et al (2011)   0.140   0.165   0.125   1.080   0.000     Javonnanesh F. et al (2012)   0.200   0.205   0.257   1.634   0.000     Javananesh F. et al (2013)   0.200   0.216   0.227   1.634   0.000     Kabir S. et al (2017)   0.300   0.33   0.237   1.630   0.000     Kabir S. et al		Wenjing J. et al(2017)	0.080	0.074	0.086	-58.240	0.000		
Wollheim C. etal(2016)   0.230   0.177   0.293   -7.263   0.000     Yadeta T. etal(2015)   0.140   0.124   0.157   2.587   0.000     Young B. etal(2011)   0.200   0.668   0.144   -10.422   0.000     Abdollahl Fard S. etal(2003)   0.100   0.068   0.144   -10.422   0.000     Clouse K. etal(2017)   0.200   0.150   0.216   -7.842   0.000     Hadvand Sh. etal(2013)   0.030   0.115   0.115   -1.2633   0.000     Hadvand Sh. etal(2012)   0.050   0.014   0.046   -8.533   0.000     Hassan Zadeh P, etal(2011)   0.060   0.138   -1109   0.000     Jahromi B. etal(2012)   0.050   0.257   -16.34   0.000     Javanmanesh F. etal(2013)   0.230   0.257   -16.34   0.000     Javanmanesh F. etal(2013)   0.230   0.257   -16.34   0.000     Kadanali A. etal(2015)   0.200   0.257   -16.34   0.000     Javanmanesh F. etal(2013)   0.230   0.257   -16.34   0.000     Kadanali A		woldu Z. et al(2014)	0.070	0.046	0.105	-11.431	0.000		
Yaouta T. et al (2013)   0.140   0.127   25.879   0.000     Young E. et al (2011)   0.200   0.169   0.235   0.131   0.000     Abdollahi Fard S. et al (2004)   0.160   0.068   0.441   1.422   0.000     Al-Sweith N. et al (2017)   0.120   0.161   0.757   3.830   0.000     Habib zach SH. et al (2013)   0.020   0.150   0.261   7.7842   0.000     Habib zach SH. et al (2013)   0.030   0.014   0.664   8.593   0.000     Habib zach SH. et al (2012)   0.060   0.014   0.064   8.593   0.000     Hasmand A. et al (2012)   0.060   0.018   0.133   9.224   0.000     Jahrom B. et al (2003)   0.200   0.257   1.634   0.000   0.001     Jahrom B. et al (2013)   0.220   0.257   1.634   0.000   0.001     Jahrom B. et al (2013)   0.200   0.277   1.634   0.000   0.001     Kabiri S. et al (2013)   0.200   0.277   1.634   0.000   0.001     Kabiri S. et al (2017)   0.340   0.390		Wollheim C. etal(2016)	0.230	0.177	0.293	-7.263	0.000		
Young B. et al (2011)   0.200   0.169   0.235   1.1311   0.000     Abdollahi Fard S. et al (2008)   0.100   0.068   0.144   1.042   0.000     Clouse K. et al (2017)   0.120   0.081   0.175   -8.830   0.000     Habbi zadeh SH. et al (1289)   0.130   0.119   0.187   -12.633   0.000     Hadavand Sh. Et al (2015)   0.030   0.014   0.064   -6.353   0.000     Hadavand Sh. Et al (2011)   0.130   0.016   0.081   0.175   -8.830   0.000     Hassan zadeh P. et al (2011)   0.140   0.166   0.183   -12.383   0.000     Javanmanesh F. et al (2012)   0.230   0.205   0.257   -16.304   0.000     Javanmanesh F. et al (2013)   0.230   0.205   0.257   -16.304   0.000     Javanmanesh F. et al (2013)   0.230   0.205   0.257   -16.304   0.000     Javanmanesh F. et al (2013)   0.230   0.237   0.216   0.000   0.000     Kabir J. et al (2017)   0.340   0.330   0.327   0.210   0.000   0.000		Yadeta T. et al(2018)	0.140	0.124	0.157	-25.879	0.000		
Abclolahi Fard S. et al (2008)   0.100   0.068   0.44 + 10.422   0.000     Al-Sweth N. et al (2014)   0.120   0.201   0.211   6.37     Clouse K. et al (2017)   0.120   0.151   0.126 + 7.842   0.000     Habib zadeh SH. et al (1189)   0.100   0.187   1.263   0.000     Hadbi zadeh SH. et al (2015)   0.030   0.014   0.664   -8.533   0.000     Haghshens Mojaveri M. et al (2012)   0.150   0.118   0.122   0.000     Hasman Zadeh P. et al (2011)   0.140   0.168   -12.2908   0.000     Jahrom B. F. et al (2013)   0.220   0.225   0.257   -16.30   0.000     Javanmanesh F. et al (2013)   0.220   0.257   -16.30   0.000   0.000     Kabiri S. et al (2015)   0.200   0.164   0.242   -11.132   0.000     Kabiri S. et al (2015)   0.200   0.164   0.242   -11.132   0.000     Musehs J. et al (2017)   0.340   0.307   0.328   -2.29   0.000     Norozi M. et al (2013)   0.170   0.185   0.212   0.000   0.		Young B. et al(2011)	0.200	0.169	0.235	-13.111	0.000		
Al-Sweih N. et al (2004)   0.160   0.033   0.241   -6.376   0.000     Clouse K. et al (2017)   0.120   0.151   0.261   -7.82   0.000     darabi R. et al (2017)   0.120   0.151   0.175   -8.830   0.000     Hadbizadeh SH. et al (1389)   0.150   0.118   0.185   -12.633   0.000     Hadawand Sh. Et al (2012)   0.060   0.041   -12.633   0.000     Hamedi A. et al (2012)   0.060   0.041   0.064   -8.593   0.000     Jakromasesh F. et al (2011)   0.140   0.166   0.133   1.22.88   0.000     Javanmanesh F. et al (2012)   0.205   0.257   -16.304   0.000   0.000     Javanmanesh F. et al (2013)   0.230   0.205   0.257   -16.304   0.000     Kabiri S. et al (2015)   0.200   0.164   0.242   1.120   0.000     Kabiri S. et al (2015)   0.170   0.118   0.232   -12.00   0.000     Kabiri S. et al (2017)   0.340   0.302   -22.92   0.000   0.000     Medugu N. et al (2017)   0.340		Abdollahi Fard S. et al(2008)	0.100	0.068	0.144	-10.422	0.000		
