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Abstract:

Objectives: Prevalence of pesticide, corrosives, drugs, venom and miscellaneous poisoning in India.

Settings: Systematic literature search was done in PubMed Central, Cochrane and google scholar databases for studies satisfying inclusion criteria. Systematic review and meta-analysis of all observational studies published in English language between 2010-May 2020 were included in this review.

Participants: Patients exposed to poisoning reported to hospitals were included.

Primary and Secondary outcome measures: Prevalence of Pesticides poisoning. Prevalence of corrosives, venom, drugs and miscellaneous agents along with subgroup analysis based on age and region. Odds ratio was calculated in two groups along with 95% CI. Percentage of person with poisoning along with 95% CI will be analyzed.

Results: Pooled analysis of studies revealed that pesticide poisoning constitutes to be the main cause of poisoning with incidence of 63%(95%CI–63% to 64%) in adults and miscellaneous to be the main cause in children with incidence of 45.0%(95%CI–43.1% to 46.9%), presenting to hospital. Pesticide was most prevalent in north India (79.1%,95%CI–78.4% to 79.9%) followed by south (65.9%,95%CI–65.3% to 66.6%), central (59.2%,95%CI–7.9% to 60.4%), west (53.1%,95%CI–51.9% to 54.2%), north east (46.9%,95%CI–41.5% to 52.4%) and eastern (38.5%, 95%CI–37.3% to 39.7%) part of India. The second most common cause of poisoning was with miscellaneous (18%, 95%CI – 18% to 19%) agents, followed by drugs (10%, 95% CI – 10% to 10%), venoms (6% (95%CI– 6% to 6%) and corrosives (2%, 95%CI–1% to 2%).

Conclusions: Pesticide poisoning is the most common type of poison used in adults while miscellaneous agent remain main cause of poisoning in children.

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Key words: Prevalence, Poisoning, Pesticides, Drugs, India.

Article Summary

The study provides comprehensive overview of poisoning in India as analyzed from 134 observational studies from 2010-2020.

Data shows types, modes, demographic patterns and prevalence rates of poisoning cases as well as the identification of high-risk people.

The data presented in this study may be underreported as moderate to severe poisoning cases reports to hospital.

There was no analysis on medical outcome of patients thereby restricting the study's scope of analysis.

Introduction:

A poison is a substance that is capable of causing illness or harm to living organisms on contact or upon introduction into the body and may be used deliberately with this intent. Toxins and venoms are poisons of biological origin, with the latter term usually reserved for those injected by the bite or sting of a poisonous animal. Poisoning has become an increasing cause of concern over the past decade, not only a major medical issue in India but also a significant global health problem [1].

Deaths due to suicide stands out to be around 793 thousand in the year 2016. It implies that the annual world suicide rate of 10.5 per lakh population but in India its rate was almost double (18.5 suicide deaths for 1 lakh population). Suicide by consuming poison is a leading cause death in emerging countries (https://www.who.int/news-room/fact-sheets/detail/suicide). Among the poison, agricultural pesticides constitutes major mode of poisoning in India [2]. Other modes of poisons are household agents, envenomation, or drugs. It is observed that agricultural or household pesticides and drugs are taken intentionally and corrosives, kerosene, bites, and other miscellaneous agents are taken accidently. Pesticide poisoning in India is highly prevalent because of its widespread use for agricultural and household activities [3, 4].

The aggravating or predisposing factors in developed countries like India, varies from financial stress to psychiatric illness, along with socio-cultural practices like patriotism, only men involved in economic activities etc. [5-7]

Due to lack of comprehensive scientific data on their prevalence and variation with age and region, the preventive, curative and rehabilitation measures are poorly implemented in India. This study planned to do systematic review and meta-analysis from published articles in India about prevalence of various poisons in India and their variation with age and region.

Materials and Methods:

Protocol and registration: PROSPERO 2020 CRD42020199427 Available from:

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Methods: In this review, we have surveyed and evaluated various studies across India regarding the prevalence of poisoning. In this, a poison could be pesticide, corrosives, venom, drugs and other miscellaneous agents. This study aims to analyze the prevalence of poisoning in India and in different region of the country and its difference in poisoning with age.

Eligibility criteria: study participants, who exposed to acute poisoning, irrespective of outcome of patients included in analysis. We had included observational studies (retrospective/prospective/cross-sectional) published between the year 2010-2020 in English language with prevalence of poisoning of poisoning in India. This analysis helps in generating overall prevalence of poisoning in India and their variation with age and region.

Information sources: A literature search done using the MeSH terms, such as 'prevalence' 'poison', 'poisoning' , 'pesticides', 'organophosphate', 'corrosives', 'drugs' and 'India', from three databases (PubMed Central, Cochrane and google scholar). Additional studies were identified through cross-references of selected article.

Search: Search strategy of PubMed provided in **Supplementary file 1**. Last search was done on May 2020.

Study selection and data collection process: studies were selected based on predefined eligibility criteria. All eligible articles taken for further screening after removing duplicates and unrelated to study inclusion criteria. Studies which are included after review of abstracts were evaluated by screening the full text. All data with regard to authorship, year of publication, study design, study population (patients consumed poison), baseline characteristics (age, sex,

marital status, educational status, type of family etc.), list of poisons included in the study, total study population, and any other relevant outcomes essential for data synthesis were extracted from the selected studies. Study selection and data collection was done by two authors independently and compiled after complete data retrieval. If any conflict exists than third author revised and resolved the conflict.

Summary measures: The data on prevalence was presented in percentages across the age group and regions.

Meta-analysis (quantitative synthesis)

Dichotomous data i.e. percentage of subjects having particular poisoning were analysed and reported along with 95% confidence interval (CI). The meta-analysis of proportions was done using R software. R software packages used were meta and metafor. The results of both random effect model as well as fixed effect model were calculated. Fixed effect model assumes that the between study variance is zero, whereas random effect model takes both within- and between-study variances into account. If the heterogeneity is greater than 40%, the results of random effect model will be more representative of the data. To prevent the underestimation of size of the confidence interval around the weighted average proportion and an overestimation of the degree of heterogeneity across the observed proportions, we used Freeman Tukey double arscine transformation (DAT). This will help the data to conform to the normal distribution as much as possible, enhancing the validity and generalizability of statistical analyses.

Heterogeneity was estimated using tau (τ). Sub-group analysis was done to estimate whether there is difference in percentage of individuals ingested pesticide poisoning with regard to geographical area and among children and adults. This was done with the assumption that there is common between study variance component across studies, thereby pooling the within group estimates of τ^2, estimated using Freeman Tukey DAT.

GRADE Pro analysis to Assess the Quality of Evidence: The overall quality of evidence for each of the outcomes would have been assessed using GRADE pro GDT (guideline development tool) software based on the principles of Grades of Recommendations, Assessment, Development and Evaluations (GRADE) [8], [4]. GRADE pro doesn't recommend for analysis of grading the evidence if it is a single group analysis. Hence no Grading of evidence was done for endpoints.

Patient and Public involvement

No patients involved

Results:

Study selection: An initial search of all the databases yielded a total of 859 articles. After removal of duplicates, 626 articles remained, which were subjected to the inclusion and exclusion criteria laid down. A thorough screening of the papers based on their title and abstract reduced the search results to 214 and in the final analysis 137 articles included. Authors of the one article was contacted with requests to help us access their specific poisoning data, which was excluded as it was not provided. The final qualitative and quantitative synthesis was performed on 134 research articles. Given below, **Figure 1** illustrates a flow chart with the various steps of the Systematic Review.

Study characteristics: Study characteristics of included studies enumerated in **Table 1** and description of each study along with their references along with various poisonous agents taken by study population listed in **supplementary Table S1a and S1b**.

Demographic distribution: The manner of poisoning shows that, the suicidal poisoning more common than the accidental poisoning. The highest prevalence of poisoning was observed in persons between the age group of 19-40 years (105 studies). Overall sex ratio was 1.7. Male to female ratio was highest in northern region of India (2.35) and lowest in eastern region of India (1.28).

Agents responsible for poisoning: we have broadly classified poisons into 5 categories, pesticides, corrosives, venom, drugs and others. Overall, pesticide poisoning stands to be more common in India and across the region and then miscellaneous (18%), than drugs (11%) and venom (10%), and corrosives (3%). (Details of poisonous agent in each group enumerated in supplementary **Table 1S b**)

Study type: Majority of the studies were retrospective observational studies (retrospective studies: 75, prospective studies: 47, cross-sectional studiers: 12).

Outcomes: the pooled data prevalence of various poisons enumerated in **Table 2**

Percentage of Pesticide and Corrosives poisoning

Pooled analysis of studies revealed pesticide poisoning to be the main cause of poisoning in 63%(95%CI–63% to 64%;I^2 =100%,p<0.01) presenting to hospital, using fixed effect model. The random effect model prevalence of pesticide poisoning among individual to be around 62% (95%CI–56% to 68%) (**Supplementary Figure 1**). In adults, pesticide poisoning is main cause of poisoning in 65.3% (95%CI–64.8% to 65.7%) and 66.8% (95%CI–61.4% to 71.9%) of individuals, using fixed and random effect models. In children, pesticide is responsible for 22.4% (95%CI–20.7% to 24.0%; I^2=100%, p<0.01) and 23.2%(95%CI–11.4% to 37.6%) of children, with fixed and random effect, respectively (**Supplementary Figure 1**). Prevalence of pesticide poisoning in Central, east, north-east, north, south and west regions of India were among 59.2%(95%CI–57.9% to 60.4%;I^2=99%,p<0.01), 38.5%(95% CI–37.3% to 39.7%;I^2=99%, p<0.01), 46.9%(95%CI–41.5% to 52.4%; I^2=0%,p=0.64), 79.1%(95%CI–78.4% to 79.9%;I^2=100%,p<0.01), 65.9%(95%CI–65.3% to 66.6%;I^2 = 99%,p<0.01), 53.1%(95%CI–51.9% to 54.2%;I^2 = 99%,p<0.01) with fixed effect model analysis (**Supplementary Figure 1**). The random effect results were given in **Supplementary Figure 1**. Pesticide was most prevalent poisoning in North India followed by south, central, west, north east and eastern part of India.

Pooled analysis of studies revealed corrosives to be the cause of poisoning in 2% (95%CI – 1% to 2%; I^2 = 96%, p<0.01) and 3% (95% CI – 2% to 3%) in patients, using fixed effect and random effect model, respectively (**Supplementary Figure 2**).

Percentage of Venom and Drugs poisoning

Pooled analysis of studies revealed cause of poisoning to be snake bites in 6% (95%CI–6% to 6%; I^2=99%, p<0.01) of individuals presenting to hospital, using fixed effect model. The

random effect model prevalence of snake bite poisoning among individual to be around 3% (95% CI–2% to 5%) (**Supplementary Figure 2**).

The fixed and random effect model predicts prevalence of drugs poisoning among individuals to be around 10% (95%CI–10% to 10%, I^2 = 98%, p<0.01) and 9% (95%CI–7% to 11%), respectively (**Supplementary Figure 2**).

Percentage of Miscellaneous causes of poisoning

Pooled analysis of studies revealed poisoning with miscellaneous agents in 18% (95%C –18% to 19%; I^2=99%, p<0.01) in individuals presenting to hospital, using fixed effect model. The random effect model prevalence of miscellaneous agents poisoning among individual to be around 15% (95%CI–13% to 18%) (**Supplementary Figure 3**). In adults, miscellaneous agents are second most common cause of poisoning with 16.9% (95%CI–16.6% to 17.3%) and 12.8% (95%CI–10.3% to 15.6%) of individuals, using fixed and random effect models. In children, miscellaneous agents are most common cause of poisoning, responsible for 45.0% (95% CI–43.1% to 46.9%; I^2 = 99%, p<0.01) and 39.6% (95%CI–12.7% to 18.1%) of children, with fixed and random effect, respectively (**Supplementary Figure 3**).

Subgroup analysis of Corrosive and Venom poisoning

In adults, prevalence of corrosive poisoning was 1.3% (95% CI–1.1% to 1.4%; I^2=95%, p<0.01) and 1.7% (95%CI–1.1% to 2.5%) of individuals, using fixed and random effect models. In children, prevalence of corrosive poisoning was 10.8% (95%CI–9.6% to 12%; I^2=91%, p<0.01) and 11.2% (95%CI–7.2% to 15.8%) of children, with fixed and random effect, respectively (**Supplementary Figure 4**). Corrosives was most prevalent poisoning in childrens than adults in India. Prevalence of venom poisoning in east and west regions of India were among 24.6%(95% CI–23.6% to 25.7%;I^2=99%, p<0.01), 15.1%(95%CI–14.3% to 16%;I^2 = 99%,p<0.01) with fixed effect model analysis (**Supplementary Figure 4**). The fixed effect

model analysis of other regions and the random effect results of all regions were given in **Supplementary Figure 4.** Venom was most prevalent poisoning in East and West India than other parts of India.

Publication Bias

Publication bias was low, as the funnel plot of 134 studies appears to be asymmetrical around the intervention effect estimate for percentage of individuals having pesticide poisoning (**Figure 2**). We applied Egger's regression test for funnel plot asymmetry which showed the value of t = 0.9137 and p-value of 0.3609, indicating low publication bias.

Discussion:

To understand the poisoning trends in India, a comprehensive analysis of various poisons and their distribution among different age group and regions is essential. The epidemiological data on poisoning available in India is either from government sources (NCRB) or independent studies conducted at the tertiary care hospitals. It has been observed that, about 25% in males and 36% in female deaths underreported in NCRB [2]. Therefore, we conducted this study to analyse the prevalence of various poisoning in India from the published observational studies.

Suicidal deaths constitutes to be the leading cause of death in individual between 15–39 years in India by consuming poisonous agents or by hanging[9]. Death by poisoning constitutes to be major public health issue in India [10]. Pesticides poisoning constitutes to be the leading cause of poisoning because of coexistence of poverty, agricultural farming and patriarchal society in India[11].

Present review showed that highly vulnerable age group was 19-40 years (45%), the finding supported by Kamaruzaman et al., who concluded that about 44.6% of poisoning patients aged between 20-39 years [12]. This was relatively different from the findings of Patel et al., who observed that suicide was most common between 15-29 years of age [2]. This difference may be due to design of the study. People of this age group, has burden of being more responsible in society due to social transformation[13]. The sex ratio in our study shows that, males 1.7 times more commonly exposed to poisoning than the females and this was higher than the earlier study conducted (1.7 vs 1-1.5)[2]. This difference may be because of inclusion of all cases of suicides instead of poisons, as done in our study. Men of low socio-economic status and farmers faces severe stress and strain because of their inability to live up to the expectations of others in the rapid urbanizing society. Increased risk taking behaviour and inability to support themselves and family responsibilities due to low income from farming, often leads to increases

in the suicidal ideation[14, 15]. In India, women after marriage has to migrate to men house and she has to adopt new traditions, rituals and customs [16]. This sort of migration and prevalent patriarchal behaviour increases the conflict and mistreatment of women[17]. Factors like family quarrels, dowry, cruelty by in-laws, etc. along with lack of independent source of income of house wives results in their over dependence on men leading to self-harm[18, 19]. This leads to increased suicides by consuming poisons.

Pesticide poisoning stands out to be most common type of poison with overall prevalence of 62%(2 in every 3 poison cases) and it contributes to be 68% in adult population and 32% in children. Region wise, the proportion of pesticide poison in north India is about 79%(more than 3/4th of total poison cases), south India 65%, central India 60%, western India 53% and less than 50% in east and north east India. World health organisation (WHO) and its member countries initiation to safe access of pesticides resulted in decrease in prevalence of fatal poisoning by 10% across the world but it is still the leading cause of poisoning in South Asian countries including India, South East Asia and China[1, 20-22].

Strict restriction of highly lethal pesticides by legal or policy actions drastically reduces the deaths [6, 23, 24]. Preventive measure must be developed for high-risk groups identified in the study. Legislative control on the sale and use of pesticides, and stress management are recommended along with better health care facilities to prevent poisoning related death.

The prevalence of corrosive poisoning in India found to be around 2% of total poisoning cases and their age wise distribution showed that in adult population it constitutes around 1.3% and in children's around 10.8%. Higher prevalence of poisoning by corrosives in children's may due to their inquisitive nature as they tend to explore household items which may include corrosive cleaning products [25]. In USA, corrosive ingestions constitutes about 8%–9% of total

poisoning in all patients[26]. This difference may be because of underreporting of events in India[25].

Snake bite remains a major challenge in rural India as 71% of total population lives in rural India and primarily depend on agriculture. The overall prevalence of venom poisoning in India stands to be 6% of all poisoning cases. We have seen that there was large scale regional variation in the total number of cases reported with different poisons. Among all poisons, snake bites constitutes around 24% and 15% of poisoning in eastern and western part of India respectively. This regional distribution may be because of topography of eastern and western Ghats. The spatial distribution cases were similar to Suraweera et al. in the eastern part but not in the western part. This difference is due to exclusion of studies reporting only snake bites from analysis [27].

Drug over dosage constitutes about 10% of poison cases in India, may be due to easy availability of drugs and alcohol. In India, many prescription drugs are available over the counter. Though we haven't performed sex wise distribution of drug poisoning but evidence from earlier literature showed that females used drugs more commonly to commit suicide [13]. In agricultural societies, males typically work at the field during daytime, whereas women look after household chores. Therefore, the choice of pesticides among men and drugs or chemicals among women may be explained partially by occupational proximity[28]. Most commonly used drugs were alcohol, antipsychotics and antiepileptic's, due to easy accessibility and over the counter sale of drugs.

Miscellaneous agents accounts for about 18% cases among all causes of poison. In children's, its prevalence was 45% whereas in adults 16%. This may be due to accidental exposure to miscellaneous agents because of exploratory behaviour in children. Negligence of parents and caretakers may also be contributing factor [29-31]. Poisoning in preschool or toddler age group

is primarily unintentional or accidental. Poisoning in adolescent age group is mostly of suicidal nature. Most commonly kerosene and other household products and less commonly drugs and pharmaceuticals are the cause of poisoning in adults [32-34].

The purpose of present study was primarily to determine the prevelance of various poisonous agents, the corresponding area-wise distribution of type of poisoning in the demographic area. Overall, men in the age group of 19-40 years commonly consume pesticide poisons and housewives and children's consumes either drugs or miscellaneous agents intentionally or accidently. Establishment of specialized toxicological units for detection and management of poisoning cases at all hospitals and primary health care centres could considerably minimize the morbidity and mortality due to poisoning. Similar to USA, India must develop a central database on national poisoning statistics. Adequate preventive measures with stable employment opportunities and bridging the socio cultural gaps between male and female along with proper supervision and care for children's can reduce the poisoning incidences in India.

Strengths and limitations of this study: The study provides comprehensive overview of poisoning in India as analyzed from observational studies published from 2010 to 2020. Data showed types, modes, demographic patterns and prevalence rates of various poisoning cases. In addition, persons at high-risk of poisoning with particular agent. The data presented in this study may be underreported as moderate to severe poisoning cases reports to hospital. There was no analysis on medical outcome of patients, thereby restricting the scope of analysis.

Conclusion: Pesticide is the most common type of poison used in adults while miscellaneous agent remains the main cause of poisoning in children. Overall, pesticides poisoning was most commonly used poison, observed among male farmers of rural India. This information will be useful for government of India for its decentralized and people centric policy decisions to meet

its target under United Nations Sustained Developmental Goals (SDG) for substantially reducing illness and death due to poisoning.

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Author Contributions.

Study design and planning of systematic review - All of the authors

Literature search – SBV, CM, SS

Figures - PKM, SS

Tables – SBV, PKM, CM

Data collection and analysis - SS, SBV, PKM

Data interpretation – SS, CM, SBV, PKM

Writing – All authors

Corrections and Final approval of Manuscript - All of the authors

Data statement section: we will submit preliminary data once study gets accepted.

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Figure Legends

Figure 1 PRISMA Flow Chart of selection of studies for systematic review

Figure 2: Publication Bias

Supplementary Figure: Percentage of patients with Pesticide poisoning (1Sa - Overall, 1Sb - Age wise and 1Sc - Region wise)

Supplementary Figure 2: Prevalence of poisoning with Corrosives (2Sa), Venom (2Sb), and Drugs (2Sc)

Supplementary Figure 3: Prevalence of poisoning with Miscellaneous agents (3Sa) and Age wise distribution (3Sb)

Supplementary Figure 4: Age wise distribution of corrosives (4Sa) and Region wise distribution of venom (4Sb).

Table 1: Baseline characteristics of study population included in the analysis

Table 2: Percentage pooled data of various poisoning encountered in India

Supplementary Table S1a and S1b: Characteristics of all studies (1Sa), List of Poisons consumed in the included studies (1Sb).

Supplementary File: Search strategy.

Table 1: Baseline characteristics of study population included in the analysis

Study characteristics	Percentage of study population
Type of studies (N=134)	
1. Retrospective	56%
2. Cross sectional	9%
3. Prospective	35%
Regional distribution study population (%)	
1. Central (N=21; n=5854)	11%
2. East (N=9; n=6684)	13%
3. North East (N=2; n= 330)	1%
4. North (N=21; n=11628)	22%
5. South (N=61; n=21212)	40%
6. West (N=20; n=7123)	13%
Male female Ratio	
1. Central (N=21; n=5854)	1.51
2. East (N=9; n=6684)	1.28
3. North East (N=2; n= 330)	1.66
4. North (N=21; n=11561)	2.35
5. South (N=61; n=21279)	1.77
6. West (N=20; n=7123)	1.87
7. India (N=134; n=52831)	1.74
Age wise distribution	
1. >18 years (n=12642)	26%
2. 19-60 (n=34653)	70%
3. >60 (n=2228)	4%
Marital status(N=62)	
1. Married (n=12027)	65%
2. Unmarried (n=6499)	35%
Educational status(N=31)	
1. Literate (n=5467)	70%
2. Illiterate (n=2373)	30%
Type of family(N=13)	
1. Nuclear (n=1248)	41%
2. Joint (n=1780)	59%
Area wise distribution(N=80)	
1. Rural (n=15896)	62%
2. Urban (n=9726)	38%
Occupational distribution(N=61)	
1. Farmers (n=9404)	56%
2. House wives (n=2481)	15%
3. Students (n=1686)	10%
4. Labourers (n=1448)	9%
5. Service (n=609)	4%
6. Unemployed (n=704)	4%
7. Self-employed (n=385)	2%
Manner of poisoning (N=111)	
1. Suicidal (n=30652)	71%
2. Accidental (n=11616)	27%
3. Others (n=926)	2%

N-total number of studies; n-sample size

Table 2: Percentage pooled data of various poisoning encountered in India

Outcome	% of pooled data	95% CI	I^2	p-value
Percentage Pesticide poisoning				
Overall	FEM -63% REM - 62%	63% to 64% 56% to 68%	100%	<0.01
Adults	FEM-65.3% REM- 66.8%	64.8% to 65.7% 61.4% to 71.9%	100%	<0.01
Childrens	FEM-22.4% REM- 23.2%	20.7% to 24.0% 11.4% to 37.6%	94%	<0.001
Region wise				
Central	FEM-59.2% REM- 60%	57.9% to 60.4% 46.5% to 74.2%	99%	<0.01
East	FEM-42.3% REM- 60%	37.3% to 39.7% 22% to 64%	99%	<0.01
North East	FEM-46.9% REM- 47.5%	41.5% to 52.3% 8.2% to 88.8%	0%	=0.64
North	FEM-79.1% REM- 56.4%	78.4% to 79.9% 42% to 70%	100%	<0.01
South	FEM-65.9% REM- 68.6%	65.3% to 66.6% 60% to 76%	99%	<0.01
West	FEM-63.1% REM- 61.9%	62.7% to 63.5% 56.3% to 67.4%	99%	<0.01
Percentage Corrosive poisoning				
Overall	FEM- 2% REM -3%	1% to 2 % 2% to 3%	96%	<0.01
Adults	FEM- 1.3% REM-1.7%	1.1% to 1.4% 1.1% to 2.5%	95%	<0.01
Childrens	FEM-10.8% REM-11.2%	9.6% to 12% 7.2% to 15.8%	91%	<0.01
Percentage Venom poisoning				
Overall	FEM- 6% REM- 3%	6% to 6% 2% to 5%	99%	<0.01
Region wise				
Central	FEM-1.4% REM- 2.3%	1% to 1.7% 0.3% to 5%	97%	<0.01
East	FEM-24.6% REM- 12%	23.6% to 25.7% 4.9% to 21%	99%	<0.01
North East	FEM-10.9% REM- 6.2%	7.7% to 14% 0% to 25%	98%	<0.01
North	FEM-0.07% REM- 1.2%	0% to 0.2% 0% to 4.2%	95%	<0.01
South	FEM-3.5% REM- 1.9%	3.2% to 3.8% 0.6%% to 3.7%	98%	<0.01
West	FEM-15.1% REM- 10%	14.3% to 16% 5.2% to 16%	99%	<0.01
Percentage Drug poisoning				
Overall	FEM-10% REM- 9%	10% to 10% 7% to 11%	98%	<0.01
Percentage of Miscellaneous causes of poisoning				

Overall	FEM-18% REM- 15%	18% to 19% 13% to 18%	99%	<0.01
Adults	FEM- 16.9% REM-12.8%	16.6% to 17.3% 10.3% to 15.6%	99%	<0.01
Childrens	FEM- 45% REM- 39.6%	43.1% to 46.9% 29.1% to 50.5%	94%	<0.01

FEM: Fixed Effect Model, REM: Random Effect Model.