Clouse K. et al(2019)   0.200   0.150   0.77.84.20   0.000     darabi R. et al(2017)   0.120   0.081   0.157   6.283   0.000     Habib zadeh S.H. et al(1389)   0.150   0.113   0.187   -12.693   0.000     Haghshens Mojaveri M. et al(2014)   0.040   0.044   8.188   -12.88   0.000     Haghshens Mojaveri M. et al(2012)   0.060   0.034   0.103   -9.241   0.000     Hassan zadeh P. et al(2011)   0.140   0.026   0.257   -16.304   0.000     Javanmanesh F. et al(2013)   0.230   0.255   0.257   -16.304   0.000     Kadanali A. et al(2005)   0.170   0.118   0.237   7.255   0.000     Kadanali A. et al(2017)   0.340   0.300   0.238   -11.020   0.000     Museh J. et al(2017)   0.340   0.300   0.238   -12.00   0.000     Museh J. et al(2017)   0.340   0.300   0.238   -12.00   0.000     Nerozi M. et al(1   0.000   0.068   0.222   6.200   0.000   0.000     Najmi N. et al(2017)		Al-Sweih N. et al(2004)	0.160	0.103	0.241	-6.376	0.000		
drabi h. et al(2017)   0.120   0.081   0.175   -8.830   0.000     Habib zach SH. et al(12015)   0.030   0.014   0.064   -8.593   0.000     Hadab zach SH. et al(2012)   0.030   0.014   0.064   -8.593   0.000     Hamed L. et al(2012)   0.000   0.018   0.188   -12.38   0.000     Hassan zadeh P. et al(2011)   0.140   0.160   0.138   -11.120   0.000     Jahrom BL. et al(2005)   0.200   0.257   -16.304   0.000   0.000     Javanmanesh F. et al(2013)   0.200   0.257   -16.304   0.000   0.000     Kabir S. et al(2016)   0.130   0.277   -16.304   0.000   0.000     Kabir S. et al(2017)   0.300   0.307   0.328   -7.025   0.000     Musleh J. et al(2017)   0.300   0.330   0.277   0.229   0.000     Musleh J. et al(2017)   0.300   0.327   0.229   0.000   0.000     Najmi N. et al(2013)   0.170   0.156   0.221   0.000   0.000   0.000   0.000   0.000   0.000 <td></td> <td>Clouse K. et al(2019)</td> <td>0.200</td> <td>0.150</td> <td>0.261</td> <td>-7.842</td> <td>0.000</td> <td></td> <td></td>		Clouse K. et al(2019)	0.200	0.150	0.261	-7.842	0.000		
Hadbizadeh SH. et al (1289)   0.150   0.119   0.187 - 12.033   0.000     Hadavand Sh. Et al (2015)   0.00   0.014   0.064   8.53   0.000     Haghshenas Mojaveri M. et al (2012)   0.050   0.014   0.064   8.53   0.000     Harsban adeh P. et al (2012)   0.060   0.034   0.038   1.109   0.000     Javanmanesh F. et al (2012)   0.200   0.257   1.63.04   0.000     Javanmanesh F. et al (2013)   0.230   0.257   1.63.04   0.000     Kadanali A. et al (2015)   0.200   0.257   1.63.04   0.000     Kadanali A. et al (2013)   0.230   0.257   1.63.04   0.000     Museh, J. et al (2017)   0.340   0.300   0.383   -10.000     Museh, J. et al (2017)   0.340   0.300   0.383   -10.000     Namin N. et al (2013)   0.170   0.118   0.126   0.000     Namin N. et al (2017)   0.340   0.300   0.333   -229   0.000     Nickenbe A. et al (2017)   0.130   0.126   -12.06   0.000   0.000     Sadaka S. et al (2		darabi R. et al(2017)	0.120	0.081	0.175	-8.830	0.000		
Hadavand Sh. Et al (2015)   0.000   0.014   0.064   -8.593   0.000     Haghshens Mojaveri M. et al (2011)   0.100   0.103   -9.241   0.000     Hassan zadeh P. et al (2011)   0.100   0.108   -12.2908   0.000     Jahrom Ib. et al (2020)   0.200   0.205   0.527   -16.304   0.000     Javanmanesh F. et al (2012)   0.200   0.205   0.527   -16.304   0.000     Javanmanesh F. et al (2013)   0.220   0.205   0.527   -16.304   0.000     Kabiri S. et al (2016)   0.130   0.272   0.527   1.504   0.000     Kadanali A. et al (2015)   0.100   0.188   0.239   7.205   0.000     Musehs L etal (2017)   0.340   0.300   0.383   7.205   0.000     Nergis M. et al (2013)   0.170   0.138   0.229   -11.326   0.000     Nergis M. et al (2013)   0.170   0.136   0.210   -11.966   0.000     Nergis M. et al (2013)   0.170   0.138   0.229   -2294   0.000     Nergis M. et al (2017)   0.130   0.127 </td <td></td> <td>Habib zadeh SH. et al(1389)</td> <td>0.150</td> <td>0.119</td> <td>0.187</td> <td>-12.693</td> <td>0.000</td> <td></td> <td></td>		Habib zadeh SH. et al(1389)	0.150	0.119	0.187	-12.693	0.000		
Haghshenas Mojaveri M. et al (2014)   0.150   0.118   0.118   0.128   0.000     Hamedi A. et al (2021)   0.60   0.034   0.103   9.221   0.000     Javanmanesh F. et al (2012)   0.20   0.025   0.225   1.6.304   0.000     Javanmanesh F. et al (2013)   0.20   0.205   0.227   1.6.304   0.000     Javanmanesh F. et al (2013)   0.200   0.118   0.229   0.000     Kabiri S. et al (2016)   0.30   0.229   0.225   1.6.304   0.000     Kabiri S. et al (2016)   0.310   0.227   0.600   0.000   0.000     Kabiri S. et al (2015)   0.310   0.227   1.6.304   0.000   0.000     Medugu N. et al (2017)   0.140   0.300   0.383   -7.025   0.000     Musieh J. et al (2017)   0.140   0.305   0.227   1.216   0.000     Najmi N. et al (2013)   0.170   0.136   0.229   1.200   0.000     Najmi N. et al (2017)   0.180   0.128   1.226   0.000   0.000     Najmi N. et al (2017)   0.130   0.1		Hadavand Sh. Et al(2015)	0.030	0.014	0.064	-8.593	0.000		