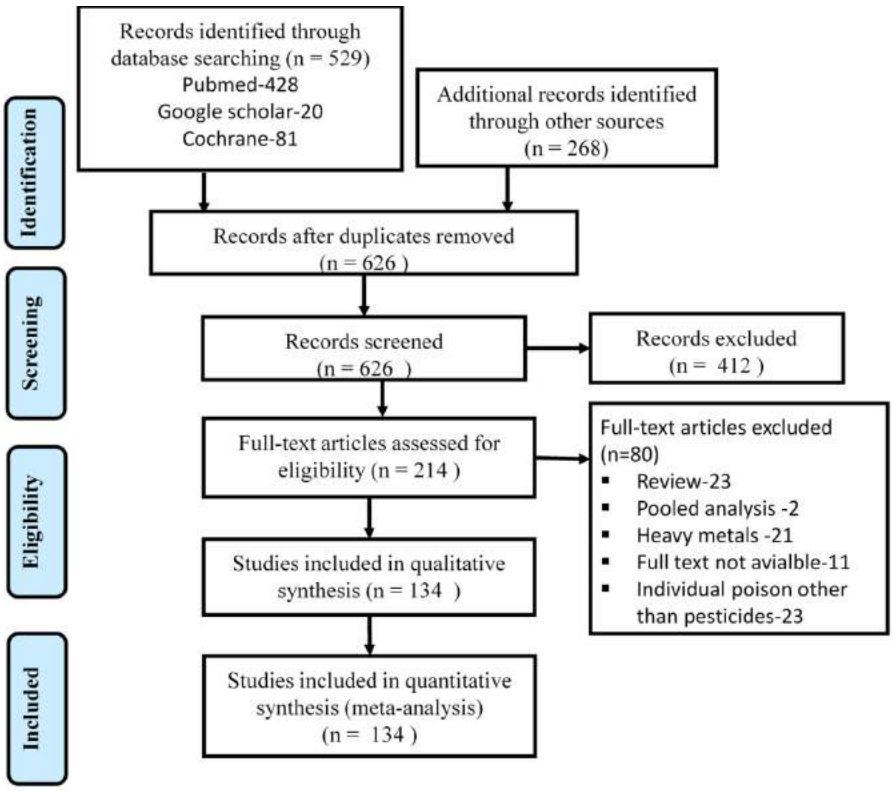

Figure 1 PRISMA Flow Chart of selection of studies for systematic review

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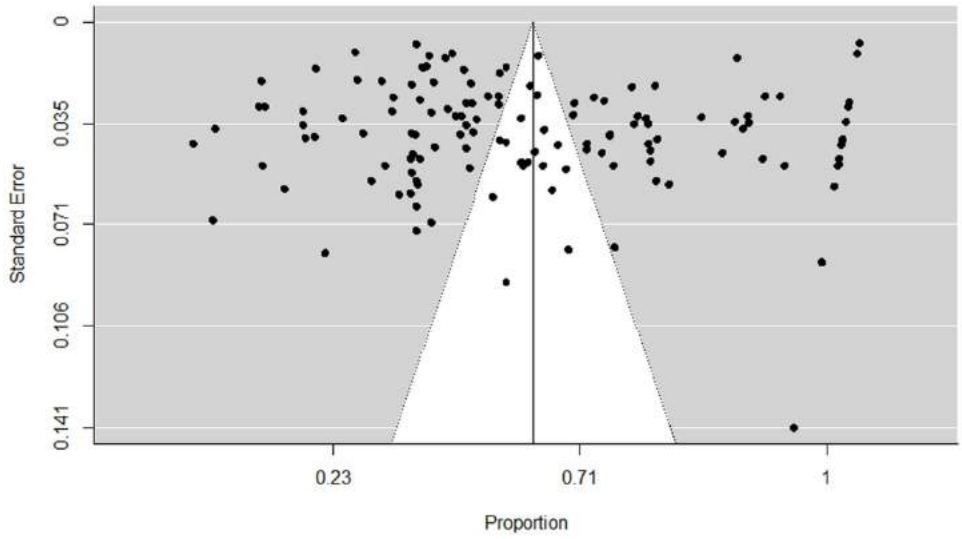
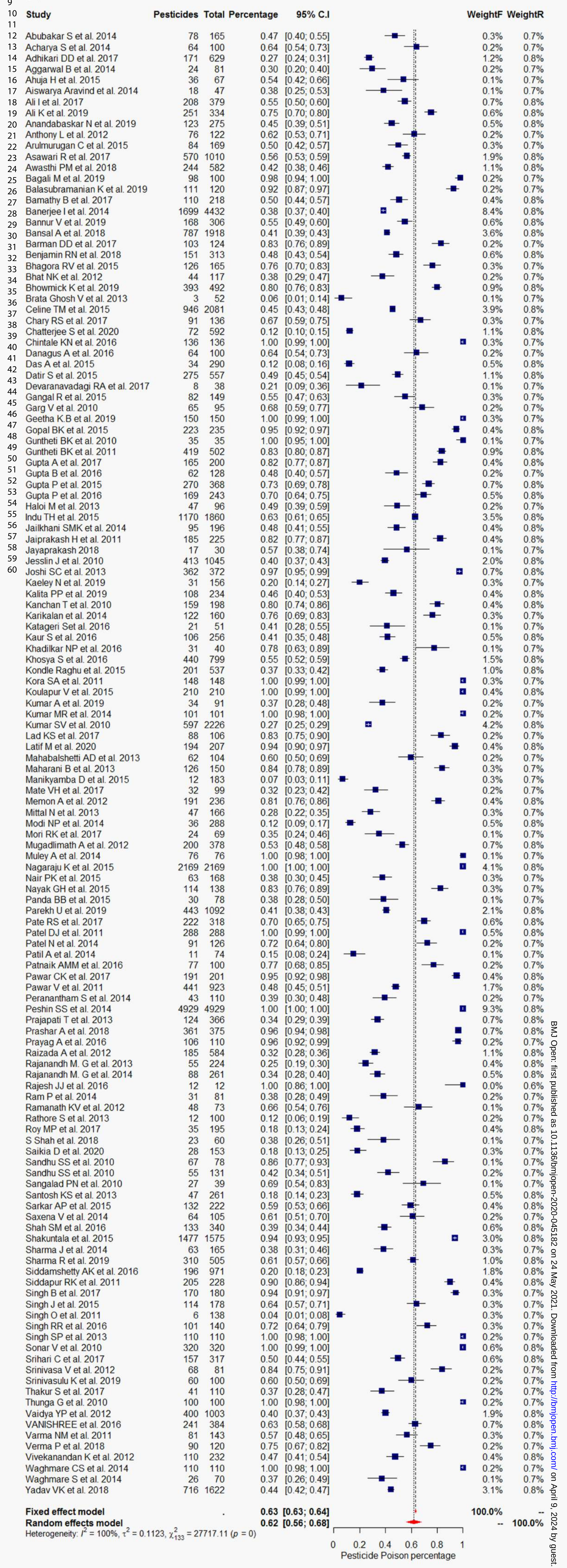


Figure 2: Publication Bias

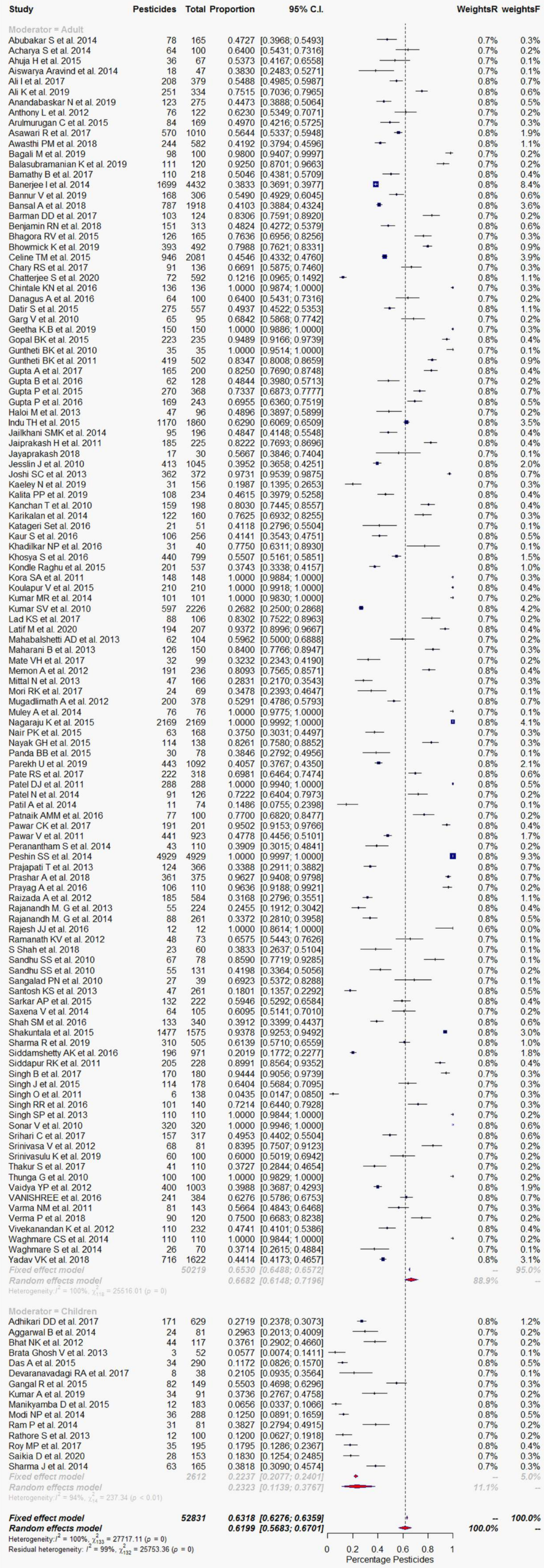
160x102mm (300 x 300 DPI)

Supplementary Figure 1Sabc: Percentage of patients with Pesticide poisoning (1Sa - Overall, 1Sb Age wise and 1Sc - Region wise)

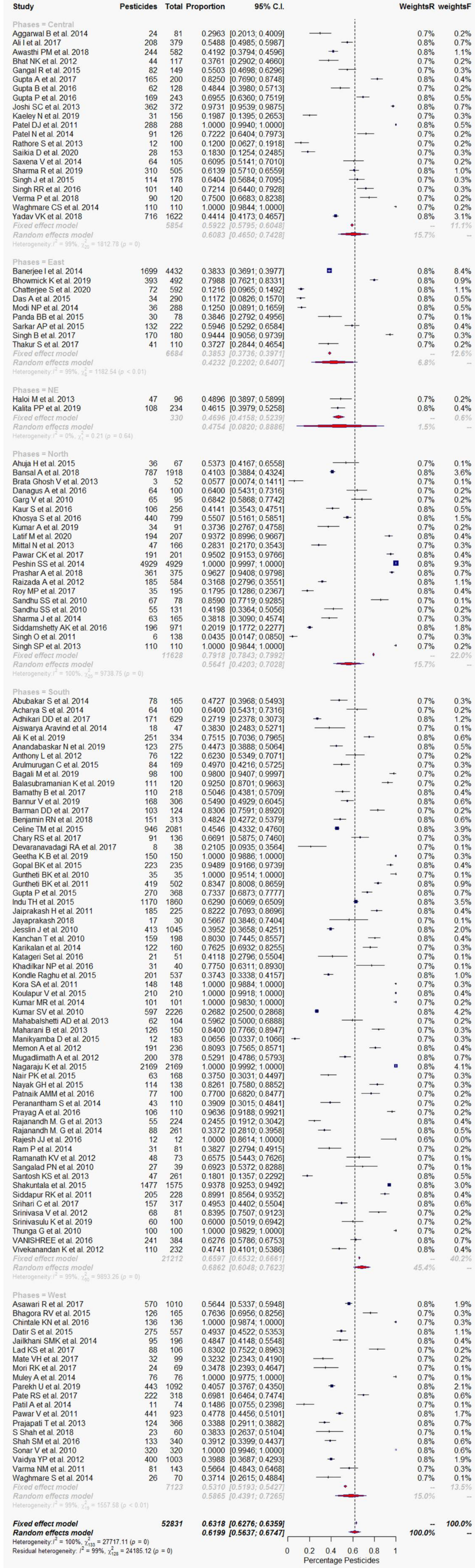
1Sa



1Sb



1Sc

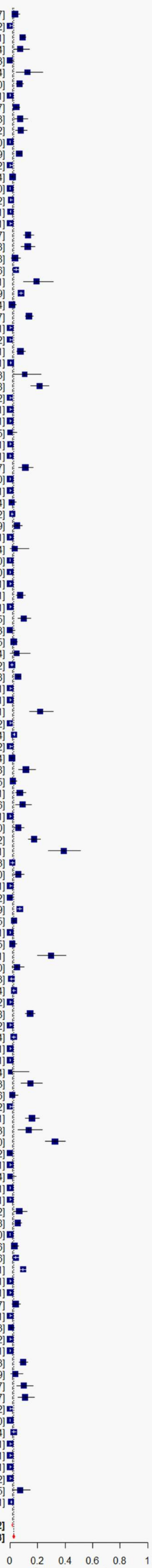


Supplementary Figure 2Sabc: Prevalence of poisoning with Corrosives (2Sa), Venom (2Sb), and Drugs (2Sc)

2Sa

Study	Corrosives	Total	Percentage	95% C.I	WeightF	WeightR
Abubakar S et al. 2014	6	165	0.04	[0.01; 0.07]	0.4%	0.8%
Acharya S et al. 2014	0	100	0.00	[0.00; 0.02]	0.2%	0.7%
Adhikari DD et al. 2017	57	629	0.09	[0.07; 0.11]	1.4%	0.8%
Aggarwal B et al. 2014	6	81	0.07	[0.03; 0.14]	0.2%	0.7%
Ahuja H et al. 2015	0	67	0.00	[0.00; 0.03]	0.1%	0.7%
Aiswarya Aravind et al. 2014	6	47	0.13	[0.04; 0.24]	0.1%	0.7%
Ali I et al. 2017	26	379	0.07	[0.05; 0.10]	0.8%	0.8%
Ali K et al. 2019	0	334	0.00	[0.00; 0.01]	0.7%	0.8%
Anandabaskar N et al. 2019	12	275	0.04	[0.02; 0.07]	0.6%	0.8%
Anthony L et al. 2012	9	122	0.07	[0.03; 0.13]	0.3%	0.8%
Arulmurugan C et al. 2015	13	169	0.08	[0.04; 0.12]	0.4%	0.8%
Asawari R et al. 2017	0	1010	0.00	[0.00; 0.00]	2.2%	0.8%
Awasthi PM et al. 2018	38	582	0.07	[0.05; 0.09]	1.3%	0.8%
Bagali M et al. 2019	0	100	0.00	[0.00; 0.02]	0.2%	0.7%
Bamathy B et al. 2017	4	218	0.02	[0.00; 0.04]	0.5%	0.8%
Banerjee I et al. 2014	0	4432	0.00	[0.00; 0.00]	9.8%	0.8%
Bannur V et al. 2019	2	306	0.01	[0.00; 0.02]	0.7%	0.8%
Bansal A et al. 2018	5	1918	0.00	[0.00; 0.01]	4.2%	0.8%
Barman DD et al. 2017	0	124	0.00	[0.00; 0.01]	0.3%	0.8%
Benjamin RN et al. 2018	41	313	0.13	[0.10; 0.17]	0.7%	0.8%
Bhagora RV et al. 2015	21	165	0.13	[0.08; 0.18]	0.4%	0.8%
Bhat NK et al. 2012	4	117	0.03	[0.01; 0.08]	0.3%	0.8%
Bhowmick K et al. 2019	21	492	0.04	[0.03; 0.06]	1.1%	0.8%
Brata Ghosh V et al. 2013	10	52	0.19	[0.10; 0.31]	0.1%	0.7%
Celine TM et al. 2015	165	2081	0.08	[0.07; 0.09]	4.6%	0.8%
Chary RS et al. 2017	2	136	0.01	[0.00; 0.04]	0.3%	0.8%
Chatterjee S et al. 2020	81	592	0.14	[0.11; 0.17]	1.3%	0.8%
Chintale KN et al. 2016	0	136	0.00	[0.00; 0.01]	0.3%	0.8%
Danagus A et al. 2016	0	100	0.00	[0.00; 0.02]	0.2%	0.7%
Das A et al. 2015	22	290	0.08	[0.05; 0.11]	0.6%	0.8%
Datir S et al. 2015	2	557	0.00	[0.00; 0.01]	1.2%	0.8%
Devaranavadagi RA et al. 2017	4	38	0.11	[0.02; 0.23]	0.1%	0.6%
Gangal R et al. 2015	32	149	0.21	[0.15; 0.28]	0.3%	0.8%
Garg V et al. 2010	0	95	0.00	[0.00; 0.02]	0.2%	0.7%
Geetha K.B et al. 2019	0	150	0.00	[0.00; 0.01]	0.3%	0.8%
Gopal BK et al. 2015	0	235	0.00	[0.00; 0.01]	0.5%	0.8%
Guntheti BK et al. 2010	0	35	0.00	[0.00; 0.05]	0.1%	0.6%
Guntheti BK et al. 2011	1	502	0.00	[0.00; 0.01]	1.1%	0.8%
Gupta A et al. 2017	0	200	0.00	[0.00; 0.01]	0.4%	0.8%
Gupta B et al. 2016	14	128	0.11	[0.06; 0.17]	0.3%	0.8%
Gupta P et al. 2015	0	368	0.00	[0.00; 0.00]	0.8%	0.8%
Gupta P et al. 2016	0	243	0.00	[0.00; 0.01]	0.5%	0.8%
Haloi M et al. 2013	1	96	0.01	[0.00; 0.04]	0.2%	0.7%
Indu TH et al. 2015	29	1860	0.02	[0.01; 0.02]	4.1%	0.8%
Jailkhani SMK et al. 2014	10	196	0.05	[0.02; 0.09]	0.4%	0.8%
Jaiprakash H et al. 2011	0	225	0.00	[0.00; 0.01]	0.5%	0.8%
Jayaprakash 2018	1	30	0.03	[0.00; 0.14]	0.1%	0.6%
Jesslin J et al. 2010	0	1045	0.00	[0.00; 0.00]	2.3%	0.8%
Joshi SC et al. 2013	0	372	0.00	[0.00; 0.00]	0.8%	0.8%
Kaeley N et al. 2019	0	156	0.00	[0.00; 0.01]	0.3%	0.8%
Kalita PP et al. 2019	17	234	0.07	[0.04; 0.11]	0.5%	0.8%
Kanchan T et al. 2010	0	198	0.00	[0.00; 0.01]	0.4%	0.8%
Karikalan et al. 2014	16	160	0.10	[0.06; 0.15]	0.4%	0.8%
Katageri Set al. 2016	0	51	0.00	[0.00; 0.03]	0.1%	0.7%
Kaur S et al. 2016	7	256	0.03	[0.01; 0.05]	0.6%	0.8%
Khadilkar NP et al. 2016	2	40	0.05	[0.00; 0.14]	0.1%	0.6%
Khosya S et al. 2016	10	799	0.01	[0.01; 0.02]	1.8%	0.8%
Kondle Raghu et al. 2015	31	537	0.06	[0.04; 0.08]	1.2%	0.8%
Kora SA et al. 2011	0	148	0.00	[0.00; 0.01]	0.3%	0.8%
Koulapur V et al. 2015	0	210	0.00	[0.00; 0.01]	0.5%	0.8%
Kumar A et al. 2019	20	91	0.22	[0.14; 0.31]	0.2%	0.7%
Kumar MR et al. 2014	0	101	0.00	[0.00; 0.02]	0.2%	0.7%
Kumar SV et al. 2010	65	2226	0.03	[0.02; 0.04]	4.9%	0.8%
Lad KS et al. 2017	0	106	0.00	[0.00; 0.02]	0.2%	0.8%
Latif M et al. 2020	3	207	0.01	[0.00; 0.04]	0.5%	0.8%
Mahabalshetti AD et al. 2013	12	104	0.12	[0.06; 0.18]	0.2%	0.8%
Maharani B et al. 2013	3	150	0.02	[0.00; 0.05]	0.3%	0.8%
Manikyamba D et al. 2015	13	183	0.07	[0.04; 0.11]	0.4%	0.8%
Mate VH et al. 2017	9	99	0.09	[0.04; 0.16]	0.2%	0.7%
Memon A et al. 2012	0	236	0.00	[0.00; 0.01]	0.5%	0.8%
Mittal N et al. 2013	10	166	0.06	[0.03; 0.10]	0.4%	0.8%
Modi NP et al. 2014	50	288	0.17	[0.13; 0.22]	0.6%	0.8%
Mori RK et al. 2017	27	69	0.39	[0.28; 0.51]	0.2%	0.7%
Mugadlimath A et al. 2012	6	378	0.02	[0.01; 0.03]	0.8%	0.8%
Nair PK et al. 2015	10	168	0.06	[0.03; 0.10]	0.4%	0.8%
Nayak GH et al. 2015	0	138	0.00	[0.00; 0.01]	0.3%	0.8%
Panda BB et al. 2015	0	78	0.00	[0.00; 0.02]	0.2%	0.7%
Parekh U et al. 2019	76	1092	0.07	[0.06; 0.09]	2.4%	0.8%
Pate RS et al. 2017	9	318	0.03	[0.01; 0.05]	0.7%	0.8%
Patel DJ et al. 2011	0	288	0.00	[0.00; 0.01]	0.6%	0.8%
Patel N et al. 2014	2	126	0.02	[0.00; 0.05]	0.3%	0.8%
Patil A et al. 2014	22	74	0.30	[0.20; 0.41]	0.2%	0.7%
Patnaik AMM et al. 2016	5	100	0.05	[0.01; 0.10]	0.2%	0.7%
Pawar CK et al. 2017	2	201	0.01	[0.00; 0.03]	0.4%	0.8%
Pawar V et al. 2011	26	923	0.03	[0.02; 0.04]	2.0%	0.8%
Peranantham S et al. 2014	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Prajapati T et al. 2013	53	366	0.14	[0.11; 0.18]	0.8%	0.8%
Prayag A et al. 2016	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Raizada A et al. 2012	15	584	0.03	[0.01; 0.04]	1.3%	0.8%
Rajanandh M. G et al. 2013	0	224	0.00	[0.00; 0.01]	0.5%	0.8%
Rajanandh M. G et al. 2014	0	261	0.00	[0.00; 0.01]	0.6%	0.8%
Rajesh JJ et al. 2016	0	12	0.00	[0.00; 0.14]	0.0%	0.4%
Ram P et al. 2014	12	81	0.15	[0.08; 0.23]	0.2%	0.7%
Ramanath KV et al. 2012	1	73	0.01	[0.00; 0.06]	0.2%	0.7%
Rathore S et al. 2013	0	100	0.00	[0.00; 0.02]	0.2%	0.7%
Roy MP et al. 2017	31	195	0.16	[0.11; 0.21]	0.4%	0.8%
S Shah et al. 2018	8	60	0.13	[0.06; 0.23]	0.1%	0.7%
Saikia D et al. 2020	50	153	0.33	[0.25; 0.40]	0.3%	0.8%
Sandhu SS et al. 2010	0	78	0.00	[0.00; 0.02]	0.2%	0.7%
Sandhu SS et al. 2010	0	131	0.00	[0.00; 0.01]	0.3%	0.8%
Sangalad PN et al. 2010	0	39	0.00	[0.00; 0.04]	0.1%	0.6%
Santosh KS et al. 2013	0	261	0.00	[0.00; 0.01]	0.6%	0.8%
Sarkar AP et al. 2015	0	222	0.00	[0.00; 0.01]	0.5%	0.8%
Saxena V et al. 2014	7	105	0.07	[0.03; 0.12]	0.2%	0.8%
Shah SM et al. 2016	19	340	0.06	[0.03; 0.08]	0.8%	0.8%
Shakuntala et al. 2015	0	1575	0.00	[0.00; 0.00]	3.5%	0.8%
Sharma J et al. 2014	5	165	0.03	[0.01; 0.06]	0.4%	0.8%
Sharma R et al. 2019	21	505	0.04	[0.03; 0.06]	1.1%	0.8%
Siddamshetty AK et al. 2016	92	971	0.09	[0.08; 0.11]	2.1%	0.8%
Siddapur RK et al. 2011	0	228	0.00	[0.00; 0.01]	0.5%	0.8%
Singh B et al. 2017	0	180	0.00	[0.00; 0.01]	0.4%	0.8%
Singh J et al. 2015	7	178	0.04	[0.01; 0.07]	0.4%	0.8%
Singh O et al. 2011	0	138	0.00	[0.00; 0.01]	0.3%	0.8%
Singh RR et al. 2016	1	140	0.01	[0.00; 0.03]	0.3%	0.8%
Singh SP et al. 2013	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Sonar V et al. 2010	0	320	0.00	[0.00; 0.01]	0.7%	0.8%
Srihari C et al. 2017	30	317	0.09	[0.06; 0.13]	0.7%	0.8%
Srinivasa V et al. 2012	3	81	0.04	[0.00; 0.09]	0.2%	0.7%
Srinivasulu K et al. 2019	10	100	0.10	[0.05; 0.17]	0.2%	0.7%
Thakur S et al. 2017	12	110	0.11	[0.06; 0.17]	0.2%	0.8%
Thunga G et al. 2010	0	100	0.00	[0.00; 0.02]	0.2%	0.7%
Vaidya YP et al. 2012	0	1003	0.00	[0.00; 0.00]	2.2%	0.8%
VANISHREE et al. 2016	10	384	0.03	[0.01; 0.04]	0.9%	0.8%
Varma NM et al. 2011	0	143	0.00	[0.00; 0.01]	0.3%	0.8%
Verma P et al. 2018	0	120	0.00	[0.00; 0.01]	0.3%	0.8%
Vivekanandan K et al. 2012	0	232	0.00	[0.00; 0.01]	0.5%	0.8%
Waghmare CS et al. 2014	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Waghmare S et al. 2014	5	70	0.07	[0.02; 0.15]	0.2%	0.7%
Yadav VK et al. 2018	12	1622	0.01	[0.00; 0.01]	3.6%	0.8%
Fixed effect model		.	**0.02**	**[0.01; 0.02]**	**100.0%**	**--**
Random effects model			**0.03**	**[0.02; 0.03]**	**--**	**100.0%**

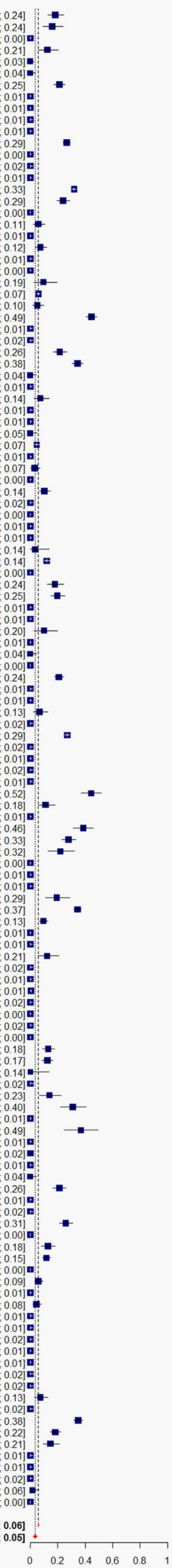
Heterogeneity: I^2 = 96%, τ^2 = 0.0192, χ^2_{128} = 2853.52 (p = 0)