Hamedi A. et al (2012)   0.060   0.034   0.103   -9.241   0.000     Hassan zadeh P. et al (2011)   0.140   0.106   0.183   -11.09   0.000     Jahromi B. et al (2012)   0.230   0.205   0.257   -16.304   0.000     Javanmanesh F. et al (2013)   0.230   0.205   0.257   -16.304   0.000     Kadanali A. et al (2013)   0.200   0.257   -16.304   0.000     Kadanali A. et al (2015)   0.200   0.257   -16.304   0.000     Kadanali A. et al (2013)   0.200   0.164   0.242   -11.122   0.000     Musieh J. et al (2017)   0.340   0.300   0.383   -10.00   0.000     Najmi N. et al (2013)   0.170   0.185   0.223   -22.99   0.000     Najmi N. et al (2013)   0.170   0.136   0.212   -12.064   0.000     Nidewabe M. et al (2013)   0.170   0.138   0.223   -6.299   0.000     Nidewabe M. et al (2017)   0.190   0.166   0.144   -10.318   0.000     Saha S et al (2018)   0.130   0.122   <		Haghshenas Mojaveri M. et al(2014)	0.150	0.118	0.188	-12.388	0.000		
Hassan radeh P. et al (2011)   0.140   0.106   0.138 - 11.090   0.000     Jahrom B. et al (2003)   0.000   0.075   0.106   22.08   0.000     Javanmanesh F. et al (2012)   0.230   0.205   0.257   -16.304   0.000     Javanmanesh F. et al (2013)   0.230   0.205   0.257   -16.304   0.000     Kabiri S. et al (2016)   0.130   0.227   1.216   0.000     Kabiri S. et al (2016)   0.130   0.237   1.624   0.000     Musieh J. et al (2017)   0.340   0.300   0.838   -7.026   0.000     Musieh J. et al (2017)   0.340   0.157   0.229   -12.160   0.000     Nkmbe M. et al (2013)   0.170   0.136   0.221   -12.160   0.000     Norozi M. et al (2017)   0.130   0.126   1.226   0.000   0.000     Najmi N. et al (2013)   0.140   0.126   1.226   0.000   0.001     Sadaka S. et al (2018)   0.270   0.213   0.336   6.224   0.000   0.001     Sharifi Y. et al (1350)   0.020   0.055		Hamedi A. et al(2012)	0.060	0.034	0.103	-9.241	0.000	<b>■</b> _	
Javanmanesh F, et al (2012) 0.230 0.075 0.108 - 22.908 0.000 Javanmanesh F, et al (2012) 0.230 0.257 - 16.304 0.000 Kabiri S, et al (2016) 0.200 0.164 0.242 - 11.132 0.000 Kabiri S, et al (2015) 0.200 0.164 0.242 - 11.132 0.000 Le Doare K, et al (2016) 0.330 0.297 0.364 - 9.120 0.000 Medugu N, et al (2017) 0.136 0.137 0.229 - 12.160 0.000 Najmi N, et al (2017) 0.136 0.137 0.229 - 12.160 0.000 Najmi N, et al (2013) 0.170 0.118 0.216 - 12.96 0.000 Norczi M, et al (2013) 0.170 0.138 0.229 - 6.245 0.000 Nuvafumilo B, et al (2017) 0.130 0.137 0.229 - 12.160 0.000 Nuvafumilo B, et al (2017) 0.130 0.137 0.229 - 12.160 0.000 Nuvafumilo B, et al (2017) 0.130 0.137 0.229 - 12.160 0.000 Nuvafumilo B, et al (2017) 0.130 0.137 0.229 - 12.064 0.000 Oluwafumilo B, et al (2017) 0.130 0.131 0.126 - 12.064 0.000 Sadaka S, et al (2018) 0.070 0.131 0.132 - 21.013 0.000 Sahara S, et al (2017) 0.150 0.131 0.127 - 21.013 0.000 Sharifi Y, et al (1300) 0.060 0.075 0.121 - 15.792 0.000 Yasini M, et al () 0.090 0.065 0.121 - 15.792 0.000 Metury Le t al (2015) 0.090 0.022 0.123 - 12.941 0.000 Steenwinkel F, et al (2008) 0.020 0.055 0.121 - 15.792 0.000 Yasini M, et al () 0.090 0.055 0.121 - 15.792 0.000 Metury Le t al (2015) 0.090 0.042 0.133 - 5.250 0.000 Steenwinkel F, et al (2015) 0.090 0.042 0.123 - 5.240 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 5.240 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 5.240 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.123 - 12.94 0.000 Metury Le t al (2015) 0.090 0.042 0.134 - 0.138 0.000 Metury Le t al (2015) 0.090 0.042 0.134 - 0.139 0.000		Hassan zadeh P. et al(2011)	0.140	0.106	0.183	-11.090	0.000		
Javanmanesh F. et al (2012) 0.230 0.205 0.257 - 16.304 0.000 javanmanesh F. et al (2013) 0.200 0.205 0.257 - 16.304 0.000 Kabiri S. et al (2013) 0.200 0.164 0.242 - 11.132 0.000 Le Doare K. et al (2016) 0.118 0.239 - 7.255 0.000 Medugu N. et al (2017) 0.340 0.300 0.383 - 7.025 0.000 Medugu N. et al (2017) 0.340 0.300 0.383 - 7.025 0.000 Musieh) . et al (2017) 0.340 0.300 0.383 - 7.025 0.000 Najmi N. et al (2013) 0.170 0.136 0.210 - 11.966 0.000 Nkorrosi M. et al (2013) 0.170 0.138 0.210 - 11.966 0.000 Nkorrosi M. et al (2017) 0.180 0.133 0.239 - 8.239 0.000 Oluwafunmilola B. et al (2017) 0.180 0.133 0.326 - 6.245 0.000 Sadaka S. et al (2018) 0.100 0.133 0.326 - 6.245 0.000 Sahara S. et al (2017) 0.150 0.131 0.172 - 21.013 0.000 Sharifi Y. et al (1309) 0.006 0.005 0.071 - 5.752 0.000 Sharifi Y. et al (1309) 0.000 0.005 0.123 - 12.91 0.000 Steenwinkel F. et al (2008) 0.000 0.005 0.123 - 12.91 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Medidugu U. et al (2015) 0.090 0.042 0.128 - 5.540 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Jamazami T. et al (2011) 0.320 0.272 0.327 - 6.445 0.000 Jamazami T. et al (2011) 0.320 0.357 - 5.752 0.000		Jahromi B. et al(2008)	0.090	0.075	0.108	-22.908	0.000		