2Sb

Study	Venom	Total	Percentage	95% C.I	WeightF	WeightR
Abubakar S et al. 2014	30	165	0.18	[0.13; 0.24]	0.4%	0.8%
Acharya S et al. 2014	16	100	0.16	[0.09; 0.24]	0.2%	0.8%
Adhikari DD et al. 2017	0	629	0.00	[0.00; 0.00]	1.4%	0.8%
Aggarwal B et al. 2014	10	81	0.12	[0.06; 0.21]	0.2%	0.8%
Ahuja H et al. 2015	0	67	0.00	[0.00; 0.03]	0.1%	0.7%
Aiswarya Aravind et al. 2014	0	47	0.00	[0.00; 0.04]	0.1%	0.7%
Ali I et al. 2017	80	379	0.21	[0.17; 0.25]	0.8%	0.8%
Ali K et al. 2019	0	334	0.00	[0.00; 0.01]	0.7%	0.8%
Anandabaskar N et al. 2019	0	275	0.00	[0.00; 0.01]	0.6%	0.8%
Anthony L et al. 2012	0	122	0.00	[0.00; 0.01]	0.3%	0.8%
Arulmurugan C et al. 2015	0	169	0.00	[0.00; 0.01]	0.4%	0.8%
Asawari R et al. 2017	267	1010	0.26	[0.24; 0.29]	2.2%	0.8%
Awasthi PM et al. 2018	0	582	0.00	[0.00; 0.00]	1.3%	0.8%
Bagali M et al. 2019	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Bamathy B et al. 2017	0	218	0.00	[0.00; 0.01]	0.5%	0.8%
Banerjee I et al. 2014	1414	4432	0.32	[0.31; 0.33]	9.8%	0.8%
Bannur V et al. 2019	73	306	0.24	[0.19; 0.29]	0.7%	0.8%
Bansal A et al. 2018	0	1918	0.00	[0.00; 0.00]	4.2%	0.8%
Barman DD et al. 2017	7	124	0.06	[0.02; 0.11]	0.3%	0.8%
Benjamin RN et al. 2018	0	313	0.00	[0.00; 0.01]	0.7%	0.8%
Bhagora RV et al. 2015	12	165	0.07	[0.04; 0.12]	0.4%	0.8%
Bhat NK et al. 2012	0	117	0.00	[0.00; 0.01]	0.3%	0.8%
Bhowmick K et al. 2019	0	492	0.00	[0.00; 0.00]	1.1%	0.8%
Brata Ghosh V et al. 2013	5	52	0.10	[0.03; 0.19]	0.1%	0.7%
Celine TM et al. 2015	124	2081	0.06	[0.05; 0.07]	4.6%	0.8%
Chary RS et al. 2017	7	136	0.05	[0.02; 0.10]	0.3%	0.8%
Chatterjee S et al. 2020	264	592	0.45	[0.41; 0.49]	1.3%	0.8%
Chintale KN et al. 2016	0	136	0.00	[0.00; 0.01]	0.3%	0.8%
Danagus A et al. 2016	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Das A et al. 2015	62	290	0.21	[0.17; 0.26]	0.6%	0.8%
Datir S et al. 2015	191	557	0.34	[0.30; 0.38]	1.2%	0.8%
Devaranavadagi RA et al. 2017	0	38	0.00	[0.00; 0.04]	0.1%	0.7%
Gangal R et al. 2015	0	149	0.00	[0.00; 0.01]	0.3%	0.8%
Garg V et al. 2010	7	95	0.07	[0.03; 0.14]	0.2%	0.8%
Geetha K.B et al. 2019	0	150	0.00	[0.00; 0.01]	0.3%	0.8%
Gopal BK et al. 2015	0	235	0.00	[0.00; 0.01]	0.5%	0.8%
Guntheti BK et al. 2010	0	35	0.00	[0.00; 0.05]	0.1%	0.7%
Guntheti BK et al. 2011	23	502	0.05	[0.03; 0.07]	1.1%	0.8%
Gupta A et al. 2017	0	200	0.00	[0.00; 0.01]	0.4%	0.8%
Gupta B et al. 2016	4	128	0.03	[0.01; 0.07]	0.3%	0.8%
Gupta P et al. 2015	0	368	0.00	[0.00; 0.00]	0.8%	0.8%
Gupta P et al. 2016	25	243	0.10	[0.07; 0.14]	0.5%	0.8%
Haloi M et al. 2013	0	96	0.00	[0.00; 0.02]	0.2%	0.8%
Indu TH et al. 2015	0	1860	0.00	[0.00; 0.00]	4.1%	0.8%
Jailkhani SMK et al. 2014	0	196	0.00	[0.00; 0.01]	0.4%	0.8%
Jaiprakash H et al. 2011	0	225	0.00	[0.00; 0.01]	0.5%	0.8%
Jayaprakash 2018	1	30	0.03	[0.00; 0.14]	0.1%	0.7%
Jesslin J et al. 2010	126	1045	0.12	[0.10; 0.14]	2.3%	0.8%
Joshi SC et al. 2013	0	372	0.00	[0.00; 0.00]	0.8%	0.8%
Kaeley N et al. 2019	28	156	0.18	[0.12; 0.24]	0.3%	0.8%
Kalita PP et al. 2019	46	234	0.20	[0.15; 0.25]	0.5%	0.8%
Kanchan T et al. 2010	0	198	0.00	[0.00; 0.01]	0.4%	0.8%
Karikalan et al. 2014	0	160	0.00	[0.00; 0.01]	0.4%	0.8%
Katageri Set al. 2016	5	51	0.10	[0.03; 0.20]	0.1%	0.7%
Kaur S et al. 2016	0	256	0.00	[0.00; 0.01]	0.6%	0.8%
Khadilkar NP et al. 2016	0	40	0.00	[0.00; 0.04]	0.1%	0.7%
Khosya S et al. 2016	0	799	0.00	[0.00; 0.00]	1.8%	0.8%
Kondle Raghu et al. 2015	112	537	0.21	[0.18; 0.24]	1.2%	0.8%
Kora SA et al. 2011	0	148	0.00	[0.00; 0.01]	0.3%	0.8%
Koulapur V et al. 2015	0	210	0.00	[0.00; 0.01]	0.5%	0.8%
Kumar A et al. 2019	6	91	0.07	[0.02; 0.13]	0.2%	0.8%
Kumar MR et al. 2014	0	101	0.00	[0.00; 0.02]	0.2%	0.8%
Kumar SV et al. 2010	600	2226	0.27	[0.25; 0.29]	4.9%	0.8%
Lad KS et al. 2017	0	106	0.00	[0.00; 0.02]	0.2%	0.8%
Latif M et al. 2020	0	207	0.00	[0.00; 0.01]	0.5%	0.8%
Mahabalshetti AD et al. 2013	0	104	0.00	[0.00; 0.02]	0.2%	0.8%
Maharani B et al. 2013	0	150	0.00	[0.00; 0.01]	0.3%	0.8%
Manikyamba D et al. 2015	81	183	0.44	[0.37; 0.52]	0.4%	0.8%
Mate VH et al. 2017	11	99	0.11	[0.06; 0.18]	0.2%	0.8%
Memon A et al. 2012	0	236	0.00	[0.00; 0.01]	0.5%	0.8%
Mittal N et al. 2013	64	166	0.39	[0.31; 0.46]	0.4%	0.8%
Modi NP et al. 2014	80	288	0.28	[0.23; 0.33]	0.6%	0.8%
Mori RK et al. 2017	15	69	0.22	[0.13; 0.32]	0.2%	0.7%
Mugadlimath A et al. 2012	0	378	0.00	[0.00; 0.00]	0.8%	0.8%
Nair PK et al. 2015	0	168	0.00	[0.00; 0.01]	0.4%	0.8%
Nayak GH et al. 2015	0	138	0.00	[0.00; 0.01]	0.3%	0.8%
Panda BB et al. 2015	15	78	0.19	[0.11; 0.29]	0.2%	0.8%
Parekh U et al. 2019	376	1092	0.34	[0.32; 0.37]	2.4%	0.8%
Pate RS et al. 2017	30	318	0.09	[0.06; 0.13]	0.7%	0.8%
Patel DJ et al. 2011	0	288	0.00	[0.00; 0.01]	0.6%	0.8%
Patel N et al. 2014	0	126	0.00	[0.00; 0.01]	0.3%	0.8%
Patil A et al. 2014	9	74	0.12	[0.06; 0.21]	0.2%	0.7%
Patnaik AMM et al. 2016	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Pawar CK et al. 2017	0	201	0.00	[0.00; 0.01]	0.4%	0.8%
Pawar V et al. 2011	4	923	0.00	[0.00; 0.01]	2.0%	0.8%
Peranantham S et al. 2014	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Prajapati T et al. 2013	0	366	0.00	[0.00; 0.00]	0.8%	0.8%
Prayag A et al. 2016	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Raizada A et al. 2012	0	584	0.00	[0.00; 0.00]	1.3%	0.8%
Rajanandh M. G et al. 2013	29	224	0.13	[0.09; 0.18]	0.5%	0.8%
Rajanandh M. G et al. 2014	32	261	0.12	[0.09; 0.17]	0.6%	0.8%
Rajesh JJ et al. 2016	0	12	0.00	[0.00; 0.14]	0.0%	0.5%
Ram P et al. 2014	0	81	0.00	[0.00; 0.02]	0.2%	0.8%
Ramanath KV et al. 2012	10	73	0.14	[0.07; 0.23]	0.2%	0.7%
Rathore S et al. 2013	31	100	0.31	[0.22; 0.40]	0.2%	0.8%
Roy MP et al. 2017	0	195	0.00	[0.00; 0.01]	0.4%	0.8%
S Shah et al. 2018	22	60	0.37	[0.25; 0.49]	0.1%	0.7%
Saikia D et al. 2020	0	153	0.00	[0.00; 0.01]	0.3%	0.8%
Sandhu SS et al. 2010	0	78	0.00	[0.00; 0.02]	0.2%	0.8%
Sandhu SS et al. 2010	0	131	0.00	[0.00; 0.01]	0.3%	0.8%
Sangalad PN et al. 2010	0	39	0.00	[0.00; 0.04]	0.1%	0.7%
Santosh KS et al. 2013	55	261	0.21	[0.16; 0.26]	0.6%	0.8%
Sarkar AP et al. 2015	0	222	0.00	[0.00; 0.01]	0.5%	0.8%
Saxena V et al. 2014	0	105	0.00	[0.00; 0.02]	0.2%	0.8%
Shah SM et al. 2016	88	340	0.26	[0.21; 0.31]	0.8%	0.8%
Shakuntala et al. 2015	0	1575	0.00	[0.00; 0.00]	3.5%	0.8%
Sharma J et al. 2014	21	165	0.13	[0.08; 0.18]	0.4%	0.8%
Sharma R et al. 2019	59	505	0.12	[0.09; 0.15]	1.1%	0.8%
Siddamshetty AK et al. 2016	0	971	0.00	[0.00; 0.00]	2.1%	0.8%
Siddapur RK et al. 2011	13	228	0.06	[0.03; 0.09]	0.5%	0.8%
Singh B et al. 2017	0	180	0.00	[0.00; 0.01]	0.4%	0.8%
Singh J et al. 2015	8	178	0.04	[0.02; 0.08]	0.4%	0.8%
Singh O et al. 2011	0	138	0.00	[0.00; 0.01]	0.3%	0.8%
Singh RR et al. 2016	0	140	0.00	[0.00; 0.01]	0.3%	0.8%
Singh SP et al. 2013	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Sonar V et al. 2010	0	320	0.00	[0.00; 0.01]	0.7%	0.8%
Srihari C et al. 2017	0	317	0.00	[0.00; 0.01]	0.7%	0.8%
Srinivasa V et al. 2012	0	81	0.00	[0.00; 0.02]	0.2%	0.8%
Srinivasulu K et al. 2019	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Thakur S et al. 2017	8	110	0.07	[0.03; 0.13]	0.2%	0.8%
Thunga G et al. 2010	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Vaidya YP et al. 2012	350	1003	0.35	[0.32; 0.38]	2.2%	0.8%
VANISHREE et al. 2016	70	384	0.18	[0.15; 0.22]	0.9%	0.8%
Varma NM et al. 2011	21	143	0.15	[0.09; 0.21]	0.3%	0.8%
Verma P et al. 2018	0	120	0.00	[0.00; 0.01]	0.3%	0.8%
Vivekanandan K et al. 2012	0	232	0.00	[0.00; 0.01]	0.5%	0.8%
Waghmare CS et al. 2014	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Waghmare S et al. 2014	1	70	0.01	[0.00; 0.06]	0.2%	0.7%
Yadav VK et al. 2018	0	1622	0.00	[0.00; 0.00]	3.6%	0.8%
Fixed effect model		.	**0.06**	**[0.06; 0.06]**	**100.0%**	**--**
Random effects model			**0.03**	**[0.02; 0.05]**	**--**	**100.0%**

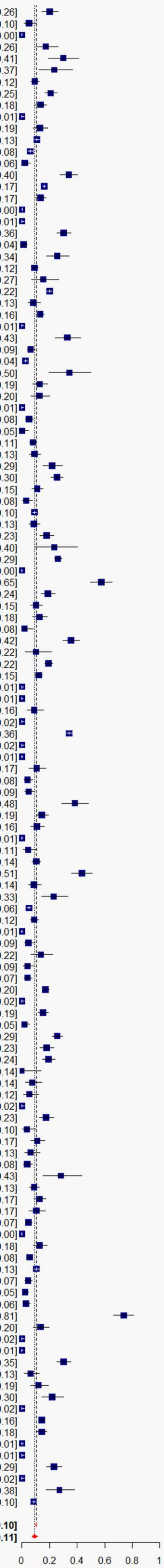
Heterogeneity: I^2 = 99%, τ^2 = 0.0422, χ^2_{128} = 11244.51 (p = 0)



2Sc

Study	Drugs	Total	Percentage	95% C.I	WeightF	WeightR
Abubakar S et al. 2014	33	165	0.20	[0.14; 0.26]	0.4%	0.8%
Acharya S et al. 2014	5	100	0.05	[0.01; 0.10]	0.2%	0.8%
Adhikari DD et al. 2017	0	629	0.00	[0.00; 0.00]	1.4%	0.8%
Aggarwal B et al. 2014	14	81	0.17	[0.10; 0.26]	0.2%	0.7%
Ahuja H et al. 2015	20	67	0.30	[0.19; 0.41]	0.1%	0.7%
Aiswarya Aravind et al. 2014	11	47	0.23	[0.12; 0.37]	0.1%	0.7%
Ali I et al. 2017	35	379	0.09	[0.07; 0.12]	0.8%	0.8%
Ali K et al. 2019	69	334	0.21	[0.16; 0.25]	0.7%	0.8%
Anandabaskar N et al. 2019	37	275	0.13	[0.10; 0.18]	0.6%	0.8%
Anthony L et al. 2012	0	122	0.00	[0.00; 0.01]	0.3%	0.8%
Arulmurugan C et al. 2015	22	169	0.13	[0.08; 0.19]	0.4%	0.8%
Asawari R et al. 2017	109	1010	0.11	[0.09; 0.13]	2.2%	0.8%
Awasthi PM et al. 2018	35	582	0.06	[0.04; 0.08]	1.3%	0.8%
Bagali M et al. 2019	2	100	0.02	[0.00; 0.06]	0.2%	0.8%
Bamathy B et al. 2017	74	218	0.34	[0.28; 0.40]	0.5%	0.8%
Banerjee I et al. 2014	714	4432	0.16	[0.15; 0.17]	9.8%	0.8%
Bannur V et al. 2019	41	306	0.13	[0.10; 0.17]	0.7%	0.8%
Bansal A et al. 2018	1	1918	0.00	[0.00; 0.00]	4.2%	0.8%
Barman DD et al. 2017	0	124	0.00	[0.00; 0.01]	0.3%	0.8%
Benjamin RN et al. 2018	95	313	0.30	[0.25; 0.36]	0.7%	0.8%
Bhagora RV et al. 2015	2	165	0.01	[0.00; 0.04]	0.4%	0.8%
Bhat NK et al. 2012	30	117	0.26	[0.18; 0.34]	0.3%	0.8%
Bhowmick K et al. 2019	45	492	0.09	[0.07; 0.12]	1.1%	0.8%
Brata Ghosh V et al. 2013	8	52	0.15	[0.07; 0.27]	0.1%	0.7%
Celine TM et al. 2015	416	2081	0.20	[0.18; 0.22]	4.6%	0.8%
Chary RS et al. 2017	11	136	0.08	[0.04; 0.13]	0.3%	0.8%
Chatterjee S et al. 2020	78	592	0.13	[0.11; 0.16]	1.3%	0.8%
Chintale KN et al. 2016	0	136	0.00	[0.00; 0.01]	0.3%	0.8%
Danagus A et al. 2016	33	100	0.33	[0.24; 0.43]	0.2%	0.8%
Das A et al. 2015	18	290	0.06	[0.04; 0.09]	0.6%	0.8%
Datir S et al. 2015	14	557	0.03	[0.01; 0.04]	1.2%	0.8%
Devaranavadagi RA et al. 2017	13	38	0.34	[0.20; 0.50]	0.1%	0.7%
Gangal R et al. 2015	19	149	0.13	[0.08; 0.19]	0.3%	0.8%
Garg V et al. 2010	12	95	0.13	[0.07; 0.20]	0.2%	0.8%
Geetha K.B et al. 2019	0	150	0.00	[0.00; 0.01]	0.3%	0.8%
Gopal BK et al. 2015	12	235	0.05	[0.03; 0.08]	0.5%	0.8%
Guntheti BK et al. 2010	0	35	0.00	[0.00; 0.05]	0.1%	0.7%
Guntheti BK et al. 2011	40	502	0.08	[0.06; 0.11]	1.1%	0.8%
Gupta A et al. 2017	18	200	0.09	[0.05; 0.13]	0.4%	0.8%
Gupta B et al. 2016	28	128	0.22	[0.15; 0.29]	0.3%	0.8%
Gupta P et al. 2015	93	368	0.25	[0.21; 0.30]	0.8%	0.8%
Gupta P et al. 2016	27	243	0.11	[0.07; 0.15]	0.5%	0.8%
Haloi M et al. 2013	3	96	0.03	[0.00; 0.08]	0.2%	0.8%
Indu TH et al. 2015	169	1860	0.09	[0.08; 0.10]	4.1%	0.8%
Jailkhani SMK et al. 2014	17	196	0.09	[0.05; 0.13]	0.4%	0.8%
Jaiprakash H et al. 2011	40	225	0.18	[0.13; 0.23]	0.5%	0.8%
Jayaprakash 2018	7	30	0.23	[0.10; 0.40]	0.1%	0.7%
Jesslin J et al. 2010	273	1045	0.26	[0.24; 0.29]	2.3%	0.8%
Joshi SC et al. 2013	0	372	0.00	[0.00; 0.00]	0.8%	0.8%
Kaeley N et al. 2019	90	156	0.58	[0.50; 0.65]	0.3%	0.8%
Kalita PP et al. 2019	44	234	0.19	[0.14; 0.24]	0.5%	0.8%
Kanchan T et al. 2010	20	198	0.10	[0.06; 0.15]	0.4%	0.8%
Karikalan et al. 2014	20	160	0.12	[0.08; 0.18]	0.4%	0.8%
Katageri Set al. 2016	1	51	0.02	[0.00; 0.08]	0.1%	0.7%
Kaur S et al. 2016	91	256	0.36	[0.30; 0.42]	0.6%	0.8%
Khadilkar NP et al. 2016	4	40	0.10	[0.02; 0.22]	0.1%	0.7%
Khosya S et al. 2016	154	799	0.19	[0.17; 0.22]	1.8%	0.8%
Kondle Raghu et al. 2015	65	537	0.12	[0.09; 0.15]	1.2%	0.8%
Kora SA et al. 2011	0	148	0.00	[0.00; 0.01]	0.3%	0.8%
Koulapur V et al. 2015	0	210	0.00	[0.00; 0.01]	0.5%	0.8%
Kumar A et al. 2019	8	91	0.09	[0.04; 0.16]	0.2%	0.8%
Kumar MR et al. 2014	0	101	0.00	[0.00; 0.02]	0.2%	0.8%
Kumar SV et al. 2010	764	2226	0.34	[0.32; 0.36]	4.9%	0.8%
Lad KS et al. 2017	0	106	0.00	[0.00; 0.02]	0.2%	0.8%
Latif M et al. 2020	0	207	0.00	[0.00; 0.01]	0.5%	0.8%
Mahabalshetti AD et al. 2013	11	104	0.11	[0.05; 0.17]	0.2%	0.8%
Maharani B et al. 2013	6	150	0.04	[0.01; 0.08]	0.3%	0.8%
Manikyamba D et al. 2015	9	183	0.05	[0.02; 0.09]	0.4%	0.8%
Mate VH et al. 2017	38	99	0.38	[0.29; 0.48]	0.2%	0.8%
Memon A et al. 2012	34	236	0.14	[0.10; 0.19]	0.5%	0.8%
Mittal N et al. 2013	18	166	0.11	[0.07; 0.16]	0.4%	0.8%
Modi NP et al. 2014	0	288	0.00	[0.00; 0.01]	0.6%	0.8%
Mori RK et al. 2017	3	69	0.04	[0.01; 0.11]	0.2%	0.7%
Mugadlimath A et al. 2012	39	378	0.10	[0.07; 0.14]	0.8%	0.8%
Nair PK et al. 2015	73	168	0.43	[0.36; 0.51]	0.4%	0.8%
Nayak GH et al. 2015	12	138	0.09	[0.04; 0.14]	0.3%	0.8%
Panda BB et al. 2015	18	78	0.23	[0.14; 0.33]	0.2%	0.7%
Parekh U et al. 2019	55	1092	0.05	[0.04; 0.06]	2.4%	0.8%
Pate RS et al. 2017	28	318	0.09	[0.06; 0.12]	0.7%	0.8%
Patel DJ et al. 2011	0	288	0.00	[0.00; 0.01]	0.6%	0.8%
Patel N et al. 2014	6	126	0.05	[0.02; 0.09]	0.3%	0.8%
Patil A et al. 2014	10	74	0.14	[0.07; 0.22]	0.2%	0.7%
Patnaik AMM et al. 2016	4	100	0.04	[0.01; 0.09]	0.2%	0.8%
Pawar CK et al. 2017	8	201	0.04	[0.02; 0.07]	0.4%	0.8%
Pawar V et al. 2011	157	923	0.17	[0.15; 0.20]	2.0%	0.8%
Peranantham S et al. 2014	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Prajapati T et al. 2013	56	366	0.15	[0.12; 0.19]	0.8%	0.8%
Prayag A et al. 2016	2	110	0.02	[0.00; 0.05]	0.2%	0.8%
Raizada A et al. 2012	149	584	0.26	[0.22; 0.29]	1.3%	0.8%
Rajanandh M. G et al. 2013	40	224	0.18	[0.13; 0.23]	0.5%	0.8%
Rajanandh M. G et al. 2014	50	261	0.19	[0.15; 0.24]	0.6%	0.8%
Rajesh JJ et al. 2016	0	12	0.00	[0.00; 0.14]	0.0%	0.5%
Ram P et al. 2014	6	81	0.07	[0.03; 0.14]	0.2%	0.7%
Ramanath KV et al. 2012	4	73	0.05	[0.01; 0.12]	0.2%	0.7%
Rathore S et al. 2013	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Roy MP et al. 2017	34	195	0.17	[0.12; 0.23]	0.4%	0.8%
S Shah et al. 2018	2	60	0.03	[0.00; 0.10]	0.1%	0.7%
Saikia D et al. 2020	17	153	0.11	[0.07; 0.17]	0.3%	0.8%
Sandhu SS et al. 2010	5	78	0.06	[0.02; 0.13]	0.2%	0.7%
Sandhu SS et al. 2010	5	131	0.04	[0.01; 0.08]	0.3%	0.8%
Sangalad PN et al. 2010	11	39	0.28	[0.15; 0.43]	0.1%	0.7%
Santosh KS et al. 2013	23	261	0.09	[0.06; 0.13]	0.6%	0.8%
Sarkar AP et al. 2015	28	222	0.13	[0.09; 0.17]	0.5%	0.8%
Saxena V et al. 2014	11	105	0.10	[0.05; 0.17]	0.2%	0.8%
Shah SM et al. 2016	16	340	0.05	[0.03; 0.07]	0.8%	0.8%
Shakuntala et al. 2015	0	1575	0.00	[0.00; 0.00]	3.5%	0.8%
Sharma J et al. 2014	21	165	0.13	[0.08; 0.18]	0.4%	0.8%
Sharma R et al. 2019	28	505	0.06	[0.04; 0.08]	1.1%	0.8%
Siddamshetty AK et al. 2016	102	971	0.11	[0.09; 0.13]	2.1%	0.8%
Siddapur RK et al. 2011	10	228	0.04	[0.02; 0.07]	0.5%	0.8%
Singh B et al. 2017	4	180	0.02	[0.00; 0.05]	0.4%	0.8%
Singh J et al. 2015	5	178	0.03	[0.01; 0.06]	0.4%	0.8%
Singh O et al. 2011	102	138	0.74	[0.66; 0.81]	0.3%	0.8%
Singh RR et al. 2016	19	140	0.14	[0.08; 0.20]	0.3%	0.8%
Singh SP et al. 2013	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Sonar V et al. 2010	0	320	0.00	[0.00; 0.01]	0.7%	0.8%
Srihari C et al. 2017	96	317	0.30	[0.25; 0.35]	0.7%	0.8%
Srinivasa V et al. 2012	5	81	0.06	[0.02; 0.13]	0.2%	0.7%
Srinivasulu K et al. 2019	12	100	0.12	[0.06; 0.19]	0.2%	0.8%
Thakur S et al. 2017	24	110	0.22	[0.15; 0.30]	0.2%	0.8%
Thunga G et al. 2010	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Vaidya YP et al. 2012	143	1003	0.14	[0.12; 0.16]	2.2%	0.8%
VANISHREE et al. 2016	55	384	0.14	[0.11; 0.18]	0.9%	0.8%
Varma NM et al. 2011	0	143	0.00	[0.00; 0.01]	0.3%	0.8%
Verma P et al. 2018	0	120	0.00	[0.00; 0.01]	0.3%	0.8%
Vivekanandan K et al. 2012	54	232	0.23	[0.18; 0.29]	0.5%	0.8%
Waghmare CS et al. 2014	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Waghmare S et al. 2014	19	70	0.27	[0.17; 0.38]	0.2%	0.7%
Yadav VK et al. 2018	137	1622	0.08	[0.07; 0.10]	3.6%	0.8%
Fixed effect model		.	**0.10**	**[0.10; 0.10]**	**100.0%**	**--**
Random effects model			**0.09**	**[0.07; 0.11]**	**--**	**100.0%**

Heterogeneity: I^2 = 98%, τ^2 = 0.0355, χ^2_{128} = 5850.93 (p = 0)



Supplementary Figure 3Sab: Prevalence of poisoning with Miscellaneous agents (3Sa) and Age wise distribution (3Sb)

3Sa

Study	Miscellaneous	Total	Percentage	95% C.I	WeightF	WeightR
Abubakar S et al. 2014	18	165	0.11	[0.07; 0.16]	0.4%	0.8%
Acharya S et al. 2014	15	100	0.15	[0.09; 0.23]	0.2%	0.8%
Adhikari DD et al. 2017	401	629	0.64	[0.60; 0.67]	1.4%	0.8%
Aggarwal B et al. 2014	27	81	0.33	[0.23; 0.44]	0.2%	0.7%
Ahuja H et al. 2015	11	67	0.16	[0.08; 0.26]	0.1%	0.7%
Aiswarya Aravind et al. 2014	12	47	0.26	[0.14; 0.39]	0.1%	0.7%
Ali I et al. 2017	30	379	0.08	[0.05; 0.11]	0.8%	0.8%
Ali K et al. 2019	14	334	0.04	[0.02; 0.07]	0.7%	0.8%
Anandabaskar N et al. 2019	103	275	0.37	[0.32; 0.43]	0.6%	0.8%
Anthony L et al. 2012	37	122	0.30	[0.22; 0.39]	0.3%	0.8%
Arulmurugan C et al. 2015	50	169	0.30	[0.23; 0.37]	0.4%	0.8%
Asawari R et al. 2017	64	1010	0.06	[0.05; 0.08]	2.2%	0.8%
Awasthi PM et al. 2018	265	582	0.46	[0.42; 0.50]	1.3%	0.8%
Bagali M et al. 2019	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Balasubramanian K et al. 2019	9	120	0.08	[0.03; 0.13]	0.3%	0.8%
Bamathy B et al. 2017	30	218	0.14	[0.09; 0.19]	0.5%	0.8%
Banerjee I et al. 2014	605	4432	0.14	[0.13; 0.15]	9.7%	0.8%
Bannur V et al. 2019	22	306	0.07	[0.05; 0.10]	0.7%	0.8%
Bansal A et al. 2018	1125	1918	0.59	[0.56; 0.61]	4.2%	0.8%
Barman DD et al. 2017	14	124	0.11	[0.06; 0.18]	0.3%	0.8%
Benjamin RN et al. 2018	26	313	0.08	[0.05; 0.12]	0.7%	0.8%
Bhagora RV et al. 2015	4	165	0.02	[0.01; 0.05]	0.4%	0.8%
Bhat NK et al. 2012	39	117	0.33	[0.25; 0.42]	0.3%	0.8%
Bhowmick K et al. 2019	33	492	0.07	[0.05; 0.09]	1.1%	0.8%
Brata Ghosh V et al. 2013	26	52	0.50	[0.36; 0.64]	0.1%	0.7%
Celine TM et al. 2015	430	2081	0.21	[0.19; 0.22]	4.6%	0.8%
Chary RS et al. 2017	25	136	0.18	[0.12; 0.25]	0.3%	0.8%
Chatterjee S et al. 2020	97	592	0.16	[0.14; 0.19]	1.3%	0.8%
Chintale KN et al. 2016	0	136	0.00	[0.00; 0.01]	0.3%	0.8%
Danagus A et al. 2016	3	100	0.03	[0.00; 0.07]	0.2%	0.8%
Das A et al. 2015	154	290	0.53	[0.47; 0.59]	0.6%	0.8%
Datir S et al. 2015	75	557	0.13	[0.11; 0.16]	1.2%	0.8%
Devaranavadagi RA et al. 2017	13	38	0.34	[0.20; 0.50]	0.1%	0.7%
Gangal R et al. 2015	16	149	0.11	[0.06; 0.16]	0.3%	0.8%
Garg V et al. 2010	11	95	0.12	[0.06; 0.19]	0.2%	0.8%
Geetha K.B et al. 2019	0	150	0.00	[0.00; 0.01]	0.3%	0.8%
Gopal BK et al. 2015	0	235	0.00	[0.00; 0.01]	0.5%	0.8%
Guntheti BK et al. 2010	0	35	0.00	[0.00; 0.05]	0.1%	0.7%
Guntheti BK et al. 2011	19	502	0.04	[0.02; 0.06]	1.1%	0.8%
Gupta A et al. 2017	17	200	0.08	[0.05; 0.13]	0.4%	0.8%
Gupta B et al. 2016	20	128	0.16	[0.10; 0.22]	0.3%	0.8%
Gupta P et al. 2015	5	368	0.01	[0.00; 0.03]	0.8%	0.8%
Gupta P et al. 2016	22	243	0.09	[0.06; 0.13]	0.5%	0.8%
Haloi M et al. 2013	45	96	0.47	[0.37; 0.57]	0.2%	0.8%
Indu TH et al. 2015	492	1860	0.26	[0.24; 0.28]	4.1%	0.8%
Jailkhani SMK et al. 2014	74	196	0.38	[0.31; 0.45]	0.4%	0.8%
Jaiprakash H et al. 2011	0	225	0.00	[0.00; 0.01]	0.5%	0.8%
Jayaprakash 2018	4	30	0.13	[0.03; 0.28]	0.1%	0.7%
Jesslin J et al. 2010	233	1045	0.22	[0.20; 0.25]	2.3%	0.8%
Joshi SC et al. 2013	10	372	0.03	[0.01; 0.05]	0.8%	0.8%
Kaeley N et al. 2019	7	156	0.04	[0.02; 0.08]	0.3%	0.8%
Kalita PP et al. 2019	19	234	0.08	[0.05; 0.12]	0.5%	0.8%
Kanchan T et al. 2010	19	198	0.10	[0.06; 0.14]	0.4%	0.8%
Karikalan et al. 2014	2	160	0.01	[0.00; 0.04]	0.4%	0.8%
Katageri Set al. 2016	24	51	0.47	[0.33; 0.61]	0.1%	0.7%
Kaur S et al. 2016	52	256	0.20	[0.16; 0.25]	0.6%	0.8%
Khadilkar NP et al. 2016	3	40	0.08	[0.01; 0.18]	0.1%	0.7%
Khosya S et al. 2016	195	799	0.24	[0.21; 0.27]	1.7%	0.8%
Kondle Raghu et al. 2015	128	537	0.24	[0.20; 0.28]	1.2%	0.8%
Kora SA et al. 2011	0	148	0.00	[0.00; 0.01]	0.3%	0.8%
Koulapur V et al. 2015	0	210	0.00	[0.00; 0.01]	0.5%	0.8%
Kumar A et al. 2019	23	91	0.25	[0.17; 0.35]	0.2%	0.8%
Kumar MR et al. 2014	0	101	0.00	[0.00; 0.02]	0.2%	0.8%
Kumar SV et al. 2010	200	2226	0.09	[0.08; 0.10]	4.9%	0.8%
Lad KS et al. 2017	18	106	0.17	[0.10; 0.25]	0.2%	0.8%
Latif M et al. 2020	10	207	0.05	[0.02; 0.08]	0.5%	0.8%
Mahabalshetti AD et al. 2013	19	104	0.18	[0.11; 0.26]	0.2%	0.8%
Maharani B et al. 2013	15	150	0.10	[0.06; 0.15]	0.3%	0.8%
Manikyamba D et al. 2015	68	183	0.37	[0.30; 0.44]	0.4%	0.8%
Mate VH et al. 2017	9	99	0.09	[0.04; 0.16]	0.2%	0.8%
Memon A et al. 2012	11	236	0.05	[0.02; 0.08]	0.5%	0.8%
Mittal N et al. 2013	27	166	0.16	[0.11; 0.22]	0.4%	0.8%
Modi NP et al. 2014	122	288	0.42	[0.37; 0.48]	0.6%	0.8%
Mori RK et al. 2017	0	69	0.00	[0.00; 0.02]	0.2%	0.7%
Mugadlimath A et al. 2012	133	378	0.35	[0.30; 0.40]	0.8%	0.8%
Nair PK et al. 2015	22	168	0.13	[0.08; 0.19]	0.4%	0.8%
Nayak GH et al. 2015	12	138	0.09	[0.04; 0.14]	0.3%	0.8%
Panda BB et al. 2015	15	78	0.19	[0.11; 0.29]	0.2%	0.7%
Parekh U et al. 2019	142	1092	0.13	[0.11; 0.15]	2.4%	0.8%
Pate RS et al. 2017	29	318	0.09	[0.06; 0.13]	0.7%	0.8%
Patel DJ et al. 2011	0	288	0.00	[0.00; 0.01]	0.6%	0.8%
Patel N et al. 2014	27	126	0.21	[0.15; 0.29]	0.3%	0.8%
Patil A et al. 2014	22	74	0.30	[0.20; 0.41]	0.2%	0.7%
Patnaik AMM et al. 2016	14	100	0.14	[0.08; 0.22]	0.2%	0.8%
Pawar CK et al. 2017	0	201	0.00	[0.00; 0.01]	0.4%	0.8%
Pawar V et al. 2011	295	923	0.32	[0.29; 0.35]	2.0%	0.8%
Peranantham S et al. 2014	67	110	0.61	[0.52; 0.70]	0.2%	0.8%
Prajapati T et al. 2013	133	366	0.36	[0.31; 0.41]	0.8%	0.8%
Prashar A et al. 2018	14	375	0.04	[0.02; 0.06]	0.8%	0.8%
Prayag A et al. 2016	2	110	0.02	[0.00; 0.05]	0.2%	0.8%
Raizada A et al. 2012	235	584	0.40	[0.36; 0.44]	1.3%	0.8%
Rajanandh M. G et al. 2013	100	224	0.45	[0.38; 0.51]	0.5%	0.8%
Rajanandh M. G et al. 2014	91	261	0.35	[0.29; 0.41]	0.6%	0.8%
Rajesh JJ et al. 2016	0	12	0.00	[0.00; 0.14]	0.0%	0.6%
Ram P et al. 2014	32	81	0.40	[0.29; 0.50]	0.2%	0.7%
Ramanath KV et al. 2012	10	73	0.14	[0.07; 0.23]	0.2%	0.7%
Rathore S et al. 2013	57	100	0.57	[0.47; 0.67]	0.2%	0.8%
Roy MP et al. 2017	95	195	0.49	[0.42; 0.56]	0.4%	0.8%
S Shah et al. 2018	5	60	0.08	[0.02; 0.17]	0.1%	0.7%
Saikia D et al. 2020	58	153	0.38	[0.30; 0.46]	0.3%	0.8%
Sandhu SS et al. 2010	6	78	0.08	[0.03; 0.15]	0.2%	0.7%
Sandhu SS et al. 2010	71	131	0.54	[0.46; 0.63]	0.3%	0.8%
Sangalad PN et al. 2010	1	39	0.03	[0.00; 0.11]	0.1%	0.7%
Santosh KS et al. 2013	136	261	0.52	[0.46; 0.58]	0.6%	0.8%
Sarkar AP et al. 2015	62	222	0.28	[0.22; 0.34]	0.5%	0.8%
Saxena V et al. 2014	23	105	0.22	[0.14; 0.30]	0.2%	0.8%
Shah SM et al. 2016	84	340	0.25	[0.20; 0.29]	0.7%	0.8%
Shakuntala et al. 2015	98	1575	0.06	[0.05; 0.07]	0.4%	0.8%
Sharma J et al. 2014	55	165	0.33	[0.26; 0.41]	0.4%	0.8%
Sharma R et al. 2019	87	505	0.17	[0.14; 0.21]	1.1%	0.8%
Siddamshetty AK et al. 2016	581	971	0.60	[0.57; 0.63]	2.1%	0.8%
Siddapur RK et al. 2011	0	228	0.00	[0.00; 0.01]	0.5%	0.8%
Singh B et al. 2017	6	180	0.03	[0.01; 0.07]	0.4%	0.8%
Singh J et al. 2015	44	178	0.25	[0.19; 0.31]	0.4%	0.8%
Singh O et al. 2011	30	138	0.22	[0.15; 0.29]	0.3%	0.8%
Singh RR et al. 2016	19	140	0.14	[0.08; 0.20]	0.3%	0.8%
Singh SP et al. 2013	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Sonar V et al. 2010	0	320	0.00	[0.00; 0.01]	0.7%	0.8%
Srihari C et al. 2017	34	317	0.11	[0.08; 0.14]	0.7%	0.8%
Srinivasa V et al. 2012	5	81	0.06	[0.02; 0.13]	0.2%	0.7%
Srinivasulu K et al. 2019	18	100	0.18	[0.11; 0.26]	0.2%	0.8%
Thakur S et al. 2017	25	110	0.23	[0.15; 0.31]	0.2%	0.8%
Thunga G et al. 2010	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Vaidya YP et al. 2012	110	1003	0.11	[0.09; 0.13]	2.2%	0.8%
VANISHREE et al. 2016	8	384	0.02	[0.01; 0.04]	0.8%	0.8%
Varma NM et al. 2011	41	143	0.29	[0.22; 0.36]	0.3%	0.8%
Verma P et al. 2018	30	120	0.25	[0.18; 0.33]	0.3%	0.8%
Vivekanandan K et al. 2012	68	232	0.29	[0.24; 0.35]	0.5%	0.8%
Waghmare CS et al. 2014	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Waghmare S et al. 2014	19	70	0.27	[0.17; 0.38]	0.2%	0.7%
Yadav VK et al. 2018	757	1622	0.47	[0.44; 0.49]	3.5%	0.8%
Fixed effect model		.	**0.18**	**[0.18; 0.19]**	**100.0%**	--
Random effects model			**0.15**	**[0.13; 0.18]**	--	**100.0%**

Heterogeneity: I^2 = 99%, τ^2 = 0.0533, χ^2_{130} = 9174.96 (p = 0)

0 0.2 0.4 0.6 0.8 1
Miscellaneous Toxicity Percentage

3Sb

Study	Miscellaneous	Total	Proportion	95% C.I.	WeightsR	weightsF
Moderator = Adult						
Abubakar S et al. 2014	18	165	0.1091	[0.0656; 0.1617]	0.8%	0.4%
Acharya S et al. 2014	15	100	0.1500	[0.0860; 0.2274]	0.8%	0.2%
Ahuja H et al. 2015	11	67	0.1642	[0.0839; 0.2635]	0.7%	0.1%
Aiswarya Aravind et al. 2014	12	47	0.2553	[0.1395; 0.3908]	0.7%	0.1%
Ali I et al. 2017	30	379	0.0792	[0.0539; 0.1086]	0.8%	0.8%
Ali K et al. 2019	14	334	0.0419	[0.0227; 0.0664]	0.8%	0.7%
Anandabaskar N et al. 2019	103	275	0.3745	[0.3182; 0.4327]	0.8%	0.6%
Anthony L et al. 2012	37	122	0.3033	[0.2246; 0.3881]	0.8%	0.3%
Arulmurugan C et al. 2015	50	169	0.2959	[0.2292; 0.3671]	0.8%	0.4%
Asawari R et al. 2017	64	1010	0.0634	[0.0491; 0.0793]	0.8%	2.2%
Awasthi PM et al. 2018	265	582	0.4553	[0.4150; 0.4959]	0.8%	1.3%
Bagali M et al. 2019	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Balasubramanian K et al. 2019	9	120	0.0750	[0.0337; 0.1299]	0.8%	0.3%
Bamathy B et al. 2017	30	218	0.1376	[0.0948; 0.1868]	0.8%	0.5%
Banerjee I et al. 2014	605	4432	0.1365	[0.1266; 0.1468]	0.8%	9.7%
Bannur V et al. 2019	22	306	0.0719	[0.0454; 0.1038]	0.8%	0.7%
Bansal A et al. 2018	1125	1918	0.5865	[0.5644; 0.6085]	0.8%	4.2%
Barman DD et al. 2017	14	124	0.1129	[0.0625; 0.1753]	0.8%	0.3%
Benjamin RN et al. 2018	26	313	0.0831	[0.0548; 0.1164]	0.8%	0.7%
Bhagora RV et al. 2015	4	165	0.0242	[0.0052; 0.0545]	0.8%	0.4%
Bhowmick K et al. 2019	33	492	0.0671	[0.0465; 0.0910]	0.8%	1.1%
Celine TM et al. 2015	430	2081	0.2066	[0.1895; 0.2243]	0.8%	4.6%
Chary RS et al. 2017	25	136	0.1838	[0.1228; 0.2537]	0.8%	0.3%
Chatterjee S et al. 2020	97	592	0.1639	[0.1351; 0.1948]	0.8%	1.3%
Chintale KN et al. 2016	0	136	0.0000	[0.0000; 0.0126]	0.8%	0.3%
Danagus A et al. 2016	3	100	0.0300	[0.0038; 0.0747]	0.8%	0.2%
Datir S et al. 2015	75	557	0.1346	[0.1075; 0.1643]	0.8%	1.2%
Garg V et al. 2010	11	95	0.1158	[0.0582; 0.1888]	0.8%	0.2%
Geetha K.B et al. 2019	0	150	0.0000	[0.0000; 0.0114]	0.8%	0.3%
Gopal BK et al. 2015	0	235	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Guntheti BK et al. 2010	0	35	0.0000	[0.0000; 0.0486]	0.7%	0.1%
Guntheti BK et al. 2011	19	502	0.0378	[0.0227; 0.0565]	0.8%	1.1%
Gupta A et al. 2017	17	200	0.0850	[0.0499; 0.1281]	0.8%	0.4%
Gupta B et al. 2016	20	128	0.1562	[0.0980; 0.2248]	0.8%	0.3%
Gupta P et al. 2015	5	368	0.0136	[0.0038; 0.0285]	0.8%	0.8%
Gupta P et al. 2016	22	243	0.0905	[0.0574; 0.1301]	0.8%	0.5%
Haloi M et al. 2013	45	96	0.4688	[0.3694; 0.5693]	0.8%	0.2%
Indu TH et al. 2015	492	1860	0.2645	[0.2447; 0.2848]	0.8%	4.1%
Jailkhani SMK et al. 2014	74	196	0.3776	[0.3108; 0.4467]	0.8%	0.4%
Jaiprakash H et al. 2011	0	225	0.0000	[0.0000; 0.0076]	0.8%	0.5%
Jayaprakash 2018	4	30	0.1333	[0.0309; 0.2823]	0.7%	0.1%
Jesslin J et al. 2010	233	1045	0.2230	[0.1982; 0.2487]	0.8%	2.3%
Joshi SC et al. 2013	10	372	0.0269	[0.0125; 0.0461]	0.8%	0.8%
Kaeley N et al. 2019	7	156	0.0449	[0.0170; 0.0839]	0.8%	0.3%
Kalita PP et al. 2019	19	234	0.0812	[0.0493; 0.1200]	0.8%	0.5%
Kanchan T et al. 2010	19	198	0.0960	[0.0584; 0.1413]	0.8%	0.4%
Karikalan et al. 2014	2	160	0.0125	[0.0002; 0.0373]	0.8%	0.4%
Katageri Set al. 2016	24	51	0.4706	[0.3344; 0.6089]	0.7%	0.1%
Kaur S et al. 2016	52	256	0.2031	[0.1559; 0.2548]	0.8%	0.6%
Khadilkar NP et al. 2016	3	40	0.0750	[0.0098; 0.1814]	0.7%	0.1%
Khosya S et al. 2016	195	799	0.2441	[0.2149; 0.2745]	0.8%	1.7%
Kondle Raghu et al. 2015	128	537	0.2384	[0.2032; 0.2754]	0.8%	1.2%
Kora SA et al. 2011	0	148	0.0000	[0.0000; 0.0116]	0.8%	0.3%
Koulapur V et al. 2015	0	210	0.0000	[0.0000; 0.0082]	0.8%	0.5%
Kumar MR et al. 2014	0	101	0.0000	[0.0000; 0.0170]	0.8%	0.2%
Kumar SV et al. 2010	200	2226	0.0898	[0.0783; 0.1021]	0.8%	4.9%
Lad KS et al. 2017	18	106	0.1698	[0.1037; 0.2478]	0.8%	0.2%
Latif M et al. 2020	10	207	0.0483	[0.0227; 0.0823]	0.8%	0.5%
Mahabalshetti AD et al. 2013	19	104	0.1827	[0.1137; 0.2633]	0.8%	0.2%
Maharani B et al. 2013	15	150	0.1000	[0.0565; 0.1537]	0.8%	0.3%
Mate VH et al. 2017	9	99	0.0909	[0.0410; 0.1566]	0.8%	0.2%
Memon A et al. 2012	11	236	0.0466	[0.0229; 0.0777]	0.8%	0.5%
Mittal N et al. 2013	27	166	0.1627	[0.1101; 0.2230]	0.8%	0.4%
Mori RK et al. 2017	0	69	0.0000	[0.0000; 0.0248]	0.7%	0.2%
Mugadlimath A et al. 2012	133	378	0.3519	[0.3044; 0.4008]	0.8%	0.8%
Nair PK et al. 2015	22	168	0.1310	[0.0838; 0.1865]	0.8%	0.4%
Nayak GH et al. 2015	12	138	0.0870	[0.0449; 0.1404]	0.8%	0.3%
Panda BB et al. 2015	15	78	0.1923	[0.1116; 0.2880]	0.7%	0.2%
Parekh U et al. 2019	142	1092	0.1300	[0.1107; 0.1507]	0.8%	2.4%
Pate RS et al. 2017	29	318	0.0912	[0.0618; 0.1255]	0.8%	0.7%
Patel DJ et al. 2011	0	288	0.0000	[0.0000; 0.0060]	0.8%	0.6%
Patel N et al. 2014	27	126	0.2143	[0.1466; 0.2906]	0.8%	0.3%
Patil A et al. 2014	22	74	0.2973	[0.1980; 0.4070]	0.7%	0.2%
Patnaik AMM et al. 2016	14	100	0.1400	[0.0781; 0.2156]	0.8%	0.2%
Pawar CK et al. 2017	0	201	0.0000	[0.0000; 0.0085]	0.8%	0.4%
Pawar V et al. 2011	295	923	0.3196	[0.2899; 0.3501]	0.8%	2.0%
Peranantham S et al. 2014	67	110	0.6091	[0.5159; 0.6985]	0.8%	0.2%
Prajapati T et al. 2013	133	366	0.3634	[0.3148; 0.4134]	0.8%	0.8%
Prashar A et al. 2018	14	375	0.0373	[0.0202; 0.0592]	0.8%	0.8%
Prayag A et al. 2016	2	110	0.0182	[0.0003; 0.0540]	0.8%	0.2%
Raizada A et al. 2012	235	584	0.4024	[0.3629; 0.4425]	0.8%	1.3%
Rajanandh M. G et al. 2013	100	224	0.4464	[0.3818; 0.5120]	0.8%	0.5%
Rajanandh M. G et al. 2014	91	261	0.3487	[0.2919; 0.4076]	0.8%	0.6%
Rajesh JJ et al. 2016	0	12	0.0000	[0.0000; 0.1386]	0.5%	0.0%
Ramanath KV et al. 2012	10	73	0.1370	[0.0664; 0.2265]	0.7%	0.2%
S Shah et al. 2018	5	60	0.0833	[0.0243; 0.1689]	0.7%	0.1%
Sandhu SS et al. 2010	6	78	0.0769	[0.0264; 0.1482]	0.7%	0.2%
Sandhu SS et al. 2010	71	131	0.5420	[0.4560; 0.6268]	0.8%	0.3%
Sangalad PN et al. 2010	1	39	0.0256	[0.0000; 0.1068]	0.7%	0.1%
Santosh KS et al. 2013	136	261	0.5211	[0.4603; 0.5815]	0.8%	0.6%
Sarkar AP et al. 2015	62	222	0.2793	[0.2221; 0.3403]	0.8%	0.5%
Saxena V et al. 2014	23	105	0.2190	[0.1446; 0.3037]	0.8%	0.2%
Shah SM et al. 2016	84	340	0.2471	[0.2026; 0.2944]	0.8%	0.7%
Shakuntala et al. 2015	98	1575	0.0622	[0.0508; 0.0747]	0.8%	3.4%
Sharma R et al. 2019	87	505	0.1723	[0.1405; 0.2065]	0.8%	1.1%
Siddamshetty AK et al. 2016	581	971	0.5984	[0.5673; 0.6290]	0.8%	2.1%
Siddapur RK et al. 2011	0	228	0.0000	[0.0000; 0.0075]	0.8%	0.5%
Singh B et al. 2017	6	180	0.0333	[0.0112; 0.0654]	0.8%	0.4%
Singh J et al. 2015	44	178	0.2472	[0.1864; 0.3134]	0.8%	0.4%
Singh O et al. 2011	30	138	0.2174	[0.1522; 0.2904]	0.8%	0.3%
Singh RR et al. 2016	19	140	0.1357	[0.0835; 0.1979]	0.8%	0.3%
Singh SP et al. 2013	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Sonar V et al. 2010	0	320	0.0000	[0.0000; 0.0054]	0.8%	0.7%
Srihari C et al. 2017	34	317	0.1073	[0.0754; 0.1439]	0.8%	0.7%
Srinivasa V et al. 2012	5	81	0.0617	[0.0178; 0.1264]	0.7%	0.2%
Srinivasulu K et al. 2019	18	100	0.1800	[0.1102; 0.2620]	0.8%	0.2%
Thakur S et al. 2017	25	110	0.2273	[0.1533; 0.3107]	0.8%	0.2%
Thunga G et al. 2010	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Vaidya YP et al. 2012	110	1003	0.1097	[0.0910; 0.1298]	0.8%	2.2%
VANISHREE et al. 2016	8	384	0.0208	[0.0086; 0.0379]	0.8%	0.8%
Varma NM et al. 2011	41	143	0.2867	[0.2153; 0.3638]	0.8%	0.3%
Verma P et al. 2018	30	120	0.2500	[0.1762; 0.3317]	0.8%	0.3%
Vivekanandan K et al. 2012	68	232	0.2931	[0.2362; 0.3535]	0.8%	0.5%
Waghmare CS et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Waghmare S et al. 2014	19	70	0.2714	[0.1729; 0.3823]	0.7%	0.2%
Yadav VK et al. 2018	757	1622	0.4667	[0.4425; 0.4910]	0.8%	3.5%
Fixed effect model		*43045*	*0.1698*	*[0.1662; 0.1734]*	--	*94.3%*
Random effects model			*0.1288*	*[0.1034; 0.1564]*	*88.7%*	--
Heterogeneity: I^2 = 99%, χ^2_{115} = 7991.46 (p = 0)						
Moderator = Children						
Adhikari DD et al. 2017	401	629	0.6375	[0.5995; 0.6747]	0.8%	1.4%
Aggarwal B et al. 2014	27	81	0.3333	[0.2343; 0.4402]	0.7%	0.2%
Bhat NK et al. 2012	39	117	0.3333	[0.2505; 0.4216]	0.8%	0.3%
Brata Ghosh V et al. 2013	26	52	0.5000	[0.3638; 0.6362]	0.7%	0.1%
Das A et al. 2015	154	290	0.5310	[0.4734; 0.5883]	0.8%	0.6%
Devaranavadagi RA et al. 2017	13	38	0.3421	[0.1983; 0.5015]	0.7%	0.1%
Gangal R et al. 2015	16	149	0.1074	[0.0622; 0.1627]	0.8%	0.3%
Kumar A et al. 2019	23	91	0.2527	[0.1682; 0.3476]	0.7%	0.2%
Manikyamba D et al. 2015	68	183	0.3716	[0.3028; 0.4430]	0.8%	0.4%
Modi NP et al. 2014	122	288	0.4236	[0.3670; 0.4812]	0.8%	0.6%
Ram P et al. 2014	32	81	0.3951	[0.2909; 0.5042]	0.7%	0.2%
Rathore S et al. 2013	57	100	0.5700	[0.4715; 0.6658]	0.8%	0.2%
Roy MP et al. 2017	95	195	0.4872	[0.4171; 0.5575]	0.8%	0.4%
Saikia D et al. 2020	58	153	0.3791	[0.3036; 0.4576]	0.8%	0.3%
Sharma J et al. 2014	55	165	0.3333	[0.2632; 0.4073]	0.8%	0.4%
Fixed effect model		*2612*	*0.4502*	*[0.4310; 0.4694]*	--	*5.7%*
Random effects model			*0.3960*	*[0.2918; 0.5051]*	*11.3%*	--
Heterogeneity: I^2 = 94%, χ^2_{114} = 246.59 (p < 0.01)						
Fixed effect model		***45657***	***0.1834***	***[0.1798; 0.1870]***	--	***100.0%***
Random effects model			***0.1536***	***[0.1277; 0.1813]***	***100.0%***	--

Heterogeneity: I^2 = 99%, χ^2_{130} = 9174.96 (p = 0)
Residual heterogeneity: I^2 = 98%, χ^2_{129} = 8238.05 (p = 0)

0 0.2 0.4 0.6 0.8 1
Percentage Miscellaneous

Supplementary Figure 4Sab: Prevalence of poisoning with Miscellaneous agents (4Sa) and Age wise distribution (4Sb)