javanmanesh F. et al (2013) 0.200 0.205 0.257 - 16.304 0.000 Kabiri S. et al (2015) 0.200 0.164 0.242 - 11.132 0.000 Le Doare K. et al (2015) 0.300 0.257 0.264 - 9.120 0.000 Medugu N. et al (2017) 0.130 0.257 0.229 - 12.160 0.000 Musieh J. et al (2017) 0.130 0.157 0.229 - 12.160 0.000 Nusieh J. et al (2013) 0.170 0.136 0.210 - 11.966 0.000 Nusieh J. et al (2013) 0.170 0.136 0.229 - 12.160 0.000 Nusieh J. et al (2013) 0.170 0.136 0.229 - 12.160 0.000 Nusieh J. et al (2013) 0.170 0.138 0.229 - 12.160 0.000 Nusieh J. et al (2013) 0.170 0.138 0.229 - 12.160 0.000 Nusieh J. et al (2013) 0.170 0.138 0.229 - 12.160 0.000 Nusieh J. et al (2013) 0.170 0.130 0.229 0.229 0.000 Sadaka S. et al (2017) 0.150 0.131 0.172 - 1.013 0.000 Saha S. et al (2017) 0.150 0.131 0.172 - 21.013 0.000 Saha S. et al (2017) 0.150 0.131 0.172 - 21.013 0.000 Sterenvinkel F. et al (2008) 0.020 0.055 0.121 - 5.792 0.000 Yasini M. et al () 0.090 0.042 0.132 - 5.241 0.000 Juwaranni Le tal (2015) 0.090 0.042 0.132 - 5.240 0.000 Jamazani T. et al (2011) 0.320 0.272 0.372 - 6.445 0.000 Jamazani T. et al (2011) 0.320 0.272 0.372 - 6.445 0.000 Jamazani T. et al (2011) 0.320 0.272 0.372 - 6.445 0.000 Jamazani T. et al (2011) 0.320 0.272 0.372 - 6.445 0.000 Jamazani T. et al (2011) 0.320 0.272 0.372 - 6.445 0.000 Jamazani T. et al (2011) 0.320 0.272 0.372 - 6.445 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042 0.383 - 5.540 0.000 Jamazani T. et al (2015) 0.090 0.042		Javanmanesh F. et al(2012)	0.230	0.205	0.257	-16.304	0.000		
Kadanali A. et al(2005)   0.200   0.646   0.242 - 11.132   0.000     Kadanali A. et al(2005)   0.170   0.118   0.239   7.235   0.000     Le Doare K. et al(2015)   0.330   0.297   0.364   9.120   0.000     Medugu N. et al(2017)   0.340   0.300   0.383   7.026   0.000     Musieh J. et al(2017)   0.340   0.305   0.222   0.229   0.000     Najmi N. et al(2013)   0.170   0.136   0.212   1.269   0.000     Nikembe M. et al(2013)   0.170   0.138   0.223   6.259   0.000     Oluwafunmilola 8. et al(2017)   0.180   0.133   0.229   8.229   0.000     Saha S. et al(2013)   0.170   0.130   0.336   6.245   0.000     Saha S. et al(2017)   0.150   0.131   0.327   2.23   1.204   0.000     Saharae Sh. Et al(2017)   0.150   0.131   0.327   2.23   0.000   0.000     Sharifi Y. et al(1350)   0.400   0.680   0.414   10.318   0.000   0.000     Sharifi Y. et al(201		javanmanesh F. et al(2013)	0.230	0.205	0.257	-16.304	0.000		
Kadanali A. et al (2005)   0.170   0.188   0.292   -7.255   0.000     Le Doare K. et al (2016)   0.330   0.297   0.664   -9.120   0.000     Medugu N. et al (2017)   0.130   0.297   0.646   -9.120   0.000     Musieh J. et al (2017)   0.190   0.157   0.229   -12.160   0.000     Najmi N. et al (2013)   0.107   0.136   0.210   -11.96   0.000     Nkembe M. et al (2013)   0.104   0.025   0.229   -12.160   0.000     Oluwafunmilola B. et al (2017)   0.180   0.126   1.226   0.000     Sadaka S. et al (2017)   0.180   0.131   0.127   2.103   0.000     Sharifi Y. et al (1300)   0.680   0.44   10.318   0.000   0.651     Sharifi Y. et al (1303)   0.020   0.055   0.227   0.237   0.326   0.000     Sthare Sh. Et al (2018)   0.000   0.065   0.124   1.030   0.000   0.661     Sharifi Y. et al (1303)   0.020   0.025   0.272   0.272   0.272   0.272   0.000		Kabiri S. et al(2016)	0.200	0.164	0.242	-11.132	0.000		
Le Doare K. et al (2016) 0.330 0.297 0.364 -9.120 0.000 Medugu N. et al (2017) 0.340 0.300 0.383 -7.026 0.000 Nusleh J. et al (2017) 0.150 0.157 0.229 -12.160 0.000 Najmi N. et al (2013) 0.170 0.136 0.210 -11.986 0.000 Norozi M. et al (2013) 0.170 0.136 0.226 -12.064 0.000 Oluwafunmilola B. et al (2017) 0.180 0.133 0.226 -12.064 0.000 Sadaka S. et al (2017) 0.180 0.131 0.126 -12.064 0.000 Sadaka S. et al (2017) 0.150 0.131 0.132 -21.013 0.000 Sahrae S. ht al (2019) 0.100 0.068 0.144 -10.138 0.000 Sterenwinkel F. et al (2008) 0.020 0.055 0.77 - 5.792 0.000 Yasini M. et al () 0.090 0.065 0.123 -12.941 0.000 Yasini M. et al () 0.090 0.062 0.123 -12.941 0.000 Yasini M. et al () 0.090 0.062 0.123 -12.94 0.000 Yasini M. et al () 0.090 0.062 0.123 -12.94 0.000 Yasini M. et al () 0.990 0.042 0.133 -5.540 0.000 Yasini M. et al () 0.990 0.042 0.133 -5.540 0.000 Yasini M. et al () 0.990 0.042 0.134 -5.540 0.000 Yasini M. et al () 0.990 0.042 0.134 -5.540 0.000 Yasini M. et al () 0.320 0.272 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.272 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.272 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.272 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.272 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.272 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.272 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.272 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.274 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.274 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.274 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445 0.000 Yasini M. et al () 0.320 0.273 0.372 -6.445		Kadanali A. et al(2005)	0.170	0.118	0.239	-7.295	0.000		
Medugu N. et al (2017)   0.340   0.300   0.383   -7.026   0.000     Muscha, te al (2017)   0.190   0.157   0.229   -12.10   0.000     Najmi N. et al (2013)   0.170   0.136   0.210   -11.986   0.000     Nkembe M. et al (2013)   0.140   0.065   0.223   -2.12.044   0.000     Olivarfunmilola 8. et al (2017)   0.180   0.133   0.239   -8.239   0.000     Sadaka 5. et al (2017)   0.150   0.131   0.172   -21.013   0.000     Sharif Y. et al (1330)   0.040   0.789   0.880   9.612   0.000     Sharif Y. et al (12030)   0.020   0.005   0.071   -5.792   0.000     Yasini M. et al (2015)   0.090   0.042   0.183   -5.540   0.000     Yasini M. et al (2011)   0.320   0.272   0.213   0.000   0.000     Zamzami T. et al (2011)   0.320   0.272   0.237   6.445   0.000     om   0.181   0.164   0.199   -5.262   0.000   0.000		Le Doare K. et al(2016)	0.330	0.297	0.364	-9.120	0.000		
Majmi N. et al (2017)   0.190   0.157   0.229   -12.160   0.000     Najmi N. et al (2013)   0.170   0.136   0.210   -11.986   0.000     Nkembe M. et al (2013)   0.140   0.085   0.223   -6.299   0.000     Oluva funnilola B. et al (2017)   0.190   0.136   0.216   -12.064   0.000     Sadaka S. et al (2017)   0.150   0.133   0.229   -8.299   0.000     Sadaka S. et al (2017)   0.150   0.131   0.272   2.103   0.000     Sahas S. et al (2017)   0.150   0.131   0.172   21.03   0.000     Saharae S. ht 21 (2019)   0.100   0.066   0.124   1.138   0.000     Stahrae S. ht 21 (2013)   0.020   0.057   0.71   -5.792   0.000     Yasini M. et al ()   0.090   0.065   0.123   1.2941   0.000     Yasini M. et al (2015)   0.090   0.422   0.312   -12.941   0.000     om   0.181   0.19   -5.792   0.000   -6.75   -0.38   0.00   0.38		Medugu N. et al(2017)	0.340	0.300	0.383	-7.026	0.000		
Najmi N. et al (2013)     0.170     0.136     0.210     -11.969     0.000       Nkembe M. et al (2018)     0.140     0.085     0.223     6.299     0.000       Norozi M. et al (1)     0.090     0.064     0.126     -12.064     0.000       Oluwafunmilola 8. et al (2017)     0.180     0.336     6.245     5.000       Sadaka S. et al (2018)     0.270     0.213     0.336     6.245     5.000       Sahara S. et al (2017)     0.150     0.134     0.127     2.1.03     0.000       Sharifi Y. et al (1350)     0.640     0.789     0.880     5.612     0.000       Steenwinkel F. et al (2008)     0.020     0.005     0.123     1.241     0.000       Yasini M. et al()     0.090     0.065     0.123     1.241     0.000       Yasini M. et al()     0.090     0.065     0.123     1.241     0.000       Yasini M. et al()     0.320     0.272     0.322     0.000     0.000       Yasini M. et al()     0.320     0.272     0.325     0.000     0.000		Musleh J. et al(2017)	0.190	0.157	0.229	-12.160	0.000		
Nkembe M. et al (2018)     0.104     0.085     0.222     -6.299     0.000       Norozi M. et al ()     0.090     0.664     0.126     1-2.064     0.000       Oluwa fummiola B. et al (2017)     0.180     0.133     0.239     -8.239     0.000       Sadaka S. et al (2018)     0.270     0.213     0.326     -6.245     0.000       Sahrae Sh. et al (2017)     0.150     0.131     0.172     -21.013     0.000       Sharae Sh. et al (2017)     0.100     0.668     0.414     -10.318     0.000       Sharae Sh. et al (2012)     0.100     0.668     0.614     -10.318     0.000       Steenwinkel F. et al (2008)     0.020     0.005     0.071     -5.792     0.000       Yasini M. et al ()     0.090     0.065     0.122     -12.241     0.000       Yasini M. et al (2015)     0.300     0.320     0.272     0.372     -6.245     0.000       Yasini M. et al (2011)     0.320     0.272     0.372     -6.264     0.000     -       Yasini M. et al (2011)     0.3		Najmi N. et al(2013)	0.170	0.136	0.210	-11.986	0.000		
Norczi M. et al()     0.090     0.064     0.125     -12.064     0.000       Oluwafunmilola B. et al(2017)     0.180     0.133     0.239     -8.239     0.000       Sadaka S. et al(2018)     0.270     0.213     0.336     -6.245     0.000       Saha S. et al(2017)     0.150     0.181     0.172     -21.013     0.000       Saha S. et al(2017)     0.150     0.680     9.612     0.000     0.000       Sahara S. ht tal(2019)     0.100     0.680     9.612     0.000     0.000       Sternwinkel F. et al(2008)     0.020     0.025     0.123     1.234     0.000       Yasini M. et al()     0.090     0.650     0.123     1.241     0.000       Zamzami T. et al(2011)     0.320     0.272     0.372     6.445     0.000       Jom     0.810     0.199     -5.262     0.000     -0.75     -0.38     0.00     0.38		Nkembe M. et al(2018)	0.140	0.085	0.223	-6.299	0.000		