4Sa

Study	corrosives	Total	Proportion	95% C.I.	WeightsR	weightsF
Moderator = Adult						
Abubakar S et al. 2014	6	165	0.0364	[0.0122; 0.0713]	0.8%	0.4%
Acharya S et al. 2014	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Ahuja H et al. 2015	0	67	0.0000	[0.0000; 0.0255]	0.7%	0.1%
Aiswarya Aravind et al. 2014	6	47	0.1277	[0.0449; 0.2405]	0.6%	0.1%
Ali I et al. 2017	26	379	0.0686	[0.0451; 0.0964]	0.8%	0.8%
Ali K et al. 2019	0	334	0.0000	[0.0000; 0.0051]	0.8%	0.7%
Anandabaskar N et al. 2019	12	275	0.0436	[0.0222; 0.0714]	0.8%	0.6%
Anthony L et al. 2012	9	122	0.0738	[0.0331; 0.1278]	0.8%	0.3%
Arulmurugan C et al. 2015	13	169	0.0769	[0.0409; 0.1225]	0.8%	0.4%
Asawari R et al. 2017	0	1010	0.0000	[0.0000; 0.0017]	0.8%	2.2%
Awasthi PM et al. 2018	38	582	0.0653	[0.0465; 0.0869]	0.8%	1.3%
Bagali M et al. 2019	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Bamathy B et al. 2017	4	218	0.0183	[0.0039; 0.0414]	0.8%	0.5%
Banerjee I et al. 2014	0	4432	0.0000	[0.0000; 0.0004]	0.9%	9.8%
Bannur V et al. 2019	2	306	0.0065	[0.0001; 0.0196]	0.8%	0.7%
Bansal A et al. 2018	5	1918	0.0026	[0.0007; 0.0055]	0.9%	4.2%
Barman DD et al. 2017	0	124	0.0000	[0.0000; 0.0138]	0.8%	0.3%
Benjamin RN et al. 2018	41	313	0.1310	[0.0957; 0.1708]	0.8%	0.7%
Bhagora RV et al. 2015	21	165	0.1273	[0.0803; 0.1828]	0.8%	0.4%
Bhowmick K et al. 2019	21	492	0.0427	[0.0264; 0.0625]	0.8%	1.1%
Celine TM et al. 2015	165	2081	0.0793	[0.0681; 0.0913]	0.9%	4.6%
Chary RS et al. 2017	2	136	0.0147	[0.0002; 0.0438]	0.8%	0.3%
Chatterjee S et al. 2020	81	592	0.1368	[0.1103; 0.1657]	0.8%	1.3%
Chintale KN et al. 2016	0	136	0.0000	[0.0000; 0.0126]	0.8%	0.3%
Danagus A et al. 2016	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Datir S et al. 2015	2	557	0.0036	[0.0001; 0.0108]	0.8%	1.2%
Garg V et al. 2010	0	95	0.0000	[0.0000; 0.0180]	0.7%	0.2%
Geetha K.B et al. 2019	0	150	0.0000	[0.0000; 0.0114]	0.8%	0.3%
Gopal BK et al. 2015	0	235	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Guntheti BK et al. 2010	0	35	0.0000	[0.0000; 0.0486]	0.6%	0.1%
Guntheti BK et al. 2011	1	502	0.0020	[0.0000; 0.0085]	0.8%	1.1%
Gupta A et al. 2017	0	200	0.0000	[0.0000; 0.0086]	0.8%	0.4%
Gupta B et al. 2016	14	128	0.1094	[0.0605; 0.1699]	0.8%	0.3%
Gupta P et al. 2015	0	368	0.0000	[0.0000; 0.0047]	0.8%	0.8%
Gupta P et al. 2016	0	243	0.0000	[0.0000; 0.0071]	0.8%	0.5%
Haloi M et al. 2013	1	96	0.0104	[0.0000; 0.0442]	0.7%	0.2%
Indu TH et al. 2015	29	1860	0.0156	[0.0104; 0.0218]	0.9%	4.1%
Jailkhani SMK et al. 2014	10	196	0.0510	[0.0240; 0.0868]	0.8%	0.4%
Jaiprakash H et al. 2011	0	225	0.0000	[0.0000; 0.0076]	0.8%	0.5%
Jayaprakash 2018	1	30	0.0333	[0.0000; 0.1376]	0.6%	0.1%
Jesslin J et al. 2010	0	1045	0.0000	[0.0000; 0.0016]	0.8%	2.3%
Joshi SC et al. 2013	0	372	0.0000	[0.0000; 0.0046]	0.8%	0.8%
Kaeley N et al. 2019	0	156	0.0000	[0.0000; 0.0110]	0.8%	0.3%
Kalita PP et al. 2019	17	234	0.0726	[0.0425; 0.1098]	0.8%	0.5%
Kanchan T et al. 2010	0	198	0.0000	[0.0000; 0.0087]	0.8%	0.4%
Karikalan et al. 2014	16	160	0.1000	[0.0578; 0.1518]	0.8%	0.4%
Katageri Set al. 2016	0	51	0.0000	[0.0000; 0.0334]	0.7%	0.1%
Kaur S et al. 2016	7	256	0.0273	[0.0103; 0.0515]	0.8%	0.6%
Khadilkar NP et al. 2016	2	40	0.0500	[0.0009; 0.1448]	0.6%	0.1%
Khosya S et al. 2016	10	799	0.0125	[0.0058; 0.0216]	0.8%	1.8%
Kondle Raghu et al. 2015	31	537	0.0577	[0.0394; 0.0792]	0.8%	1.2%
Kora SA et al. 2011	0	148	0.0000	[0.0000; 0.0116]	0.8%	0.3%
Koulapur V et al. 2015	0	210	0.0000	[0.0000; 0.0082]	0.8%	0.5%
Kumar MR et al. 2014	0	101	0.0000	[0.0000; 0.0170]	0.7%	0.2%
Kumar SV et al. 2010	65	2226	0.0292	[0.0226; 0.0366]	0.9%	4.9%
Lad KS et al. 2017	0	106	0.0000	[0.0000; 0.0162]	0.7%	0.2%
Latif M et al. 2020	3	207	0.0145	[0.0018; 0.0364]	0.8%	0.5%
Mahabalshetti AD et al. 2013	12	104	0.1154	[0.0602; 0.1847]	0.7%	0.2%
Maharani B et al. 2013	3	150	0.0200	[0.0025; 0.0501]	0.8%	0.3%
Mate VH et al. 2017	9	99	0.0909	[0.0410; 0.1566]	0.7%	0.2%
Memon A et al. 2012	0	236	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Mittal N et al. 2013	10	166	0.0602	[0.0284; 0.1022]	0.8%	0.4%
Mori RK et al. 2017	27	69	0.3913	[0.2789; 0.5097]	0.7%	0.2%
Mugadlimath A et al. 2012	6	378	0.0159	[0.0053; 0.0314]	0.8%	0.8%
Nair PK et al. 2015	10	168	0.0595	[0.0281; 0.1010]	0.8%	0.4%
Nayak GH et al. 2015	0	138	0.0000	[0.0000; 0.0124]	0.8%	0.3%
Panda BB et al. 2015	0	78	0.0000	[0.0000; 0.0219]	0.7%	0.2%
Parekh U et al. 2019	76	1092	0.0696	[0.0552; 0.0855]	0.9%	2.4%
Pate RS et al. 2017	9	318	0.0283	[0.0125; 0.0498]	0.8%	0.7%
Patel DJ et al. 2011	0	288	0.0000	[0.0000; 0.0060]	0.8%	0.6%
Patel N et al. 2014	2	126	0.0159	[0.0002; 0.0472]	0.8%	0.3%
Patil A et al. 2014	22	74	0.2973	[0.1980; 0.4070]	0.7%	0.2%
Patnaik AMM et al. 2016	5	100	0.0500	[0.0143; 0.1030]	0.7%	0.2%
Pawar CK et al. 2017	2	201	0.0100	[0.0002; 0.0298]	0.8%	0.4%
Pawar V et al. 2011	26	923	0.0282	[0.0184; 0.0399]	0.8%	2.0%
Peranantham S et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Prajapati T et al. 2013	53	366	0.1448	[0.1105; 0.1828]	0.8%	0.8%
Prayag A et al. 2016	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Raizada A et al. 2012	15	584	0.0257	[0.0142; 0.0403]	0.8%	1.3%
Rajanandh M. G et al. 2013	0	224	0.0000	[0.0000; 0.0077]	0.8%	0.5%
Rajanandh M. G et al. 2014	0	261	0.0000	[0.0000; 0.0066]	0.8%	0.6%
Rajesh JJ et al. 2016	0	12	0.0000	[0.0000; 0.1386]	0.4%	0.0%
Ramanath KV et al. 2012	1	73	0.0137	[0.0000; 0.0579]	0.7%	0.2%
S Shah et al. 2018	8	60	0.1333	[0.0573; 0.2326]	0.7%	0.1%
Sandhu SS et al. 2010	0	78	0.0000	[0.0000; 0.0219]	0.7%	0.2%
Sandhu SS et al. 2010	0	131	0.0000	[0.0000; 0.0131]	0.8%	0.3%
Sangalad PN et al. 2010	0	39	0.0000	[0.0000; 0.0436]	0.6%	0.1%
Santosh KS et al. 2013	0	261	0.0000	[0.0000; 0.0066]	0.8%	0.6%
Sarkar AP et al. 2015	0	222	0.0000	[0.0000; 0.0077]	0.8%	0.5%
Saxena V et al. 2014	7	105	0.0667	[0.0256; 0.1236]	0.7%	0.2%
Shah SM et al. 2016	19	340	0.0559	[0.0337; 0.0831]	0.8%	0.8%
Shakuntala et al. 2015	0	1575	0.0000	[0.0000; 0.0011]	0.9%	3.5%
Sharma R et al. 2019	21	505	0.0416	[0.0257; 0.0609]	0.8%	1.1%
Siddamshetty AK et al. 2016	92	971	0.0947	[0.0771; 0.1140]	0.8%	2.1%
Siddapur RK et al. 2011	0	228	0.0000	[0.0000; 0.0075]	0.8%	0.5%
Singh B et al. 2017	0	180	0.0000	[0.0000; 0.0095]	0.8%	0.4%
Singh J et al. 2015	7	178	0.0393	[0.0149; 0.0737]	0.8%	0.4%
Singh O et al. 2011	0	138	0.0000	[0.0000; 0.0124]	0.8%	0.3%
Singh RR et al. 2016	1	140	0.0071	[0.0000; 0.0304]	0.8%	0.3%
Singh SP et al. 2013	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Sonar V et al. 2010	0	320	0.0000	[0.0000; 0.0054]	0.8%	0.7%
Srihari C et al. 2017	30	317	0.0946	[0.0647; 0.1295]	0.8%	0.7%
Srinivasa V et al. 2012	3	81	0.0370	[0.0047; 0.0918]	0.7%	0.2%
Srinivasulu K et al. 2019	10	100	0.1000	[0.0478; 0.1675]	0.7%	0.2%
Thakur S et al. 2017	12	110	0.1091	[0.0568; 0.1750]	0.8%	0.2%
Thunga G et al. 2010	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Vaidya YP et al. 2012	0	1003	0.0000	[0.0000; 0.0017]	0.8%	2.2%
VANISHREE et al. 2016	10	384	0.0260	[0.0121; 0.0447]	0.8%	0.9%
Varma NM et al. 2011	0	143	0.0000	[0.0000; 0.0120]	0.8%	0.3%
Verma P et al. 2018	0	120	0.0000	[0.0000; 0.0143]	0.8%	0.3%
Vivekanandan K et al. 2012	0	232	0.0000	[0.0000; 0.0074]	0.8%	0.5%
Waghmare CS et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Waghmare S et al. 2014	5	70	0.0714	[0.0207; 0.1456]	0.7%	0.2%
Yadav VK et al. 2018	12	1622	0.0074	[0.0037; 0.0122]	0.9%	3.6%
Fixed effect model		*42550*	*0.0130*	*[0.0118; 0.0142]*	*--*	*94.2%*
Random effects model			*0.0179*	*[0.0116; 0.0254]*	*88.7%*	*--*
Heterogeneity: $I^2 = 95\%$, $\chi^2_{113} = 2253.32$ ($p = 0$)						
Moderator = Children						
Adhikari DD et al. 2017	57	629	0.0906	[0.0694; 0.1144]	0.8%	1.4%
Aggarwal B et al. 2014	6	81	0.0741	[0.0254; 0.1429]	0.7%	0.2%
Bhat NK et al. 2012	4	117	0.0342	[0.0074; 0.0764]	0.8%	0.3%
Brata Ghosh V et al. 2013	10	52	0.1923	[0.0951; 0.3120]	0.7%	0.1%
Das A et al. 2015	22	290	0.0759	[0.0479; 0.1094]	0.8%	0.6%
Devaranavadagi RA et al. 2017	4	38	0.1053	[0.0239; 0.2264]	0.6%	0.1%
Gangal R et al. 2015	32	149	0.2148	[0.1522; 0.2846]	0.8%	0.3%
Kumar A et al. 2019	20	91	0.2198	[0.1401; 0.3112]	0.7%	0.2%
Manikyamba D et al. 2015	13	183	0.0710	[0.0377; 0.1133]	0.8%	0.4%
Modi NP et al. 2014	50	288	0.1736	[0.1319; 0.2197]	0.8%	0.6%
Ram P et al. 2014	12	81	0.1481	[0.0781; 0.2348]	0.7%	0.2%
Rathore S et al. 2013	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Roy MP et al. 2017	31	195	0.1590	[0.1107; 0.2139]	0.8%	0.4%
Saikia D et al. 2020	50	153	0.3268	[0.2545; 0.4034]	0.8%	0.3%
Sharma J et al. 2014	5	165	0.0303	[0.0086; 0.0630]	0.8%	0.4%
Fixed effect model		*2612*	*0.1083*	*[0.0964; 0.1208]*	*--*	*5.8%*
Random effects model			*0.1121*	*[0.0726; 0.1585]*	*11.3%*	*--*
Heterogeneity: $I^2 = 91\%$, $\chi^2_{14} = 154.28$ ($p < 0.01$)						
Fixed effect model		**45162**	***0.0162***	***[0.0149; 0.0175]***	**--**	***100.0%***
Random effects model			***0.0249***	***[0.0179; 0.0329]***	***100.0%***	**--**

Heterogeneity: $I^2 = 96\%$, $\chi^2_{128} = 2853.52$ ($p = 0$)
Residual heterogeneity: $I^2 = 95\%$, $\chi^2_{127} = 2407.60$ ($p = 0$)

0 0.2 0.4 0.6 0.8 1
Percentage Corrosives

4Sb

Study	Venom	Total	Proportion	95% C.I.	WeightsR	weightsF
Phases = Central						
Aggarwal B et al. 2014	10	81	0.1235	[0.0595; 0.2051]	0.8%	0.2%
Ali I et al. 2017	80	379	0.2111	[0.1714; 0.2537]	0.8%	0.8%
Awasthi PM et al. 2018	0	582	0.0000	[0.0000; 0.0030]	0.8%	1.3%
Bhat NK et al. 2012	0	117	0.0000	[0.0000; 0.0146]	0.8%	0.3%
Gangal R et al. 2015	0	149	0.0000	[0.0000; 0.0115]	0.8%	0.3%
Gupta A et al. 2017	0	200	0.0000	[0.0000; 0.0086]	0.8%	0.4%
Gupta B et al. 2016	4	128	0.0312	[0.0067; 0.0700]	0.8%	0.3%
Gupta P et al. 2016	25	243	0.1029	[0.0675; 0.1445]	0.8%	0.5%
Joshi SC et al. 2013	0	372	0.0000	[0.0000; 0.0046]	0.8%	0.8%
Kaeley N et al. 2019	28	156	0.1795	[0.1229; 0.2439]	0.8%	0.3%
Patel DJ et al. 2011	0	288	0.0000	[0.0000; 0.0060]	0.8%	0.6%
Patel N et al. 2014	0	126	0.0000	[0.0000; 0.0136]	0.8%	0.3%
Rathore S et al. 2013	31	100	0.3100	[0.2227; 0.4045]	0.8%	0.2%
Saikia D et al. 2020	0	153	0.0000	[0.0000; 0.0112]	0.8%	0.3%
Saxena V et al. 2014	0	105	0.0000	[0.0000; 0.0163]	0.8%	0.2%
Sharma R et al. 2019	59	505	0.1168	[0.0902; 0.1464]	0.8%	1.1%
Singh J et al. 2015	8	178	0.0449	[0.0186; 0.0811]	0.8%	0.4%
Singh RR et al. 2016	0	140	0.0000	[0.0000; 0.0122]	0.8%	0.3%
Verma P et al. 2018	0	120	0.0000	[0.0000; 0.0143]	0.8%	0.3%
Waghmare CS et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Yadav VK et al. 2018	0	1622	0.0000	[0.0000; 0.0011]	0.8%	3.6%
Fixed effect model		*5854*	*0.0140*	*[0.0109; 0.0174]*	*--*	*13.0%*
Random effects model			*0.0237*	*[0.0036; 0.0577]*	*16.4%*	*--*
Heterogeneity: $I^2 = 97\%$, $\chi^2_{20} = 675.29$ ($p < 0.01$)						
Phases = East						
Banerjee I et al. 2014	1414	4432	0.3190	[0.3054; 0.3328]	0.8%	9.8%
Bhowmick K et al. 2019	0	492	0.0000	[0.0000; 0.0035]	0.8%	1.1%
Chatterjee S et al. 2020	264	592	0.4459	[0.4061; 0.4862]	0.8%	1.3%
Das A et al. 2015	62	290	0.2138	[0.1684; 0.2630]	0.8%	0.6%
Modi NP et al. 2014	80	288	0.2778	[0.2275; 0.3310]	0.8%	0.6%
Panda BB et al. 2015	15	78	0.1923	[0.1116; 0.2880]	0.7%	0.2%
Sarkar AP et al. 2015	0	222	0.0000	[0.0000; 0.0077]	0.8%	0.5%
Singh B et al. 2017	0	180	0.0000	[0.0000; 0.0095]	0.8%	0.4%
Thakur S et al. 2017	8	110	0.0727	[0.0305; 0.1298]	0.8%	0.2%
Fixed effect model		*6684*	*0.2468*	*[0.2365; 0.2573]*	*--*	*14.8%*
Random effects model			*0.1202*	*[0.0490; 0.2165]*	*7.1%*	*--*
Heterogeneity: $I^2 = 99\%$, $\chi^2_{8} = 1116.31$ ($p < 0.01$)						
Phases = NE						
Haloi M et al. 2013	0	96	0.0000	[0.0000; 0.0178]	0.8%	0.2%
Kalita PP et al. 2019	46	234	0.1966	[0.1480; 0.2501]	0.8%	0.5%
Fixed effect model		*330*	*0.1093*	*[0.0774; 0.1457]*	*--*	*0.7%*
Random effects model			*0.0629*	*[0.0000; 0.2584]*	*1.6%*	*--*
Heterogeneity: $I^2 = 98\%$, $\chi^2_{1} = 46$ ($p < 0.01$)						
Phases = North						
Ahuja H et al. 2015	0	67	0.0000	[0.0000; 0.0255]	0.7%	0.1%
Bansal A et al. 2018	0	1918	0.0000	[0.0000; 0.0009]	0.8%	4.2%
Brata Ghosh V et al. 2013	5	52	0.0962	[0.0283; 0.1937]	0.7%	0.1%
Danagus A et al. 2016	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Garg V et al. 2010	7	95	0.0737	[0.0283; 0.1362]	0.8%	0.2%
Kaur S et al. 2016	0	256	0.0000	[0.0000; 0.0067]	0.8%	0.6%
Khosya S et al. 2016	0	799	0.0000	[0.0000; 0.0022]	0.8%	1.8%
Kumar A et al. 2019	6	91	0.0659	[0.0225; 0.1276]	0.8%	0.2%
Latif M et al. 2020	0	207	0.0000	[0.0000; 0.0083]	0.8%	0.5%
Mittal N et al. 2013	64	166	0.3855	[0.3127; 0.4610]	0.8%	0.4%
Pawar CK et al. 2017	0	201	0.0000	[0.0000; 0.0085]	0.8%	0.4%
Raizada A et al. 2012	0	584	0.0000	[0.0000; 0.0029]	0.8%	1.3%
Roy MP et al. 2017	0	195	0.0000	[0.0000; 0.0088]	0.8%	0.4%
Sandhu SS et al. 2010	0	78	0.0000	[0.0000; 0.0219]	0.7%	0.2%
Sandhu SS et al. 2010	0	131	0.0000	[0.0000; 0.0131]	0.8%	0.3%
Sharma J et al. 2014	21	165	0.1273	[0.0803; 0.1828]	0.8%	0.4%
Siddamshetty AK et al. 2016	0	971	0.0000	[0.0000; 0.0018]	0.8%	2.1%
Singh O et al. 2011	0	138	0.0000	[0.0000; 0.0124]	0.8%	0.3%
Singh SP et al. 2013	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Fixed effect model		*6324*	*0.0007*	*[0.0000; 0.0020]*	*--*	*14.0%*
Random effects model			*0.0124*	*[0.0000; 0.0424]*	*14.7%*	*--*
Heterogeneity: $I^2 = 95\%$, $\chi^2_{18} = 398.79$ ($p < 0.01$)						
Phases = South						
Abubakar S et al. 2014	30	165	0.1818	[0.1264; 0.2446]	0.8%	0.4%
Acharya S et al. 2014	16	100	0.1600	[0.0940; 0.2390]	0.8%	0.2%
Adhikari DD et al. 2017	0	629	0.0000	[0.0000; 0.0027]	0.8%	1.4%
Aiswarya Aravind et al. 2014	0	47	0.0000	[0.0000; 0.0363]	0.7%	0.1%
Ali K et al. 2019	0	334	0.0000	[0.0000; 0.0051]	0.8%	0.7%
Anandabaskar N et al. 2019	0	275	0.0000	[0.0000; 0.0062]	0.8%	0.6%
Anthony L et al. 2012	0	122	0.0000	[0.0000; 0.0140]	0.8%	0.3%
Arulmurugan C et al. 2015	0	169	0.0000	[0.0000; 0.0101]	0.8%	0.4%
Bagali M et al. 2019	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Bamathy B et al. 2017	0	218	0.0000	[0.0000; 0.0079]	0.8%	0.5%
Bannur V et al. 2019	73	306	0.2386	[0.1924; 0.2880]	0.8%	0.7%
Barman DD et al. 2017	7	124	0.0565	[0.0216; 0.1051]	0.8%	0.3%
Benjamin RN et al. 2018	0	313	0.0000	[0.0000; 0.0055]	0.8%	0.7%
Celine TM et al. 2015	124	2081	0.0596	[0.0498; 0.0702]	0.8%	4.6%
Chary RS et al. 2017	7	136	0.0515	[0.0196; 0.0960]	0.8%	0.3%
Devaranavadagi RA et al. 2017	0	38	0.0000	[0.0000; 0.0448]	0.7%	0.1%
Geetha K.B et al. 2019	0	150	0.0000	[0.0000; 0.0114]	0.8%	0.3%
Gopal BK et al. 2015	0	235	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Guntheti BK et al. 2010	0	35	0.0000	[0.0000; 0.0486]	0.7%	0.1%
Guntheti BK et al. 2011	23	502	0.0458	[0.0291; 0.0660]	0.8%	1.1%
Gupta P et al. 2015	0	368	0.0000	[0.0000; 0.0047]	0.8%	0.8%
Indu TH et al. 2015	0	1860	0.0000	[0.0000; 0.0009]	0.8%	4.1%
Jaiprakash H et al. 2011	0	225	0.0000	[0.0000; 0.0076]	0.8%	0.5%
Jayaprakash 2018	1	30	0.0333	[0.0000; 0.1376]	0.7%	0.1%
Jesslin J et al. 2010	126	1045	0.1206	[0.1015; 0.1410]	0.8%	2.3%
Kanchan T et al. 2010	0	198	0.0000	[0.0000; 0.0087]	0.8%	0.4%
Karikalan et al. 2014	0	160	0.0000	[0.0000; 0.0107]	0.8%	0.4%
Katageri Set al. 2016	5	51	0.0980	[0.0288; 0.1973]	0.7%	0.1%
Khadilkar NP et al. 2016	0	40	0.0000	[0.0000; 0.0425]	0.7%	0.1%
Kondle Raghu et al. 2015	112	537	0.2086	[0.1752; 0.2440]	0.8%	1.2%
Kora SA et al. 2011	0	148	0.0000	[0.0000; 0.0116]	0.8%	0.3%
Koulapur V et al. 2015	0	210	0.0000	[0.0000; 0.0082]	0.8%	0.5%
Kumar MR et al. 2014	0	101	0.0000	[0.0000; 0.0170]	0.8%	0.2%
Kumar SV et al. 2010	600	2226	0.2695	[0.2513; 0.2882]	0.8%	4.9%
Mahabalshetti AD et al. 2013	0	104	0.0000	[0.0000; 0.0165]	0.8%	0.2%
Maharani B et al. 2013	0	150	0.0000	[0.0000; 0.0114]	0.8%	0.3%
Manikyamba D et al. 2015	81	183	0.4426	[0.3712; 0.5152]	0.8%	0.4%
Memon A et al. 2012	0	236	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Mugadlimath A et al. 2012	0	378	0.0000	[0.0000; 0.0045]	0.8%	0.8%
Nair PK et al. 2015	0	168	0.0000	[0.0000; 0.0102]	0.8%	0.4%
Nayak GH et al. 2015	0	138	0.0000	[0.0000; 0.0124]	0.8%	0.3%
Patnaik AMM et al. 2016	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Peranantham S et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Prayag A et al. 2016	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Rajanandh M. G et al. 2013	29	224	0.1295	[0.0884; 0.1768]	0.8%	0.5%
Rajanandh M. G et al. 2014	32	261	0.1226	[0.0854; 0.1654]	0.8%	0.6%
Rajesh JJ et al. 2016	0	12	0.0000	[0.0000; 0.1386]	0.5%	0.0%
Ram P et al. 2014	0	81	0.0000	[0.0000; 0.0211]	0.8%	0.2%
Ramanath KV et al. 2012	10	73	0.1370	[0.0664; 0.2265]	0.7%	0.2%
Sangalad PN et al. 2010	0	39	0.0000	[0.0000; 0.0436]	0.7%	0.1%
Santosh KS et al. 2013	55	261	0.2107	[0.1633; 0.2624]	0.8%	0.6%
Shakuntala et al. 2015	0	1575	0.0000	[0.0000; 0.0011]	0.8%	3.5%
Siddapur RK et al. 2011	13	228	0.0570	[0.0302; 0.0913]	0.8%	0.5%
Srihari C et al. 2017	0	317	0.0000	[0.0000; 0.0054]	0.8%	0.7%
Srinivasa V et al. 2012	0	81	0.0000	[0.0000; 0.0211]	0.8%	0.2%
Srinivasulu K et al. 2019	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Thunga G et al. 2010	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
VANISHREE et al. 2016	70	384	0.1823	[0.1452; 0.2226]	0.8%	0.9%
Vivekanandan K et al. 2012	0	232	0.0000	[0.0000; 0.0074]	0.8%	0.5%
Fixed effect model		*18923*	*0.0353*	*[0.0326; 0.0382]*	*--*	*41.9%*
Random effects model			*0.0195*	*[0.0066; 0.0375]*	*45.4%*	*--*
Heterogeneity: $I^2 = 98\%$, $\chi^2_{58} = 3172.33$ ($p = 0$)						
Phases = West						
Asawari R et al. 2017	267	1010	0.2644	[0.2376; 0.2920]	0.8%	2.2%
Bhagora RV et al. 2015	12	165	0.0727	[0.0374; 0.1179]	0.8%	0.4%
Chintale KN et al. 2016	0	136	0.0000	[0.0000; 0.0126]	0.8%	0.3%
Datir S et al. 2015	191	557	0.3429	[0.3040; 0.3829]	0.8%	1.2%
Jailkhani SMK et al. 2014	0	196	0.0000	[0.0000; 0.0088]	0.8%	0.4%
Lad KS et al. 2017	0	106	0.0000	[0.0000; 0.0162]	0.8%	0.2%
Mate VH et al. 2017	11	99	0.1111	[0.0557; 0.1815]	0.8%	0.2%
Mori RK et al. 2017	15	69	0.2174	[0.1271; 0.3233]	0.7%	0.2%
Parekh U et al. 2019	376	1092	0.3443	[0.3164; 0.3728]	0.8%	2.4%
Pate RS et al. 2017	30	318	0.0943	[0.0645; 0.1291]	0.8%	0.7%
Patil A et al. 2014	9	74	0.1216	[0.0556; 0.2072]	0.7%	0.2%
Pawar V et al. 2011	4	923	0.0043	[0.0009; 0.0098]	0.8%	2.0%
Prajapati T et al. 2013	0	366	0.0000	[0.0000; 0.0047]	0.8%	0.8%
S Shah et al. 2018	22	60	0.3667	[0.2486; 0.4932]	0.7%	0.1%
Shah SM et al. 2016	88	340	0.2588	[0.2136; 0.3068]	0.8%	0.8%
Sonar V et al. 2010	0	320	0.0000	[0.0000; 0.0054]	0.8%	0.7%
Vaidya YP et al. 2012	350	1003	0.3490	[0.3197; 0.3787]	0.8%	2.2%
Varma NM et al. 2011	21	143	0.1469	[0.0931; 0.2100]	0.8%	0.3%
Waghmare S et al. 2014	1	70	0.0143	[0.0000; 0.0603]	0.7%	0.2%
Fixed effect model		*7047*	*0.1518*	*[0.1434; 0.1604]*	*--*	*15.6%*
Random effects model			*0.1002*	*[0.0524; 0.1607]*	*14.8%*	*--*
Heterogeneity: $I^2 = 99\%$, $\chi^2_{18} = 1728.6$ ($p = 0$)						
Fixed effect model		**45162**	***0.0585***	***[0.0563; 0.0608]***	**--**	***100.0%***
Random effects model			***0.0334***	***[0.0215; 0.0475]***	***100.0%***	**--**

Heterogeneity: $I^2 = 99\%$, $\chi^2_{128} = 11244.51$ ($p = 0$)
Residual heterogeneity: $I^2 = 98\%$, $\chi^2_{123} = 7137.31$ ($p = 0$)

0 0.2 0.4 0.6 0.8 1
Percentage Venom

Supplementary File 1: Search strategy:

(((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india) of all studies -57417.