Oluwafunmilola 8. et al(2017)     0.180     0.133     0.239     -8.239     0.000       Sadaka S. et al(2018)     0.270     0.213     0.336     -6.245     0.000       Saha S. et al(2017)     0.150     0.131     0.172     -7.1033     0.000       Sharafi Y. et al(1300)     0.680     0.44     -10.318     0.000       Sharafi Y. et al(1300)     0.680     0.680     0.612     0.000       Sharafi Y. et al(1300)     0.600     0.680     0.612     0.000       Steenwinkel F. et al(2008)     0.000     0.005     0.212     1.234     0.000       Yasini M. et al()     0.090     0.652     0.123     0.224     0.000       Zamzami T. et al(2011)     0.320     0.272     0.372     -6.445     0.000       Jom     0.181     0.192     2.52.62     0.000     -0.75     -0.38     0.00     0.38		Norozi M. et al()	0.090	0.064	0.126	-12.064	0.000		
Sadaka S. et al (2018)     0.270     0.213     0.336     -6.245     0.000       Sahaa S. et al (2017)     0.150     0.151     0.172     -21.013     0.000       Sahaa S. et al (2017)     0.150     0.066     0.144     10.138     0.000       Saharae S. ht al (2019)     0.100     0.066     0.144     10.138     0.000       Sharae S. ht al (2019)     0.000     0.065     0.122     12.000     0.000       Steenwinkel F. et al (2008)     0.020     0.005     0.071     -5.792     0.000       Yasini M. et al (1)     0.090     0.065     0.122     -12.941     0.000       Yasini M. et al (2015)     0.090     0.052     0.372     -6.445     0.000       Zamzami T. et al (2011)     0.320     0.272     0.372     -6.445     0.000       Iom     0.181     0.19     -25.262     0.000     -0.38     0.00     0.38		Oluwafunmilola B. et al(2017)	0.180	0.133	0.239	-8.239	0.000		
Saha S, et al(2017)     0.150     0.131     0.172     21.013     0.000       Sahrase Sh. Et al(2019)     0.100     0.068     0.144     1-0.318     0.000       Sharifi Y, et al(1350)     0.840     0.789     0.880     9.612     0.000       Steenwinkel F, et al(2008)     0.020     0.005     0.021     5.752     0.000       Yasini M, et al()     0.090     0.065     0.123     1.294     0.000       Yesildager U, et al(2015)     0.090     0.042     0.183     -5.540     0.000       Zamzami T, et al(2011)     0.320     0.272     0.372     -6.445     0.000       Jom     0.181     0.164     0.199     -25.262     0.000		Sadaka S.et al(2018)	0.270	0.213	0.336	-6.245	0.000		
Sahraee Sh. Et al(2019)     0.100     0.068     0.144     -10.318     0.000       Sharrif V. et al(1390)     0.840     0.789     0.880     9.612     0.000       Steenwinke F. et al(2008)     0.020     0.005     0.71     5.732     0.000       Yasini M. et al()     0.090     0.655     0.123     -12.941     0.000       Yesildager U. et al(2015)     0.090     0.042     0.133     -5.540     0.000       Zamzami T. et al(2011)     0.320     0.272     0.372     6.444     0.000       Iom     0.181     0.164     0.199     -25.262     0.000     -0.75     -0.38     0.00     0.38		Saha S. et al(2017)	0.150	0.131	0.172	-21.013	0.000		
Sharifi Y. et al (1390)   0.840   0.789   0.880   9.612   0.000     Steenwinkel F. et al (2008)   0.020   0.005   0.071   -5.792   0.000     Yasini M. et al ()   0.090   0.065   0.123   12.941   0.000     Yesini M. et al ()   0.090   0.065   0.123   12.941   0.000     Yesini M. et al ()   0.390   0.042   0.133   -5.540   0.000     Zamzami T. et al (2011)   0.320   0.272   0.372   -6.445   0.000     Jom   0.181   0.164   0.199   -5.262   0.000   -0.75   -0.38   0.00   0.38		Sahraee Sh. Et al (2019)	0.100	0.068	0.144	-10.318	0.000		
Steenwinkel F. et al(2008)     0.02     0.005     0.71     -5.792     0.000       Yasini M. et al()     0.090     0.065     0.123     -12.941     0.000       Yesildager U. et al(2015)     0.090     0.042     0.183     -5.540     0.000       Zamzami T. et al(2011)     0.320     0.272     0.372     -6.445     0.000       Iom     0.181     0.164     0.199     -25.262     0.000     -0.75     -0.38     0.00     0.38		Sharifi Y. et al(1390)	0.840	0.789	0.880	9.612	0.000		
Yasini M. et al()   0.090   0.065   0.123   -12.941   0.000     Yesildager U. et al(2015)   0.090   0.042   0.183   -5.540   0.000     Zamzami T. et al(2011)   0.320   0.272   0.372   -6.454   0.000     iom   0.181   0.164   0.199   -25.262   0.000   -0.75   -0.38   0.00   0.38		Steenwinkel F. et al(2008)	0.020	0.005	0.071	-5.792	0.000		
Yesildager U. et al(2015)     0.090     0.042     0.183     -5.540     0.000       Zamzami T. et al(2011)     0.320     0.272     0.372     -6.445     0.000       Jom     0.181     0.164     0.199     -25.262     0.000     -0.75     -0.38     0.00     0.38		Yasini M. et al()	0.090	0.065	0.123	-12.941	0.000		
Zamzami T. et al (2011) 0.320 0.272 0.372 -6.445 0.000 dom 0.181 0.164 0.199 -25.262 0.000 -0.75 -0.38 0.00 0.38		Yesildager U. et al(2015)	0.090	0.042	0.183	-5.540	0.000		
dom 0.181 0.164 0.199 -25.262 0.000   ↓ ↓ ■		Zamzami T. et al(2011)	0.320	0.272	0.372	-6.445	0.000		
-0.75 -0.38 0.00 0.38	dom	,	0.181	0.164	0.199	-25.262	0.000		
-0.75 -0.36 0.00 0.38								-0.75 -0.38 0.00 0.29	
								-0.75 -0.58 0.00 0.38	