(((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india) in humans 23303

(((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india)-428

(((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india)of obcervational studies - 460

Search: (((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india) Filters: in the last 10 years-428

((((((((((((("epidemiology"[MeSH Subheading] OR "epidemiology"[All Fields]) OR "prevalence"[All Fields]) OR "prevalence"[MeSH Terms]) OR "prevalance"[All Fields]) OR "prevalences"[All Fields]) OR "prevalence s"[All Fields]) OR "prevalent"[All Fields]) OR "prevalently"[All Fields]) OR "prevalents"[All Fields]) AND (((((((("poisoned"[All Fields] OR "poisoning"[MeSH Terms]) OR "poisoning"[All Fields]) OR "poisonings"[All Fields]) OR "poisoning"[MeSH Subheading]) OR "poisonous"[All Fields]) OR "poisons"[Pharmacological Action]) OR "poisons"[MeSH Terms]) OR "poisons"[All Fields]) OR "poison"[All Fields])) OR (("organophosphate poisoning"[MeSH Terms] OR ("organophosphate"[All Fields] AND "poisoning"[All Fields])) OR "organophosphate poisoning"[All Fields])) OR (((((("pesticidal"[All Fields] OR "pesticide s"[All Fields]) OR "pesticides"[Pharmacological Action]) OR "pesticides"[MeSH Terms]) OR "pesticides"[All Fields]) OR "pesticide"[All Fields])) OR (((((((("caustics"[Pharmacological Action] OR "caustics"[MeSH Terms]) OR "caustics"[All Fields]) OR "corrosive"[All Fields]) OR "corrosives"[All Fields]) OR "corrosion"[MeSH Terms]) OR "corrosion"[All Fields]) OR "corrosions"[All Fields]) OR "corrosiveness"[All Fields]) OR "corrosivity"[All Fields])) OR (((((((("venom s"[All Fields] OR "venome"[All Fields]) OR "venomic"[All Fields]) OR "venomics"[All Fields]) OR "venomous"[All Fields]) OR "venoms"[MeSH Terms]) OR "venoms"[All Fields]) OR "venom"[All Fields])) OR ((((("drug s"[All Fields] OR "pharmaceutical preparations"[MeSH Terms]) OR ("pharmaceutical"[All Fields] AND "preparations"[All Fields])) OR

"pharmaceutical preparations"[All Fields]) OR "drugs"[All Fields])) AND ((("india"[MeSH Terms] OR "india"[All Fields]) OR "india s"[All Fields]) OR "indias"[All Fields])

Translations

prevalence: "epidemiology"[Subheading] OR "epidemiology"[All Fields] OR "prevalence"[All Fields] OR "prevalence"[MeSH Terms] OR "prevalance"[All Fields] OR "prevalences"[All Fields] OR "prevalence's"[All Fields] OR "prevalent"[All Fields] OR "prevalently"[All Fields] OR "prevalents"[All Fields]

poisoning: "poisoned"[All Fields] OR "poisoning"[MeSH Terms] OR "poisoning"[All Fields] OR "poisonings"[All Fields] OR "poisoning"[Subheading] OR "poisonous"[All Fields] OR "poisons"[Pharmacological Action] OR "poisons"[MeSH Terms] OR "poisons"[All Fields] OR "poison"[All Fields]

organophosphate poisoning: "organophosphate poisoning"[MeSH Terms] OR ("organophosphate"[All Fields] AND "poisoning"[All Fields]) OR "organophosphate poisoning"[All Fields]

pesticides: "pesticidal"[All Fields] OR "pesticide's"[All Fields] OR "pesticides"[Pharmacological Action] OR "pesticides"[MeSH Terms] OR "pesticides"[All Fields] OR "pesticide"[All Fields]

corrosives: "caustics"[Pharmacological Action] OR "caustics"[MeSH Terms] OR "caustics"[All Fields] OR "corrosive"[All Fields] OR "corrosives"[All Fields] OR "corrosion"[MeSH Terms] OR "corrosion"[All Fields] OR "corrosions"[All Fields] OR "corrosiveness"[All Fields] OR "corrosivity"[All Fields]

venom: "venom's"[All Fields] OR "venome"[All Fields] OR "venomic"[All Fields] OR "venomics"[All Fields] OR "venomous"[All Fields] OR "venoms"[MeSH Terms] OR "venoms"[All Fields] OR "venom"[All Fields]

drugs: "drug's"[All Fields] OR "pharmaceutical preparations"[MeSH Terms] OR ("pharmaceutical"[All Fields] AND "preparations"[All Fields]) OR "pharmaceutical preparations"[All Fields] OR "drugs"[All Fields]

india: "india"[MeSH Terms] OR "india"[All Fields] OR "india's"[All Fields] OR "indias"[All Fields]

Supplementary Table S1a: Characteristics of all studies

Study Id with year	Sample Size	Most common age group(Y)	Sex Ratio (M/F)	Geographical Region of India	Types of Poison
Abubakar S et al. 2014[1]	165	21-30	1.46	South	Pesticides-78, Corrosives-6, Venom-30, Drugs-33, Others-18
Acharya S et al. 2014[2]	100	21-30	0.9	South	Pesticides-64, Corrosives-0, Venom-16, Drugs-5, Others-15
Adhikari DD et al. 2017[3]	629	0-16	NA	South	Pesticides-171, Corrosives-57,Venom-0, Drugs-0, Others-401
Aggarwal B et al. 2014[4]	81	1-18	1.25	Central	Pesticides-24, Corrosives-6, Venom-10, Drugs-14, Others-27
Ahuja H et al. 2015[5]	67	20-40	2.2	North	Pesticides-36, Corrosives-0,Venom-0, Drugs-20, Others-11
Aiswarya A et al. 2014[6]	47	25-44	1.35	South	Pesticides-18, Corrosives-6,Venom-0, Drugs-11, Others-12
Ali I et al. 2017[7]	379	21-30	1.5	Central	Pesticides-208, Corrosives-26,Venom-80, Drugs-35, Others-30
Ali K et al. 2019[8]	334	19-29	NA	South	Pesticides-251, Corrosives-0, Venom-0, Drugs-69, Others-14
Anandabaskar N et al. 2019[9]	275	21-30	0.7	South	Pesticides-123, Corrosives-12, Venom-0, Drugs-37, Others-103
Anthony L et al. 2012[10]	122	21-30	1.1	South	Pesticides-76, Corrosives-9, Venom-0, Drugs-0, Others-37
Arulmurugan C et al. 2015[11]	169	10-30	1.5	South	Pesticides-84, Corrosives-13, Venom-0, Drugs-22, Others-50

Asawari R et al. 2017[12]	1010	20-35	1.3	West	Pesticides-570, Corrosives-0, Venom-267, Drugs-109, Others-64
Awasthi PM et al. 2018[13]	582	21-30	1.7	Central	Pesticides-244, Corrosives-38, Venom-0, Drugs-35, Others-265
Bagali M et al. 2019[14]	100	21-30	2.5	South	Pesticides-98, Corrosives-0, Venom-0, Drugs-2, Others-0
Balasubramanian K et al.2019[15]	120	20-30	1.2	South	Pesticides-111, Corrosives-0, Venom-0, Drugs-0, Others-9
Bamathy B et al. 2017[16]	218	19-30	1.1	South	Pesticides-110, Corrosives-4, Venom-0, Drugs-74, Others-30
Banerjee I et al. 2014[17]	4432	21-30	0.56	East	Pesticides-1699, Corrosives-0,Venom-1414, Drugs-714, Others-605
Bannur V et al. 2019[18]	306	21-30	1.5	South	Pesticides-168, Corrosives-2, Venom-73, Drugs-41, Others-22
Bansal A et al. 2018[19]	1918	NA	NA	North	Pesticides-787, Corrosives-5, Venom-0, Drugs-41, Others-22
Barman DD et al. 2017[20]	124	21-30	0.7	South	Pesticides-103, Corrosives-0, Venom-7, Drugs-0, Others-14
Benjamin RN et al. 2018[21]	313	25-44	1.6	South	Pesticides-151, Corrosives-41, Venom-0, Drugs-95, Others-26
Bhagora RV et al. 2015[22]	165	21-30	1.36	West	Pesticides-126, Corrosives-21, Venom-12, Drugs-2, Others-4
Bhat NK et al. 2012[23]	117	1-18	1.4	Central	Pesticides-44, Corrosives-4, Venom-0, Drugs-30, Others-39
Bhowmick K et al. 2019[24]	492	21-28	1.5	East	Pesticides-393, Corrosives-21,Venom-0, Drugs-45, Others-33

Brata Ghosh V et al. 2013[25]	52	0-11	1.9	North	Pesticides-3, Corrosives-30, Venom-5, Drugs-8, Others-26
Celine TM et al. 2015[26]	2081	26-45	1.3	South	Pesticides-946, Corrosives-165, Venom-124, Drugs-416, Others-430
Chary RS et al. 2017[27]	136	21-30	1.96	South	Pesticides-91, Corrosives-22, Venom-7, Drugs-11, Others-25
Chatterjee S et al. 2020[28]	592	21-30	1.3	East	Pesticides-72, Corrosives-181, Venom-264, Drugs-78, Others-97
Chintale KN et al. 2016[29]	136	21-30	2.9	West	Pesticides-136, Corrosives-0, Venom-0, Drugs-0, Others-0
Danagus A et al. 2016[30]	100	31-40	4.6	North	Pesticides-64, Corrosives-0, Venom-0, Drugs-33, Others-3
Das A et al. 2015[31]	290	0-12	1.5	East	Pesticides-34, Corrosives-22, Venom-62, Drugs-18, Others-154
Datir S et al. 2015[32]	557	21-30	1.4	West	Pesticides-275, Corrosives-2, Venom-191, Drugs-14, Others-75
Devaranavadagi RA et al. 2017[33]	38	1-18	0.7	South	Pesticides-8, Corrosives-4, Venom-0, Drugs-13, Others-13
Gangal R et al. 2015[34]	149	0-10	1.3	Central	Pesticides-82, Corrosives-32, Venom-0, Drugs-19, Others-16
Garg V et al. 2010[35]	95	21-30	4	North	Pesticides-65, Corrosives-20, Venom-7, Drugs-12, Others-11
Geetha K.B et al. 2019[36]	150	21-30	2.7	South	Pesticides-150, Corrosives-0, Venom-0, Drugs-0, Others-0
Gopal BK et al. 2015[37]	235	21-30	2.1	South	Pesticides-223, Corrosives-0, Venom-0, Drugs-12, Others-0

Guntheti BK et al. 2010[38]	35	15-30	2.2	South	Pesticides-35, Corrosives-0, Venom-0, Drugs-0, Others-0
Guntheti BK et al. 2011[39]	502	21-30	6.1	South	Pesticides-419, Corrosives-1, Venom-23, Drugs-40, Others-19
Gupta A et al. 2017[40]	200	21-30	0.6	Central	Pesticides-165, Corrosives-0, Venom-0, Drugs-18, Others-17
Gupta B et al. 2016[41]	128	21-30	1.4	Central	Pesticides-62, Corrosives-14, Venom-4, Drugs-28, Others-20
Gupta Pet al. 2015[42]	368	21-30	NA	South	Pesticides-270, Corrosives-0, Venom-0, Drugs-93, Others-5
Gupta P et al. 2016[43]	243	21-30	1.4	Central	Pesticides-169, Corrosives-0, Venom-25, Drugs-27, Others-22
Haloi M et al. 2013[44]	96	20-29	1.66	North-East	Pesticides-47, Corrosives-1, Venom-0, Drugs-3, Others-45
Indu TH et al. 2015[45]	1860	21-30	1.6	South	Pesticides-1170, Corrosives-29, Venom-0, Drugs-169, Others-492
Jailkhani SMK et al. 2014[46]	196	21-30	1.1	West	Pesticides-95, Corrosives-10, Venom-0, Drugs-17, Others-74
Jaiprakash H et al. 2011[47]	225	21-30	1.6	South	Pesticides-185, Corrosives-0, Venom-0, Drugs-40, Others-0
Jayaprakash 2018[48]	30	20-40	0.6	South	Pesticides-17, Corrosives-1, Venom-1, Drugs-7, Others-4
Jesslin J et al. 2010[49]	1045	18-29	1.51	South	Pesticides-413, Corrosives-0, Venom-126, Drugs-273, Others-233
Joshi SC et al. 2013[50]	372	21-30	1.2	Central	Pesticides-362, Corrosives-0, Venom-0, Drugs-0, Others-10

Kaeley N et al. 2019[51]	156	NA	3.2	Central	Pesticides-31, Corrosives-0, Venom-28, Drugs-90, Others-7
Kalita PP et al. 2019[52]	234	18-30	1.66	North-East	Pesticides-108, Corrosives-17, Venom-46, Drugs-44, Others-19
Kanchan Tet al. 2010[53]	198	20-29	2.5	South	Pesticides-159, Corrosives-0, Venom-0, Drugs-20, Others-19
Karikalan et al. 2014[54]	160	11-20	0.4	South	Pesticides-122, Corrosives-16, Venom-0, Drugs-20, Others-2
Katageri Set al. 2016[55]	51	21-30	3.6	South	Pesticides-21, Corrosives-0, Venom-5, Drugs-1, Others-24
Kaur S et al. 2016[56]	256	18-25	1.2	North	Pesticides-106, Corrosives-7, Venom-0, Drugs-91, Others-52
Khadilkar NP et al. 2016[57]	40	21-30	2.1	South	Pesticides-31, Corrosives-2, Venom-0, Drugs-4, Others-3
Khosya S et al. 2016[58]	799	21-30	1.26	North	Pesticides-440, Corrosives-10, Venom-0, Drugs-154, Others-195
Kondle Raghu et al. 2015[59]	537	20-30	0.92	South	Pesticides-201, Corrosives-31, Venom-112, Drugs-65, Others-128
Kora SA et al. 2011[60]	148	21-30	0.78	South	Pesticides-148, Corrosives-0, Venom-0, Drugs-0, Others-0
Koulapur V et al. 2015[61]	210	21-30	2.6	South	Pesticides-210, Corrosives-0, Venom-0, Drugs-0, Others-0
Kumar A et al. 2019[62]	91	0-12	1.6	North	Pesticides-34, Corrosives-20, Venom-6, Drugs-8, Others-23
Kumar MR et al. 2014[63]	101	21-30	2.5	South	Pesticides-101, Corrosives-0, Venom-0, Drugs-0, Others-0

Kumar SV et al. 2010[64]	2226	21-30	1.1	South	Pesticides-597, Corrosives-65, Venom-600, Drugs-764, Others-200
Lad KS et al. 2017[65]	106	21-30	1.4	West	Pesticides-88, Corrosives-0, Venom-0, Drugs-0, Others-18
Latif M et al. 2020[66]	207	20-30	2.3	North	Pesticides-194, Corrosives-3, Venom-0, Drugs-0, Others-10
Mahabalshetti AD et al. 2013[67]	104	20-29	1.1	South	Pesticides-62, Corrosives-12, Venom-0, Drugs-11, Others-19
Maharani B et al. 2013[68]	150	21-30	1.6	South	Pesticides-126, Corrosives-3, Venom-0, Drugs-6, Others-15
Manikyamba D et al. 2015[69]	183	1-15	1.56	South	Pesticides-12Corrosives-3, Venom-81, Drugs-9, Others-68
Mate VH et al. 2017[70]	99	21-30	2.5	West	Pesticides-32, Corrosives-9, Venom-11, Drugs-38, Others-9
Memon A et al. 2012[71]	236	21-30	0.8	South	Pesticides-191, Corrosives-0, Venom-0, Drugs-34, Others-11
Mittal N et al. 2013[72]	166	19-39	2.3	North	Pesticides-47, Corrosives-10, Venom-64, Drugs-18, Others-27
Modi NP et al. 2014[73]	288	0-14	2.3	East	Pesticides-36, Corrosives-50, Venom-80, Drugs-0, Others-122
Mori RK et al. 2017[74]	69	NA	NA	West	Pesticides-24, Corrosives-27, Venom-15, Drugs-3, Others-0
Mugadlimath A et al. 2012[75]	378	21-30	1.2	South	Pesticides-200, Corrosives-6, Venom-0, Drugs-39, Others-133
Muley A et al. 2014[76]	76	15-25	1.5	West	Pesticides-76, Corrosives-0, Venom-0, Drugs-0, Others-0

Nagaraju K et al. 2015[77]	2169	21-40	1.7	South	Pesticides- 2169,Corrosives-NA,Venom-NA, Drugs-NA, Others-NA
Nair PK et al. 2015[78]	168	21-30	0.7	South	Pesticides-63, Corrosives-10,Venom-0, Drugs-73,Others-22
Nayak GH et al. 2015[79]	138	21-30	2.5	South	Pesticides-114, Corrosives-0, Venom-0, Drugs-12, Others-12
Panda BB et al. 2015[80]	78	21-30	1.4	East	Pesticides-30, Corrosives-0, Venom-15, Drugs-18, Others-15
Parekh U et al. 2019[81]	1092	21-30	1.5	West	Pesticides-443, Corrosives-76, Venom-376, Drugs-55, Others-142
Pate RS et al. 2017[82]	318	21-30	1.8	West	Pesticides-222, Corrosives-9, Venom-30, Drugs-28, Others-29
Patel DJ et al. 2011[83]	288	21-30	1.3	Central	Pesticides-288, Corrosives-0, Venom-0, Drugs-0, Others-0
Patel N et al. 2014[84]	126	21-30	1.6	Central	Pesticides-91, Corrosives-2, Venom-0, Drugs-6, Others-27
Patil A et al. 2014[85]	74	20-29	1.1	West	Pesticides-11, Corrosives-22, Venom-9, Drugs-10, Others-22
Patnaik AMM et al. 2016[86]	100	NA	1.86	South	Pesticides-77, Corrosives-5, Venom-0, Drugs-4, Others-14
Pawar CK et al. 2017[87]	201	21-30	3.67	North	Pesticides-191,Corrosives-2, Venom-0, Drugs-8, Others-0
Pawar V et al. 2011[88]	923	20-29	1.4	West	Pesticides-441, Corrosives-26, Venom-4, Drugs-157, Others-295
Peranantham S et al. 2014[89]	110	21-30	3.1	South	Pesticides-43, Corrosives-0, Venom-0, Drugs-0, Others-67

Peshin SS et al. 2014[90]	4929	18-35	1.6	North	Pesticides-4929, Corrosives-NA, Venom-NA, Drugs-NA, Others-NA
Prajapati T et al. 2013[91]	366	21-30	2.4	West	Pesticides-124, Corrosives-53, Venom-0, Drugs-56, Others-133
Prashar A et al. 2018[92]	375	21-30	3.2	North	Pesticides-361, Corrosives-NA, Venom-NA, Drugs-NA, Others-14
Prayag A et al. 2016[93]	110	18-28	1.68	South	Pesticides-106, Corrosives-0, Venom-0, Drugs-2, Others-2
Raizada A et al. 2012[94]	584	20-30	2.5	North	Pesticides-185, Corrosives-15, Venom-0, Drugs-149, Others-235
Rajanandh M. G et al. 2013[95]	224	21-35	1.1	South	Pesticides-55, Corrosives-0, Venom-29, Drugs-40, Others-100
Rajanandh M. G et al. 2014[96]	261	21-35	1.35	South	Pesticides-88, Corrosives-0, Venom-32, Drugs-50, Others-91
Rajesh JJ et al. 2016[97]	12	20-29	5	South	Pesticides-12, Corrosives-0, Venom-0, Drugs-0, Others-0
Ram P et al. 2014[98]	81	1-15	1.02	South	Pesticides-31, Corrosives-12, Venom-0, Drugs-6, Others-32
Ramanath KV et al. 2012[99]	73	21-40	1.7	South	Pesticides-48, Corrosives-1, Venom-10, Drugs-4, Others-10
Rathore S et al. 2013[100]	100	1-15	2.3	Central	Pesticides-12, Corrosives-0, Venom-31, Drugs-0, Others-57
Roy MP et al. 2017[101]	195	0-12	1.7	North	Pesticides-35, Corrosives-31, Venom-0, Drugs-34, Others-95
S Shah et al. 2018[102]	60	21-40	3.5	West	Pesticides-23, Corrosives-8, Venom-22, Drugs-2, Others-5

Saikia D et al. 2020[103]	153	0-12	1.86	Central	Pesticides-28, Corrosives-50, Venom-0, Drugs-17, Others-58
Sandhu SS et al. 2010[104]	78	21-30	2.9	North	Pesticides-67, Corrosives-0, Venom-0, Drugs-5, Others-6
Sandhu SS et al. 2010[105]	131	21-30	3.1	North	Pesticides-55, Corrosives-0, Venom-0, Drugs-5, Others-71
Sangalad PN et al. 2010[106]	39	41-50	3.9	South	Pesticides-27, Corrosives-0, Venom-0, Drugs-11, Others-1
Santosh KS et al. 2013[107]	261	21-35	1.35	South	Pesticides-47, Corrosives-0, Venom-55, Drugs-23, Others-136
Sarkar AP et al. 2015[108]	222	20-29	0.96	East	Pesticides-132, Corrosives-0, Venom-0, Drugs-28, Others-62
Saxena V et al. 2014[109]	105	21-30	1.2	Central	Pesticides-64, Corrosives-7, Venom-0, Drugs-11, Others-23
Shah SM et al. 2016[110]	340	21-30	1.74	West	Pesticides-133, Corrosives-19, Venom-88, Drugs-16, Others-84
Shakuntala et al. 2015[111]	1575	21-30	2.5	South	Pesticides-1477, Corrosives-0, Venom-0, Drugs-0, Others-98
Sharma J et al. 2014[112]	165	1-18	1.2	North	Pesticides-63, Corrosives-5, Venom-21, Drugs-21, Others-55
Sharma R et al. 2019[113]	505	21-30	1.4	Central	Pesticides-310, Corrosives-21, Venom-59, Drugs-28, Others-87
Siddamshetty AK et al. 2016[114]	971	21-30	2.1	North	Pesticides-196, Corrosives-92, Venom-0, Drugs-102, Others-581
Siddapur RK et al. 2011[115]	228	21-30	2.3	South	Pesticides-205, Corrosives-0, Venom-13, Drugs-10, Others-0

Singh B et al. 2017[116]	180	15-29	1.2	East	Pesticides-170, Corrosives-0, Venom-0, Drugs-4, Others-6
Singh J et al. 2015[117]	178	21-30	1.28	Central	Pesticides-114, Corrosives-7, Venom-8, Drugs-5, Others-44
Singh O et al. 2011[118]	138	21-30	1.02	North	Pesticides-6, Corrosives-0, Venom-0, Drugs-102, Others-30
Singh RR et al. 2016[119]	140	21-30	1.6	Central	Pesticides-101, Corrosives-1, Venom-0, Drugs-19, Others-19
Singh SP et al. 2013[120]	110	20-30	2.67	North	Pesticides-110, Corrosives-0, Venom-0, Drugs-0, Others-0
Sonar V et al. 2010[121]	320	21-30	2.7	West	Pesticides-320, Corrosives-0, Venom-0, Drugs-0, Others-0
Srihari C et al. 2017[122]	317	15-24	0.8	South	Pesticides-157, Corrosives-30, Venom-0, Drugs-96, Others-34
Srinivasa V et al. 2012[123]	81	21-30	2.5	South	Pesticides-68, Corrosives-3, Venom-0, Drugs-5, Others-5
Srinivasulu K et al. 2019[124]	100	21-40	1.6	South	Pesticides-60, Corrosives-10, Venom-0, Drugs-12, Others-18
Thakur S et al. 2017[125]	110	21-30	0.8	East	Pesticides-41, Corrosives-12, Venom-8, Drugs-24, Others-25
Thunga G et al. 2010[126]	100	21-30	2.1	South	Pesticides-100, Corrosives-0, Venom-0, Drugs-0, Others-0
Vaidya YP et al. 2012[127]	1003	21-30	1.8	West	Pesticides-400, Corrosives-0, Venom-350, Drugs-143, Others-110
Vanishree et al. 2016[128]	384	21-30	2.2	South	Pesticides-241, Corrosives-10, Venom-70, Drugs-55, Others-8

Varma NM et al. 2011[129]	143	21-30	1.86	West	Pesticides-81, Corrosives-0, Venom-21, Drugs-0, Others-41
Verma P et al. 2018[130]	120	21-30	1.66	Central	Pesticides-90, Corrosives-0, Venom-0, Drugs-0, Others-30
Vivekanandan K et al. 2012[131]	232	16-30	1.5	South	Pesticides-110, Corrosives-0, Venom-0, Drugs-54, Others-68
Waghmare CS et al. 2014[132]	110	NA	NA	Central	Pesticides-110, Corrosives-0, Venom-0, Drugs-0, Others-0
Waghmare S et al. 2014[133]	70	21-30	2.3	West	Pesticides-26, Corrosives-5, Venom-1, Drugs-19, Others-19
Yadav VK et al. 2018[134]	1622	22-32	1.2	Central	Pesticides-716, Corrosives-12, Venom-0, Drugs-137, Others-757

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Supplementary Table S1b: List of Poisons consumed in the included studies

Classification of poison consumed in our study				
Pesticides	**Corrosives**	**Venom**	**Drugs**	**Miscellaneous**
Organophosphates: Chlorpyriphos, Dimethoate, Malathion, Monocrotophos, Parathion, Quinolphos, Phorate **Organochlorines:** Endosulphan. Lindale, DDT Carbamates-Aldicarb, Aminocarb, Propoxur **Rodenticides:** Aluminium Phosphide, Zinc Phosphide, Bromodialone Pyrethroids- Cypermethrine, Imidacloprid, Transfluthrine, Prallenthrine **Herbicides:** Paraquat, Pretilachor	**Acids-** Mineral-Boric Acid, Sulphuric Acid, Hydrochloric Acid, Nitric acid Organic-Carbolic acid (phenol) **Alkalis**-Sodium Hydroxide (Caustic soda), Button Battery Ingestion	**Snake Bite** (Cobra, Krait, Russel's Viper, Saw scaled Viper), **Scorpion stings**, **Spider bite, Hymenoptera stings** (Ants, Bees, Wasps)	**Alcohol**- Ethyl Alcohol, Methanol **Pharmacologic Active Ingredient:** Agents-Analgesics, Antidepressants, Antiepileptic, Antiretroviral drugs, Anti-tuberculosis, Antipsychotics, Anti-hypertensives, Barbiturates, Benzodiazepines, Beta blockers, Calcium channel blockers, Salicylates, Ointments, Opioids, Paracetamol, Diazepam, NSAIDs, Narcotics, Alprazolam, Chloroquine, Sedative overdose,	**Hydrocarbons**-Petrol, Diesel, Kerosene **Plant Origin**- Castor Oil, Cannabis Indica, Bhang, Opium, Dhatura, Oleander, Tobacco, Jatropha Curcas, Food Poisoning Inorganic Irritants-Copper Sulphate, Iron, Mercury, Lithium, Lead, EDTA, Potassium Permanganate **Industrial Chemical**-Aniline dyes, Cyanide, Toxic Fumes, Dettol, Disinfectant, House cleaner, Detergents Hair dye, Herbal, Thinner Turpentine Oil Unknown Chemical analysis report awaited.