Prevalence of GBS in 'vagina-rectum' of pregnants

Fig. 5: Prevalence of GBS in vaginal-rectal region of pregnant women

#### Antibiotic sensitivity

Among the papers selected, 28 papers had surveyed the rate of antibiotic sensitivity. The sensitivity caused by different antibiotics has been shown in (Table 1). Sensitivity to antibiotics in the conducted meta-analysis was 98.2% (96.5-99.1) to Ampicillin, 99.7% (99.2-99.9) to Vanco-

mycin, 98.9% (97.7-99.5) to Penicillin, 80.9% (64.7-90.7) to Erythromycin, and 78.9% (61.8-85.9) to Clindamycin. In present study antibiotic sensitivity to Ampicillin, Vancomycin and Penicillin reached 98-99% which was meaningfully more than the sensitivity to Erythromycin and Clindamycin.

Table 1: Sensitivity caused by	y different antibiotics
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Model	Effe	95% inter	val	Test (2-1	of null Tail)	Heterogeneity				
	Number	Prevalence	Lower	Upper	Z-	<i>P</i> -	Q-value	df	<i>P</i> -	I-
	Studies		limit	limit	value	value		(Q)	value	squared
Ampicilin	17	0.9828	0.9652	0.9915	11.01	< 0.001	263.91	16	< 0.001	93.93
Penicilin	24	0.9897	0.9773	0.9954	11.08	< 0.001	688.71	23	< 0.001	96.66
Vancomycin	17	0.9977	0.9921	0.9993	9.58	< 0.001	184.53	16	< 0.001	91.32
Erythromycin	16	0.8096	0.6476	0.9077	3.38	0.001	3635.97	15	< 0.001	99.58
Clindamycin	13	0.7590	0.6180	0.8597	3.37	0.001	1738.60	12	< 0.001	99.30

#### Antibiotic resistance

About 17 studies have considered antibiotic resistance. The rate of Antibiotic resistance was as follows: 82.92% (74-90) to Tetracycline, 28.14% (25-85) to Penicillin, 14.3% (10-19) to Erythromycin and 15.97% (10.5-23) to Clindamycin. In the present study, resistance to Tetracycline was meaningfully more than the resistance to Erythromycin and Clindamycin (Table 2).

Table 2: Resistance caused by different antibiotics

Model	Effe	ect size and s	95% inter	val	Test of T	f null (2- 'ail)	Heterogeneity			
	Number	Prevalence	Lower	Upper	Z-	<i>P</i> -	Q-	df	<i>P</i> -	I-
	Studies		limit	limit	value	value	value	(Q)	value	squared
Tetracyclin	5	0.8392	0.7401	0.9054	5.35	< 0.001	154.709	4	< 0.001	97.41
Erythromycin	15	0.1430	0.1041	0.1933	-9.70	< 0.001	514.730	14	< 0.001	97.28
Clindamycin	14	0.1597	0.1050	0.2354	-6.74	< 0.001	717.800	13	< 0.001	98.19
Penicilin	3	0.2840	0.0253	0.8584	-0.66	0.506	359.704	2	< 0.001	99.44

#### The survey of serotype distribution

Among the papers surveyed, we found that 22 papers had separated various serotypes of GBS in terms of their prevalence which inducted Ia type 17%, Ib 10%, Ic 2%, II 16%, III 22%, IV 6%, V type 15%, and VI type 1%. In the conducted studies, serotype of kind III was the most prevalent, but kind II and V were in the second and third position respectively. The least prevalence belonged to the kind IV (Table 3).