Fumigants-Camphor, Naphthalene, Nitrobenzene			Amlodipine+Atenolol, Haloperidol, Valproate, Ibuprofen, Phenytoin, Thyroxine and Ear Drops	

PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	3-4
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	5
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	5
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	4/6
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	6
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	6
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	6
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	6
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	6
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	6
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	-
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	7
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	7

PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	-
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	-
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	9
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	9, Table 1 and Table 1S
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	-
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	9-11
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	9-11
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	-
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	-
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	12-
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	15
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	15
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	16

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BMJ Open

Toxicoepidemiology of Poisoning Exhibited in Indian population from 2010 to 2020: A Systematic review and Meta-analysis

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Title of the article: Toxicoepidemiology of Poisoning Exhibited in Indian population from 2010 to 2020: A Systematic review and Meta-analysis

Running title: Prevalence of poisoning in India.

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Abstract:

Objectives: Prevalence of pesticide, corrosives, drugs, venom and miscellaneous poisoning in India.

Settings: Systematic literature search was done in PubMed Central, Cochrane and google scholar databases for studies satisfying inclusion criteria. Systematic review and meta-analysis of all observational studies published in English language from January 2010 to May 2020 were included in this review.

Participants: Patients exposed to poisoning reported to hospitals were included.

Primary and Secondary outcome measures: Prevalence of Pesticides poisoning was analysed. Prevalence of corrosives, venom, drugs and miscellaneous agents along with subgroup analysis based on age and region was also done. Percentage of person with poisoning along with 95% CI was analyzed.

Results: Pooled analysis of studies revealed that pesticide poisoning constitutes to be the main cause of poisoning with incidence of 63%(95%CI–63% to 64%) in adults and miscellaneous to be the main cause in children with incidence of 45.0%(95%CI–43.1% to 46.9%), presenting to hospital. Pesticide was most prevalent in north India (79.1%,95%CI–78.4% to 79.9%) followed by south (65.9%,95%CI–65.3% to 66.6%), central (59.2%,95%CI–7.9% to 60.4%), west (53.1%,95%CI–51.9% to 54.2%), north east (46.9%,95%CI–41.5% to 52.4%) and eastern (38.5%, 95%CI–37.3% to 39.7%) part of India. The second most common cause of poisoning was with miscellaneous (18%, 95%CI – 18% to 19%) agents, followed by drugs (10%, 95% CI – 10% to 10%), venoms (6% (95%CI– 6% to 6%) and corrosives (2%, 95%CI–1% to 2%).

Conclusions: Pesticide poisoning is the most common type of poison used in adults while miscellaneous agent remain main cause of poisoning in children.

Systematic review registration: PROSPERO 2020 CRD42020199427 Available from:

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Key words: Prevalence, Poisoning, Pesticides, Drugs, India.

Strengths and limitations of this study

- In this study more than 50 thousand participants from 134 studies were included for evaluating the types and the manner of poisoning, and their prevalence rates in Indian population, from January 2010 to May 2020.
- Age wise and region wise distribution of prevalence of poisoning was also analyzed.
- Research gaps have been identified about patient's medical outcome in the analysis.
- Limitations include that the results of the review were drawn from analysis of observational studies.

Introduction:

A poison is a substance that is capable of causing illness or harm to the living organisms on contact or upon introduction into the body. Toxins and venoms are poisons of biological origin, with the latter term usually reserved for those injected by the bite or sting of a poisonous animal. Poisoning has become an increasing cause of concern over the past decade, not only in India but globally [1].

In the year 2016, deaths due to suicide were around 800 thousand worldwide. It implies the annual world suicide rate of 10.5 per lakh population, but in India the suicide rate is almost double (18.5 suicide deaths for 1 lakh population). Majority (79%) of suicides occurs in low and middle income countries. Ingestion of poison is one of the most common mode of suicide in low and middle income countries such as India [2]. Among the poisons, pesticides contributes to majority of poisoning cases in India [3]. Pesticide poisoning in India is highly prevalent because of its widespread use for agricultural and household activities. Other poisoning agents are household agents, envenomation, and drugs. It is observed that agricultural or household pesticides and drugs are taken intentionally whereas intake of corrosives, kerosene, other miscellaneous agents and bite by animals, happen accidently [4, 5].

World Health Organization (WHO) estimated that death due to envenomation is around one lakh and around three times the people who survived were disabled due to amputation and incomplete recovery. Approximately half of these deaths were reported from India due to natural existence of different poisonous species like snakes, scorpions and spiders. In this regard, WHO initiated a strategy for prevention and control of snakebite related deaths and disability [6].

The aggravating or predisposing factors in emerging countries like India, varies from financial stress to psychiatric illness, along with socio-cultural practices like patriarchal system. The

patriarchal system makes females more dependent on males financially and therefore increase suicide risk in them [7-9].

The pattern of poisoning varies between the geographical regions of the country. Understanding the geographical pattern of poisoning in a country helps in the identification of risk factors. This along with integration of preventive and promotive health services, may help in reduction of morbidity and mortality [10].

Due to lack of comprehensive scientific data on the prevalence of poisoning and their variation with age and region, the preventive, curative and rehabilitation measures are poorly implemented in India. Therefore the present systematic review and meta-analysis was done to study the prevalence of various types of poisoning in India and their variation with age and region.

Materials and Methods:

Protocol and registration: The study protocol was registered with PROSPERO-International prospective register of systematic reviews. Available as Shoban Babu Varthya, Chaitanya Mittal, Surjit Singh. Comprehensive Analysis of Incidence and Prevalence of Poisoning in India and its Regions: A Systematic review and Meta-analysis. PROSPERO 2020 CRD42020199427 Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42020199427.

Methods: In this review, we have surveyed and evaluated various observational studies across India regarding the prevalence of poisoning. In our review, pesticides, corrosives, venom, drugs and other miscellaneous agents were regarded as poison for analysis.

Eligibility criteria: To analyze the prevalence of poisoning, studies with participants exposed to acute poisoning, irrespective of outcome of patients were included in analysis. We had included observational studies (retrospective/prospective/cross-sectional) published between the year 2010-2020 in English language, with endpoint of prevalence of poisoning in India. This analysis helps in generating overall prevalence of poisoning in India and their variation with age and region.

Information sources: A literature search done using the MeSH terms, such as 'prevalence' 'poison', 'poisoning' , 'pesticides', 'organophosphate', 'corrosives', 'drugs' and 'India', from three databases (PubMed Central, Cochrane and google scholar). Additional studies were identified through cross-references of selected article.

Search: Search strategy of PubMed provided in **Supplementary file 1**. Last search was done on May 2020.

Study selection and data collection process: studies were selected based on predefined eligibility criteria. All eligible articles taken for further screening after removing duplicates and

unrelated to study inclusion criteria. Studies which are included after review of abstracts were evaluated by screening the full text. All data with regard to authorship, year of publication, study design, study population (patients consumed poison), baseline characteristics (age, sex, marital status, educational status, type of family etc.), list of poisons included in the study, total study population, and any other relevant outcomes essential for data synthesis were extracted from the selected studies. Study selection and data collection was done by two authors independently and compiled after complete data retrieval. If any conflict exists than third author revised and resolved the conflict.

Summary measures: The data on prevalence was presented in percentages across the age group and regions.

Meta-analysis (quantitative synthesis)

Dichotomous data i.e. percentage of subjects having particular poisoning were analysed and reported along with 95% confidence interval (CI). The meta-analysis of proportions was done using R software. R software packages used were meta and metafor. The results of both random effect model as well as fixed effect model were calculated. Fixed effect model assumes that the between study variance is zero, whereas random effect model takes both within- and between-study variances into account. If the heterogeneity is greater than 40%, the results of random effect model will be more representative of the data. To prevent the underestimation of size of the confidence interval around the weighted average proportion and an overestimation of the degree of heterogeneity across the observed proportions, we used Freeman Tukey double arscine transformation (DAT). This will help the data to conform to the normal distribution as much as possible, enhancing the validity and generalizability of statistical analyses.

Heterogeneity was estimated using tau (τ). Sub-group analysis was done to estimate whether there is difference in percentage of individuals ingested pesticide poisoning with regard to geographical area and among children and adults. This was done with the assumption that there

is common between study variance component across studies, thereby pooling the within group estimates of τ^2, estimated using Freeman Tukey DAT.

GRADE Pro analysis to Assess the Quality of Evidence: The overall quality of evidence for each of the outcomes would have been assessed using GRADE pro GDT (guideline development tool) software based on the principles of Grades of Recommendations, Assessment, Development and Evaluations (GRADE) [5, 11]. GRADE pro doesn't recommend for analysis of grading the evidence if it is a single group analysis. Hence no Grading of evidence was done for endpoints.

Patient and Public involvement

No patients and public involvement in the study

Results:

Study selection: An initial search of all the databases yielded a total of 859 articles. After removal of duplicates, 626 articles remained, which were subjected to the inclusion and exclusion criteria laid down. A thorough screening of the papers based on their title and abstract reduced the search results to 214 and in final analysis 134 articles were included. Among the excluded articles, review articles were 23, pooled analysis were 2, Heavy metals poisoning were 21, individual poison other than pesticides were 23 and full text were not available for 8 articles. Authors of the three articles were contacted with requests to help us access their specific poisoning data, which was excluded as it was not provided. Therefore, the final qualitative and quantitative synthesis was performed on 134 research articles. Given below, **Figure 1** illustrates a flow chart with the various steps of the Systematic Review.

Study characteristics: Study characteristics of included studies enumerated in **Table 1** and description of each study along with their references listed in **supplementary Table S1a**.

Demographic distribution: The manner of poisoning shows that, the suicidal poisoning more common than the accidental poisoning. The highest prevalence of poisoning was observed in persons between the age group of 19-40 years (105 studies). Overall sex ratio was 1.7. Male to female ratio was highest in northern region of India (2.35) and lowest in eastern region of India (1.28).

Agents responsible for poisoning: we have broadly classified poisons into 5 categories, pesticides, corrosives, venom, drugs and others. Overall, pesticide poisoning stands to be more common in India and across the region and then miscellaneous (18%), than drugs (11%) and venom (10%), and corrosives (3%). Details of poisonous agent in each group enumerated in **supplementary Table 1Sb**

Study type: Majority of the studies were retrospective observational studies (retrospective studies: 75, prospective studies: 47, cross-sectional studiers: 12).

Outcomes: the pooled data prevalence of various poisons enumerated in **Table 2**

Percentage of Pesticide and Corrosives poisoning

Pooled analysis of studies revealed pesticide poisoning to be the main cause of poisoning in 63%(95%CI–63% to 64%;I^2 =100%,p<0.01) presenting to hospital, using fixed effect model. The random effect model prevalence of pesticide poisoning among individual to be around 62% (95%CI–56% to 68%) (**Supplementary Figure 1**). In adults, pesticide poisoning is main cause of poisoning in 65.3% (95%CI–64.8% to 65.7%) and 66.8% (95%CI–61.4% to 71.9%) of individuals, using fixed and random effect models. In children, pesticide is responsible for 22.4% (95%CI–20.7% to 24.0%; I^2=100%, p<0.01) and 23.2%(95%CI–11.4% to 37.6%) of children, with fixed and random effect, respectively (**Supplementary Figure 1**). Prevalence of pesticide poisoning in Central, east, north-east, north, south and west regions of India were among 59.2%(95%CI–57.9% to 60.4%;I^2=99%,p<0.01), 38.5%(95% CI–37.3% to 39.7%;I^2=99%, p<0.01), 46.9%(95%CI–41.5% to 52.4%; I^2=0%,p=0.64), 79.1%(95%CI–78.4% to 79.9%;I^2=100%,p<0.01), 65.9%(95%CI–65.3% to 66.6%;I^2 = 99%,p<0.01), 53.1%(95%CI–51.9% to 54.2%;I^2 = 99%,p<0.01) with fixed effect model analysis (**Supplementary Figure 1**). The random effect results were given in **Supplementary Figure 1**. Pesticide was most prevalent poisoning in North India followed by south, central, west, north east and eastern part of India.

Pooled analysis of studies revealed corrosives to be the cause of poisoning in 2% (95%CI – 1% to 2%; I^2 = 96%, p<0.01) and 3% (95% CI – 2% to 3%) in patients, using fixed effect and random effect model, respectively (**Supplementary Figure 2**).

Percentage of Venom and Drugs poisoning

Pooled analysis of studies revealed cause of poisoning to be snake bites in 6% (95%CI–6% to 6%; I^2=99%, p<0.01) of individuals presenting to hospital, using fixed effect model. The random effect model prevalence of snake bite poisoning among individual to be around 3% (95% CI–2% to 5%) (**Supplementary Figure 2**).

The fixed and random effect model predicts prevalence of drugs poisoning among individuals to be around 10% (95%CI–10% to 10%, I^2 = 98%, p<0.01) and 9% (95%CI–7% to 11%), respectively (**Supplementary Figure 2**).

Percentage of Miscellaneous causes of poisoning

Pooled analysis of studies revealed poisoning with miscellaneous agents in 18% (95%C –18% to 19%; I^2=99%, p<0.01) in individuals presenting to hospital, using fixed effect model. The random effect model prevalence of miscellaneous agents poisoning among individual to be around 15% (95%CI–13% to 18%) (**Supplementary Figure 3**). In adults, miscellaneous agents are second most common cause of poisoning with 16.9% (95%CI–16.6% to 17.3%) and 12.8% (95%CI–10.3% to 15.6%) of individuals, using fixed and random effect models. In children, miscellaneous agents are most common cause of poisoning, responsible for 45.0% (95% CI–43.1% to 46.9%; I^2 = 99%, p<0.01) and 39.6% (95%CI–12.7% to 18.1%) of children, with fixed and random effect, respectively (**Supplementary Figure 3**).

Subgroup analysis of Corrosive and Venom poisoning

In adults, prevalence of corrosive poisoning was 1.3% (95% CI–1.1% to 1.4%; I^2=95%, p<0.01) and 1.7% (95%CI–1.1% to 2.5%) of individuals, using fixed and random effect models. In children, prevalence of corrosive poisoning was 10.8% (95%CI–9.6% to 12%; I^2=91%, p<0.01) and 11.2% (95%CI–7.2% to 15.8%) of children, with fixed and random effect, respectively (**Supplementary Figure 4**). Prevalence of venom poisoning in east and west regions of India were among 24.6%(95% CI–23.6% to 25.7%;I^2=99%, p<0.01),

15.1%(95%CI–14.3% to 16%;I^2 = 99%,p<0.01) with fixed effect model analysis (**Supplementary Figure 4**). The fixed effect model analysis of other regions and the random effect results of all regions were given in **Supplementary Figure 4.** Venom was most prevalent poisoning in East and West India than other parts of India.

Publication Bias

Publication bias was low, as the funnel plot of 134 studies appears to be asymmetrical around the intervention effect estimate for percentage of individuals having pesticide poisoning (**Figure 2**). We applied Egger's regression test for funnel plot asymmetry which showed the value of t = 0.9137 and p-value of 0.3609, indicating low publication bias.

Discussion:

In order to delineate the poisoning trends in India, a comprehensive analysis of various type of poisoning and their distribution among different age groups and regions is essential. The epidemiological data on poisoning available in India is either from government sources like National Crime Records Bureau (NCRB) or independent studies conducted at the tertiary care hospitals. It has been observed that, NCRB underreports the male and female deaths by around 25% and 36%, respectively [3]. Therefore, we conducted the current review to analyse the prevalence of various types of poisoning in India from the published observational studies.

Suicidal deaths by intake of poisonous agents or by hanging constitutes to be the leading cause of death in individual between 15–39 years in India [12]. Death by poisoning thus constitutes to be a major public health issue in India [13]. Among poisoning agents, pesticides constitutes to be the leading cause of poisoning because of coexistence of poverty, agricultural farming thus easy availability and patriarchal society in India[14].

Present review showed that highly vulnerable age group was 19-40 years (45%). The results were similar to the study done by Kamaruzaman et al., who concluded that about 44.6% of poisoning patients aged between 20-39 years [15]. However, Patel et al., observed that suicide was most common between 15-29 years of age. This may be due to prospective cohort design of Patel et al., while we pooled the data from all types of observational study [3]. Young adults aged 19-40 years has the financial as well as the social responsibilities of their family due to social transformation [16].

In our review, it was observed that the males to females ratio of chances of exposure to poisoning was 1:7. We found higher male to female ratio than the study done by Patel et al. (1.7 vs 1-1.5)[3]. The possible reason for this is that we included all cases of poisoning while Patel et al. included only suicide by poisoning in their study. Several reasons for committing

suicide by poisons are suggested, Men and farmers of low socio-economic status suffered from severe stress because of their inability to cope up with the expectations of the rapidly urbanizing society. Expecting higher returns from commercial crops, small farmers take higher risk by taking loans which they are unable to pay, due to inability to sell crops at expected rates. Inability to support the family responsibilities due to low income from farming, often leads to increases rates of suicides among them [17, 18]. In India, women after marriage has to migrate to men house and she has to adopt new traditions, rituals and customs [19]. This sort of migration and prevalent patriarchal behaviour increases the conflict and mistreatment of women [10]. Factors like family quarrels, dowry, cruelty by in-laws, etc. along with lack of independent source of income of house wives results in their over dependence on men[20, 21]. This leads to increased suicides by consuming poisons.

Pesticide poisoning is the most common type of poisoning with overall prevalence of 62% (2 in every 3 poison cases) and prevalence of around 68% in adult population and 32% in children. Region wise, the proportion of pesticide poisoning in north India is about 79% (more than 3/4th of total poison cases), south India is 65%, central India is 60%, western India is 53% and less than 50% in east and north east India. Initiation of programme of safe access of pesticides by WHO and its member countries resulted in decrease in prevalence of fatal poisoning by 10% across the world. However, still pesticide poisoning is the leading cause of poisoning in South Asian countries including India, South East Asia and China [1, 22-24]. Many studies have concluded that the strict restriction of highly lethal pesticides by legal mechanism or policy actions drastically reduces the deaths [8, 25, 26].

The pooled prevalence of corrosive poisoning in whole population in India was found to be around 2% of total poisoning cases. In adult population it constitutes around 1.3% and in children's around 10.8%. Higher prevalence of corrosive poisoning in children's may due to their inquisitive nature, their tendency to explore household items containing corrosive

cleaning agents [27]. In USA, corrosive ingestions constitutes about 8%–9% of total poisoning in all patients [28]. This difference may be because of underreporting of events in India [27].

Snake bite remains a major challenge in rural India as 71% of total population lives in rural India and they primarily depend on agriculture for livelihood [29]. The overall prevalence of venom poisoning in India is 6% of all poisoning cases. Among all envenomation cases (6%), eastern and western part of India contributes around 24% and 15% of venom poisoning cases respectively. We have observed regional differences in envenomation, may be due to topography of eastern and western Ghats. The spatial distribution of cases were similar to eastern part but not in the western part of India, in the study done by Suraweera et al. This difference is due to exclusion of studies reporting only snake bites from our meta-analysis [30].

Drug overdose constitutes about 10% of poisoning cases in India, may be it is possibly due to easy availability of drugs and alcohol. In India, many prescription drugs are available over the counter. Though we haven't performed sex wise distribution of drug poisoning but evidence from literature showed that females used drugs more commonly to commit suicide [16]. In agricultural societies, males typically work in field during daytime, whereas women look after household activities. Therefore, the choice of pesticides among men and drugs or chemicals among women may be partially explained by their occupational proximity to different type of poisoning agents [31].

Miscellaneous agents accounts for 18% of cases among all causes of poisoning. In children's, its prevalence was 45% whereas in adults it is 16%. Higher prevalence of poisoning among children is due to their exploratory behaviour leading to accidental ingestion. In addition, negligence of parents and caretakers may also be a contributing factor [32-34]. Poisoning in preschool or toddler age group is primarily unintentional or accidental. In adolescents, it is

mostly of suicidal nature. Most commonly used products were kerosene and sterilizing agents [35-37].

The purpose of present study was primarily to determine the prevalence of various poisonous agents and their area-wise distribution. The overall observation is that the men 19-40 years of age usually consume the pesticide poisons intentionally and the housewives and children's consumes drugs or miscellaneous agents intentionally or accidently. Establishment of specialized toxicological units for detection and management of poisoning cases at all hospitals and primary health care centres could considerably minimize the morbidity and mortality associated with poisoning. Similar to USA, India must develop a central database on national poisoning statistics for decentralised management of poisoning. Adequate preventive measures with stable employment opportunities, bridging the socio-cultural gap between males and females, along with proper supervision and care of children's can reduce the poisoning cases in India.

Strengths and limitations of this study: The study provides comprehensive overview of poisoning in India as analyzed from observational studies published from January 2010 to May 2020. Results were represented as types, manner, demographic patterns and prevalence rates of various poisoning cases. In addition, persons at high-risk of poisoning with particular agent. The data presented in this study may be underreported as moderate to severe poisoning cases reports to hospital. There was no analysis on medical outcome of patients, thereby restricting the scope of analysis.

Conclusion: Pesticide is the most common type of poison consumed intentionally by adults especially male farmers of rural India while miscellaneous agent remains the main cause of poisoning in children. This information will be useful for government of India for its decentralized and people centric policy decisions to meet its target under United Nations

Sustained Developmental Goals (SDG) for substantially reducing illness and death due to poisoning.

Strict restriction of highly lethal pesticides by legal or policy actions drastically reduces the deaths. Preventive measure must be developed for high-risk groups identified in our study. Legislative control on the sale and use of pesticides, and stress management are recommended along with better health care facilities to prevent poisoning related death.

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Author Contributions.

Study design and planning of systematic review - All of the authors

Literature search – SBV, CM, SS

Figures - PKM, SS

Tables – SBV, PKM, CM

Data collection and analysis - SS, SBV, PKM

Data interpretation – SS, CM, SBV, PKM

Writing – All authors

Corrections and Final approval of Manuscript - All of the authors

Data sharing statement section: The datasets used and/or analyzed during the current study are available from the corresponding author on request.

Ethical Approval Statement: Not applicable

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Figure Legends

Figure 1 PRISMA Flow Chart of selection of studies for systematic review

Figure 2: Publication Bias

Supplementary Figure 1: Percentage of patients with Pesticide poisoning (1Sa - Overall, 1Sb - Age wise and 1Sc - Region wise)

Supplementary Figure 2: Prevalence of poisoning with Corrosives (2Sa), Venom (2Sb), and Drugs (2Sc)

Supplementary Figure 3: Prevalence of poisoning with Miscellaneous agents (3Sa) and Age wise distribution (3Sb)

Supplementary Figure 4: Age wise distribution of corrosives (4Sa) and Region wise distribution of venom (4Sb).

Table 1: Baseline characteristics of study population included in the analysis

Table 2: Percentage pooled data of various poisoning encountered in India

Supplementary Table S1a: Characteristics of individual studies

Supplementary Table S1b: List of Poisons consumed in the included studies

Supplementary File: Search strategy.

Table 1: Baseline characteristics of study population included in the analysis

Study characteristics	Percentage of study population
Type of studies (N=134)	
1. Retrospective (75)	56%
2. Cross sectional (12)	9%
3. Prospective (47)	35%
Regional distribution study population (%)	
1. Central (N=21; n=5854)	11%
2. East (N=9; n=6684)	13%
3. North East (N=2; n= 330)	1%
4. North (N=21; n=11628)	22%
5. South (N=61; n=21212)	40%
6. West (N=20; n=7123)	13%
Male female Ratio	
1. Central (N=21; n=5854)	1.51
2. East (N=9; n=6684)	1.28
3. North East (N=2; n= 330)	1.66
4. North (N=21; n=11561)	2.35
5. South (N=61; n=21279)	1.77
6. West (N=20; n=7123)	1.87
7. India (N=134; n=52831)	1.74
Age wise distribution	
1. >18 years (n=12642)	26%
2. 19-60 (n=34653)	70%
3. >60 (n=2228)	4%
Marital status(N=62)	
1. Married (n=12027)	65%
2. Unmarried (n=6499)	35%
Educational status(N=31)	
1. Literate (n=5467)	70%
2. Illiterate (n=2373)	30%
Type of family(N=13)	
1. Nuclear (n=1248)	41%
2. Joint (n=1780)	59%
Area wise distribution(N=80)	
1. Rural (n=15896)	62%
2. Urban (n=9726)	38%
Occupational distribution(N=61)	
1. Farmers (n=9404)	56%
2. House wives (n=2481)	15%
3. Students (n=1686)	10%
4. Labourers (n=1448)	9%
5. Service (n=609)	4%
6. Unemployed (n=704)	4%
7. Self-employed (n=385)	2%
Manner of poisoning (N=111)	
1. Suicidal (n=30652)	71%
2. Accidental (n=11616)	27%
3. Others (n=926)	2%

N-total number of studies; n-sample size

Table 2: Percentage pooled data of various poisoning encountered in India

Outcome	% of pooled data	95% CI	I^2	p-value
Percentage Pesticide poisoning				
Overall	FEM -63% REM - 62%	63% to 64% 56% to 68%	100%	<0.01
Adults	FEM-65.3% REM- 66.8%	64.8% to 65.7% 61.4% to 71.9%	100%	<0.01
Childrens	FEM-22.4% REM- 23.2%	20.7% to 24.0% 11.4% to 37.6%	94%	<0.001
Region wise				
Central	FEM-59.2% REM- 60%	57.9% to 60.4% 46.5% to 74.2%	99%	<0.01
East	FEM-42.3% REM- 60%	37.3% to 39.7% 22% to 64%	99%	<0.01
North East	FEM-46.9% REM- 47.5%	41.5% to 52.3% 8.2% to 88.8%	0%	=0.64
North	FEM-79.1% REM- 56.4%	78.4% to 79.9% 42% to 70%	100%	<0.01
South	FEM-65.9% REM- 68.6%	65.3% to 66.6% 60% to 76%	99%	<0.01
West	FEM-63.1% REM- 61.9%	62.7% to 63.5% 56.3% to 67.4%	99%	<0.01
Percentage Corrosive poisoning				
Overall	FEM- 2% REM -3%	1% to 2 % 2% to 3%	96%	<0.01
Adults	FEM- 1.3% REM-1.7%	1.1% to 1.4% 1.1% to 2.5%	95%	<0.01
Childrens	FEM-10.8% REM-11.2%	9.6% to 12% 7.2% to 15.8%	91%	<0.01
Percentage Venom poisoning				
Overall	FEM- 6% REM- 3%	6% to 6% 2% to 5%	99%	<0.01
Region wise				
Central	FEM-1.4% REM- 2.3%	1% to 1.7% 0.3% to 5%	97%	<0.01
East	FEM-24.6% REM- 12%	23.6% to 25.7% 4.9% to 21%	99%	<0.01
North East	FEM-10.9% REM- 6.2%	7.7% to 14% 0% to 25%	98%	<0.01
North	FEM-0.07% REM- 1.2%	0% to 0.2% 0% to 4.2%	95%	<0.01
South	FEM-3.5% REM- 1.9%	3.2% to 3.8% 0.6%% to 3.7%	98%	<0.01
West	FEM-15.1% REM- 10%	14.3% to 16% 5.2% to 16%	99%	<0.01
Percentage Drug poisoning				
Overall	FEM-10% REM- 9%	10% to 10% 7% to 11%	98%	<0.01
Percentage of Miscellaneous causes of poisoning				

Overall	FEM-18% REM- 15%	18% to 19% 13% to 18%	99%	<0.01
Adults	FEM- 16.9% REM-12.8%	16.6% to 17.3% 10.3% to 15.6%	99%	<0.01
Childrens	FEM- 45% REM- 39.6%	43.1% to 46.9% 29.1% to 50.5%	94%	<0.01

FEM: Fixed Effect Model, REM: Random Effect Model.