#### Prevalence according to the geographical region

Due to the difference in the prevalence of GBS in different geographical regions, we decided to study it in terms of geographical region, so the prevalence of GBS according to the continents was determined separately. Maximum prevalence belonged to Australia and Oceania with 22.54% and minimum prevalence belonged to Asia with 12.86%. The other continents had prevalence as follows: Europe with 16.41%, South American

with 18.63%, North American with 18.6%, and Africa with 19%. Considering Islamic countries such as Iran, Turkey, Saudi Arabia and Jordan which can affect the results, that is, we can see low prevalence in Islamic countries, so we have included the result of analysis for each continent separately in the appendix.

	Ef	fect size and	Test of	null (2-		Heterogeneity				
					Ta	ul)				
	Number	Prevalence	Lower	Upper	Z-value	P-value	Q-value	df (Q)	P-value	I-squared
	Studies		limit	limit						
La	22	0.1700	0.1312	0.2174	-10.20	< 0.001	1507.88	21	< 0.001	98.61
Lb	16	0.1033	0.0879	0.1211	-23.67	< 0.001	197.96	15	< 0.001	92.42
Lc	2	0.0267	0.0022	0.2548	-2.79	< 0.001	13.04	1	< 0.001	92.33
Ii	20	0.1667	0.1280	0.2142	-10.19	< 0.001	872.40	19	< 0.001	97.82
Iii	22	0.2229	0.1607	0.3004	-6.07	< 0.001	3049.76	21	< 0.001	99.31
Iv	9	0.0647	0.0436	0.0952	-12.50	< 0.001	281.41	8	< 0.001	97.16
V	19	0.1521	0.0940	0.2368	-6.15	< 0.001	2192.46	18	< 0.001	99.18
Vi	2	0.0103	0.0026	0.0394	-6.52	< 0.001	10.87	1	0.001	90.80

#### Table 3: The survey of serotype distribution

# The prevalence of GBS in pregnant women of developed and developing countries

About 33 studies had been carried out in developed countries, and heterogeneity among them was meaningful (Q=2457.62, df=32, I<sup>2</sup>=98.69). In these studies, 55288 individuals were surveyed. According to the results obtained from metaanalysis by using Random Effect Model, the prevalence of GBS in pregnant was 17.74%. (17.74%, CI=95% (14.69-21.27)). The prevalence of GBS in pregnant women of developed countries has been shown in the appendix. About 99 studies had been conducted in developing countries, and the heterogeneity among them was meaningful (Q=2405.46, df=98, I<sup>2</sup>=95.93). In these studies, 60392 individuals were surveyed. According to the results obtained from metaanalysis with the use of Random Effect Model, the prevalence of GBS in pregnants was 14.92% (p:14.92, CI=95% (13.46-16.561)). The prevalence of GBS in pregnant women of developing countries has been shown in the appendix. According to Ratio Test, the difference between developed and developing countries in the prevalence of GBS in pregnants was meaningful statistically (P<0.001).

## Discussion

Streptococcus group B is abundantly colonized in vagina and rectum of pregnant women which is in accordance with the surveyed studies; however, the prevalence of it differs geographically. In the present study, the prevalence of GBS in pregnant was 15.5%. There have been systematic reviews dealing with the prevalence of GBS in pregnant and its geographical distribution, but no up-to-date study has been conducted which could compare the prevalence in Islamic and non-Islamic countries.

The quality of the papers was surveyed by making use of the checklist related to the prevalence studies of JBI. Most of the papers met the requirements needed to enter our study. Out of them 10 papers did not have suitable quality, and we could not survey quality of 6 papers due to its unavailability and abstract use. Thirteen papers did not have a suitable sample size. In most papers, the respective population selection method had taken place without randomization, and the method of sampling and culture had not been extensively stated in 17 papers. Moreover, there had been no reference to the sampling method in 5 papers; however, the other papers had explained the sampling method and the suitable culture media in detail.

In this study, the general prevalence of GBS in Islamic and non-Islamic countries was 14% and 16.3% respectively, but this result should be analyzed in terms of the study restrictions and the effects brought about by defacing variants.

Majority of the studies had been carried out with large sample size in developed countries, yet less developed countries had small sample size, and no study had been conducted to represent the difference between developed and developing countries in this respect. In the present study, the prevalence in developed and less developed countries was 17.74% and 14.92% respectively. Considering the fact that all Islamic countries belong to the less developed group of countries, we cannot rely on the low prevalence of this infection in Islamic countries only because of the repeated wash which is the hypothesis of this study. Another limitation of the studies was concerned with using various culture medias. Through surveying the papers, we noticed that enriched culture media had been used a lot in developed countries, but in less developed countries such as Islamic countries where researchers had utilized culture medias based on Blood Agar. Since culture medias based on Blood Agar bearing less sensitivity in diagnosis cause the prevalence to seem low, making firm judgment about the low prevalence in Islamic countries may lead to ambiguity.

Still another limitation of the surveyed papers was that the sample had been selected in an unrandom manner in the majority of them which causes us to give contradictory judgment about the results of the study.

Another limitation of the studies was related to the time of sampling in pregnant. In the systematic review carried out recently, researchers have come to the conclusion that the prevalence of GBS in pregnant sampled before the 35<sup>th</sup> week was more than those sampled after 35<sup>th</sup> week. However, the result of the sampling in the 2<sup>nd</sup> and 3<sup>rd</sup> trimesters compared with that of early weeks of pregnancy are more predictable in the case of colonization of pregnant by GBS. Considering the point that the exact date of sampling had not been mentioned in some papers or the date had covered a long period of pregnancy in some others such as 2<sup>nd</sup> and 3<sup>rd</sup> trimester, in the present study, analysis and conclusion drawn about the prevalence in terms of sampling time was impossible.

## Conclusion

Frequent washing of perineum based on religious instructions in Islamic countries can diminish the rate of GBS colonization in pregnant women.

## **Ethical considerations**

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

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## **Conflict of interest**

The authors declare that there is no conflict of interest.

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