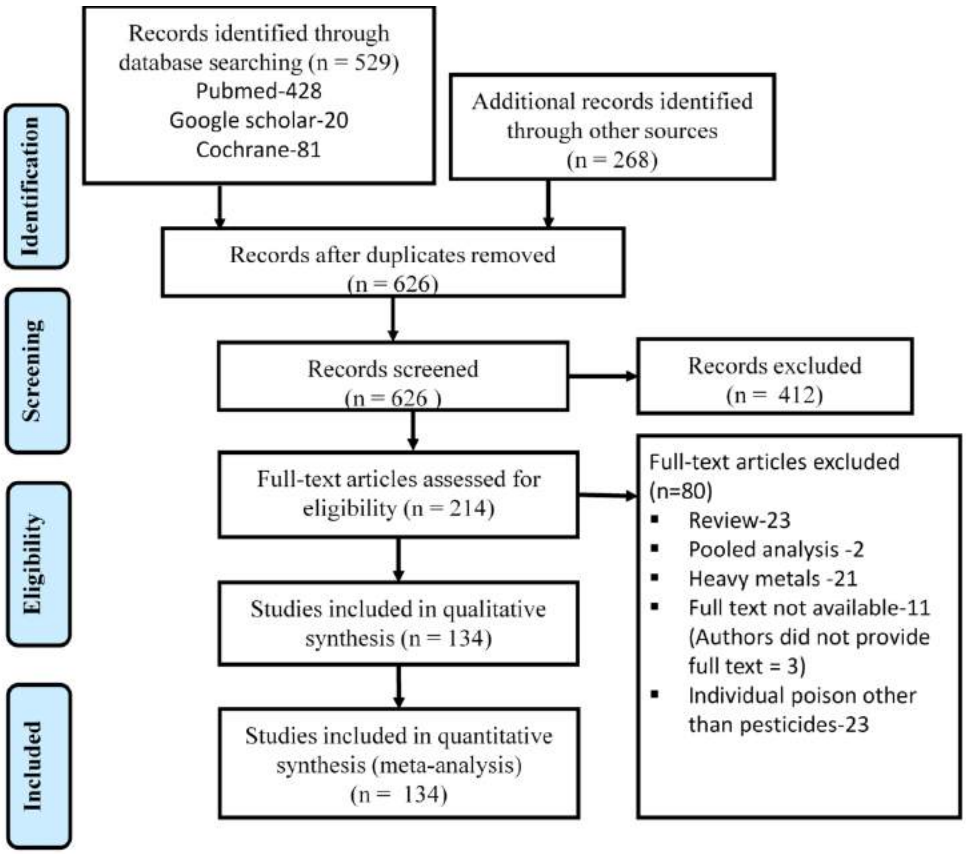

Figure 1 PRISMA Flow Chart of selection of studies for systematic review

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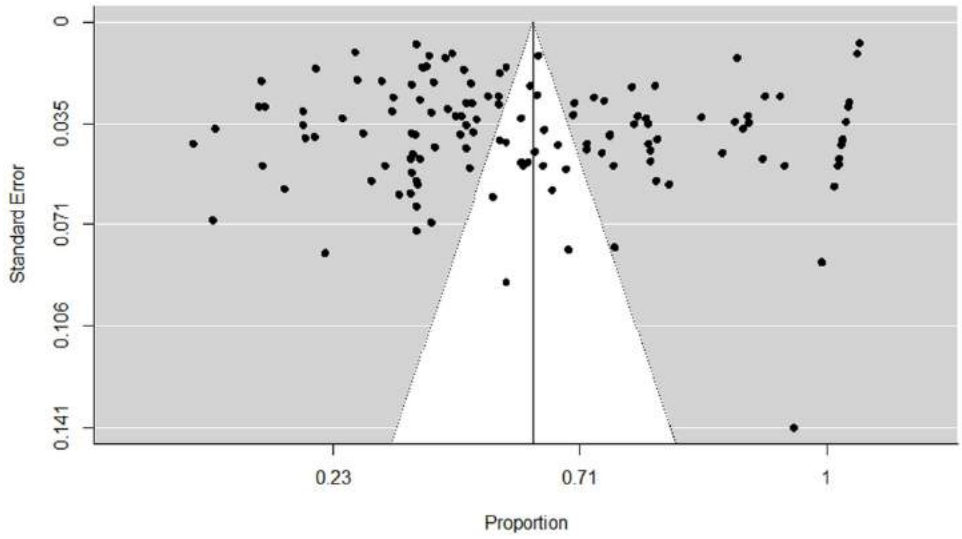

Figure 2: Publication Bias

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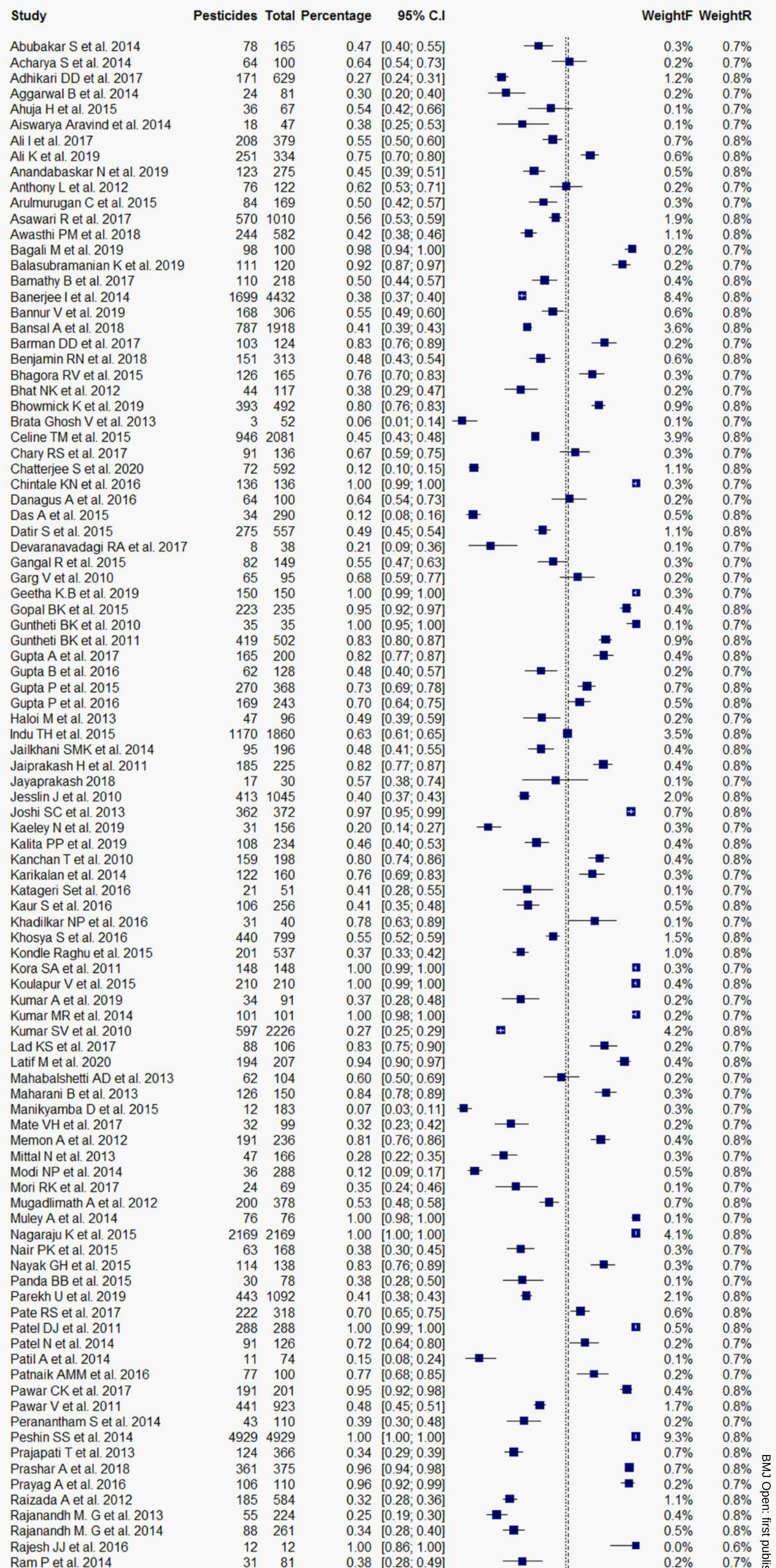
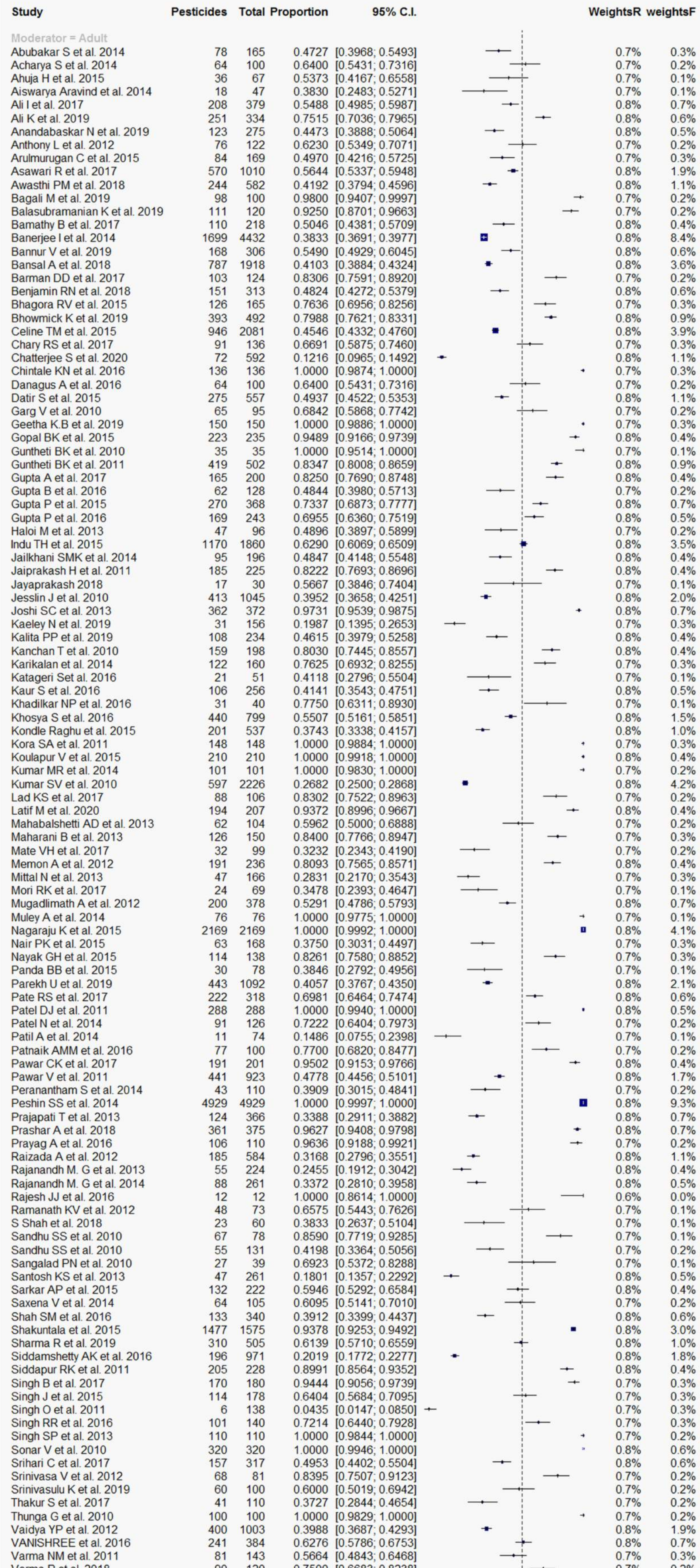
Supplementary Figure 1Sabc: Percentage of patients with Pesticide poisoning (1Sa - Overall, 1Sb Age wise and 1Sc - Region wise)

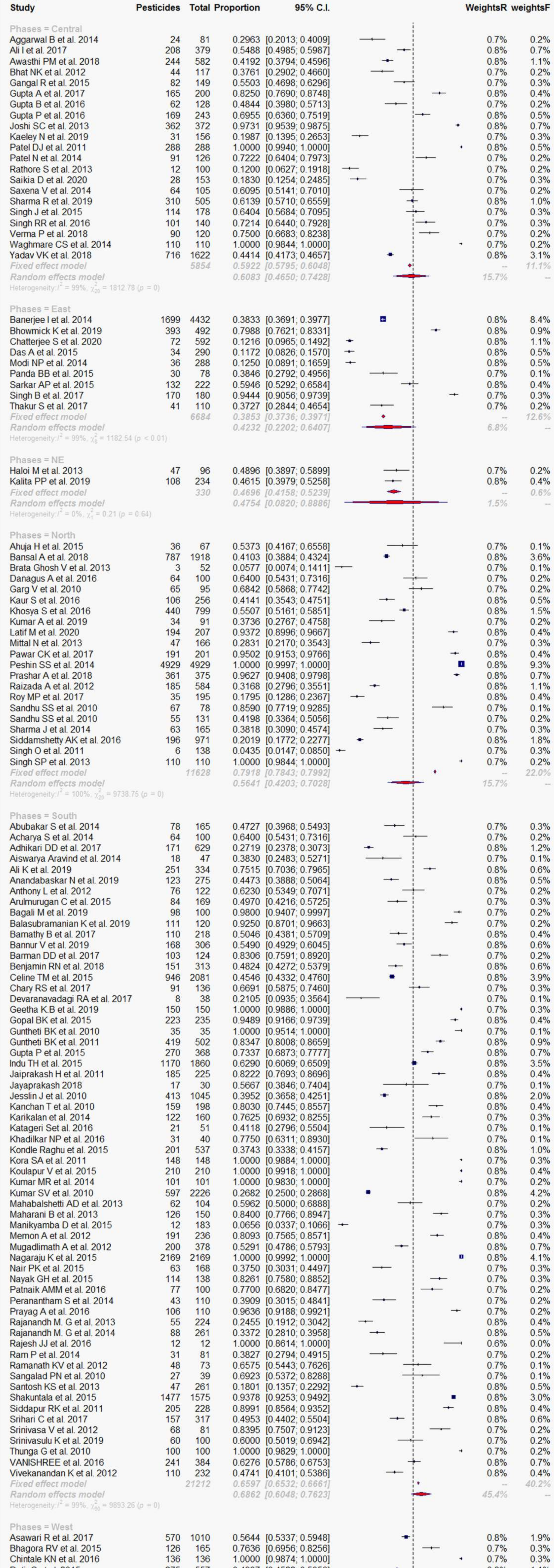
1Sa



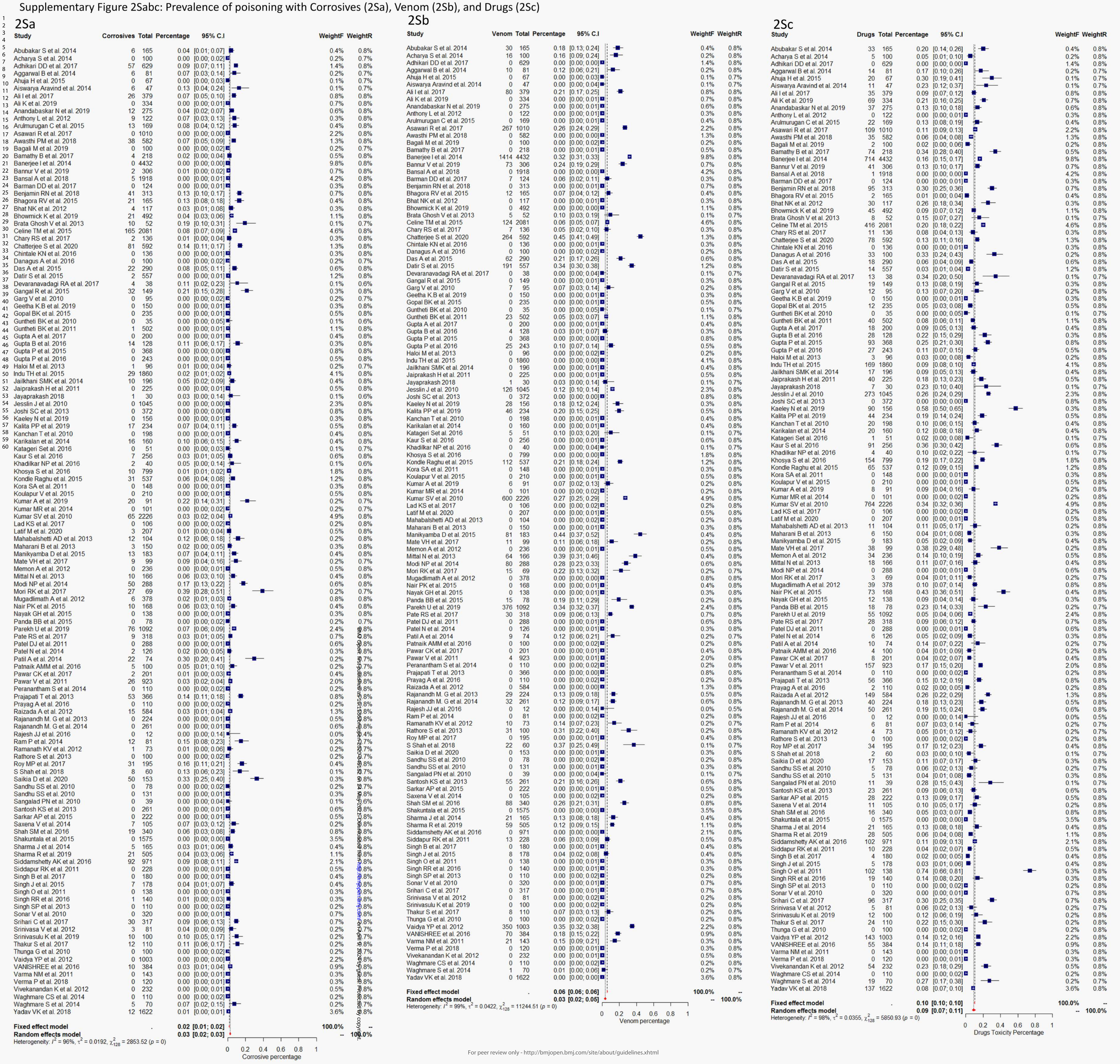
1Sb



1Sc



Supplementary Figure 2Sabc: Prevalence of poisoning with Corrosives (2Sa), Venom (2Sb), and Drugs (2Sc)



Supplementary Figure 3Sab: Prevalence of poisoning with Miscellaneous agents (3Sa) and Age wise distribution (3Sb)

3Sa

Study	Miscellaneous	Total	Percentage	95% C.I	WeightF	WeightR
Abubakar S et al. 2014	18	165	0.11	[0.07; 0.16]	0.4%	0.8%
Acharya S et al. 2014	15	100	0.15	[0.09; 0.23]	0.2%	0.8%
Adhikari DD et al. 2017	401	629	0.64	[0.60; 0.67]	1.4%	0.8%
Aggarwal B et al. 2014	27	81	0.33	[0.23; 0.44]	0.2%	0.7%
Ahuja H et al. 2015	11	67	0.16	[0.08; 0.26]	0.1%	0.7%
Aiswarya Aravind et al. 2014	12	47	0.26	[0.14; 0.39]	0.1%	0.7%
Ali I et al. 2017	30	379	0.08	[0.05; 0.11]	0.8%	0.8%
Ali K et al. 2019	14	334	0.04	[0.02; 0.07]	0.7%	0.8%
Anandabaskar N et al. 2019	103	275	0.37	[0.32; 0.43]	0.6%	0.8%
Anthony L et al. 2012	37	122	0.30	[0.22; 0.39]	0.3%	0.8%
Arulmurugan C et al. 2015	50	169	0.30	[0.23; 0.37]	0.4%	0.8%
Asawari R et al. 2017	64	1010	0.06	[0.05; 0.08]	2.2%	0.8%
Awasthi PM et al. 2018	265	582	0.46	[0.42; 0.50]	1.3%	0.8%
Bagali M et al. 2019	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Balasubramanian K et al. 2019	9	120	0.08	[0.03; 0.13]	0.3%	0.8%
Bamathy B et al. 2017	30	218	0.14	[0.09; 0.19]	0.5%	0.8%
Banerjee I et al. 2014	605	4432	0.14	[0.13; 0.15]	9.7%	0.8%
Bannur V et al. 2019	22	306	0.07	[0.05; 0.10]	0.7%	0.8%
Bansal A et al. 2018	1125	1918	0.59	[0.56; 0.61]	4.2%	0.8%
Barman DD et al. 2017	14	124	0.11	[0.06; 0.18]	0.3%	0.8%
Benjamin RN et al. 2018	26	313	0.08	[0.05; 0.12]	0.7%	0.8%
Bhagora RV et al. 2015	4	165	0.02	[0.01; 0.05]	0.4%	0.8%
Bhat NK et al. 2012	39	117	0.33	[0.25; 0.42]	0.3%	0.8%
Bhowmick K et al. 2019	33	492	0.07	[0.05; 0.09]	1.1%	0.8%
Brata Ghosh V et al. 2013	26	52	0.50	[0.36; 0.64]	0.1%	0.7%
Celine TM et al. 2015	430	2081	0.21	[0.19; 0.22]	4.6%	0.8%
Chary RS et al. 2017	25	136	0.18	[0.12; 0.25]	0.3%	0.8%
Chatterjee S et al. 2020	97	592	0.16	[0.14; 0.19]	1.3%	0.8%
Chintale KN et al. 2016	0	136	0.00	[0.00; 0.01]	0.3%	0.8%
Danagus A et al. 2016	3	100	0.03	[0.00; 0.07]	0.2%	0.8%
Das A et al. 2015	154	290	0.53	[0.47; 0.59]	0.6%	0.8%
Datir S et al. 2015	75	557	0.13	[0.11; 0.16]	1.2%	0.8%
Devaranavadagi RA et al. 2017	13	38	0.34	[0.20; 0.50]	0.1%	0.7%
Gangal R et al. 2015	16	149	0.11	[0.06; 0.16]	0.3%	0.8%
Garg V et al. 2010	11	95	0.12	[0.06; 0.19]	0.2%	0.8%
Geetha K.B et al. 2019	0	150	0.00	[0.00; 0.01]	0.3%	0.8%
Gopal BK et al. 2015	0	235	0.00	[0.00; 0.01]	0.5%	0.8%
Guntheti BK et al. 2010	0	35	0.00	[0.00; 0.05]	0.1%	0.7%
Guntheti BK et al. 2011	19	502	0.04	[0.02; 0.06]	1.1%	0.8%
Gupta A et al. 2017	17	200	0.08	[0.05; 0.13]	0.4%	0.8%
Gupta B et al. 2016	20	128	0.16	[0.10; 0.22]	0.3%	0.8%
Gupta P et al. 2015	5	368	0.01	[0.00; 0.03]	0.8%	0.8%
Gupta P et al. 2016	22	243	0.09	[0.06; 0.13]	0.5%	0.8%
Haloi M et al. 2013	45	96	0.47	[0.37; 0.57]	0.2%	0.8%
Indu TH et al. 2015	492	1860	0.26	[0.24; 0.28]	4.1%	0.8%
Jailkhani SMK et al. 2014	74	196	0.38	[0.31; 0.45]	0.4%	0.8%
Jaiprakash H et al. 2011	0	225	0.00	[0.00; 0.01]	0.5%	0.8%
Jayaprakash 2018	4	30	0.13	[0.03; 0.28]	0.1%	0.7%
Jesslin J et al. 2010	233	1045	0.22	[0.20; 0.25]	2.3%	0.8%
Joshi SC et al. 2013	10	372	0.03	[0.01; 0.05]	0.8%	0.8%
Kaeley N et al. 2019	7	156	0.04	[0.02; 0.08]	0.3%	0.8%
Kalita PP et al. 2019	19	234	0.08	[0.05; 0.12]	0.5%	0.8%
Kanchan T et al. 2010	19	198	0.10	[0.06; 0.14]	0.4%	0.8%
Karikalan et al. 2014	2	160	0.01	[0.00; 0.04]	0.4%	0.8%
Katageri Set al. 2016	24	51	0.47	[0.33; 0.61]	0.1%	0.7%
Kaur S et al. 2016	52	256	0.20	[0.16; 0.25]	0.6%	0.8%
Khadilkar NP et al. 2016	3	40	0.08	[0.01; 0.18]	0.1%	0.7%
Khosya S et al. 2016	195	799	0.24	[0.21; 0.27]	1.7%	0.8%
Kondle Raghu et al. 2015	128	537	0.24	[0.20; 0.28]	1.2%	0.8%
Kora SA et al. 2011	0	148	0.00	[0.00; 0.01]	0.3%	0.8%
Koulapur V et al. 2015	0	210	0.00	[0.00; 0.01]	0.5%	0.8%
Kumar A et al. 2019	23	91	0.25	[0.17; 0.35]	0.2%	0.8%
Kumar MR et al. 2014	0	101	0.00	[0.00; 0.02]	0.2%	0.8%
Kumar SV et al. 2010	200	2226	0.09	[0.08; 0.10]	4.9%	0.8%
Lad KS et al. 2017	18	106	0.17	[0.10; 0.25]	0.2%	0.8%
Latif M et al. 2020	10	207	0.05	[0.02; 0.08]	0.5%	0.8%
Mahabalshetti AD et al. 2013	19	104	0.18	[0.11; 0.26]	0.2%	0.8%
Maharani B et al. 2013	15	150	0.10	[0.06; 0.15]	0.3%	0.8%
Manikyamba D et al. 2015	68	183	0.37	[0.30; 0.44]	0.4%	0.8%
Mate VH et al. 2017	9	99	0.09	[0.04; 0.16]	0.2%	0.8%
Memon A et al. 2012	11	236	0.05	[0.02; 0.08]	0.5%	0.8%
Mittal N et al. 2013	27	166	0.16	[0.11; 0.22]	0.4%	0.8%
Modi NP et al. 2014	122	288	0.42	[0.37; 0.48]	0.6%	0.8%
Mori RK et al. 2017	0	69	0.00	[0.00; 0.02]	0.2%	0.7%
Mugadlimath A et al. 2012	133	378	0.35	[0.30; 0.40]	0.8%	0.8%
Nair PK et al. 2015	22	168	0.13	[0.08; 0.19]	0.4%	0.8%
Nayak GH et al. 2015	12	138	0.09	[0.04; 0.14]	0.3%	0.8%
Panda BB et al. 2015	15	78	0.19	[0.11; 0.29]	0.2%	0.7%
Parekh U et al. 2019	142	1092	0.13	[0.11; 0.15]	2.4%	0.8%
Pate RS et al. 2017	29	318	0.09	[0.06; 0.13]	0.7%	0.8%
Patel DJ et al. 2011	0	288	0.00	[0.00; 0.01]	0.6%	0.8%
Patel N et al. 2014	27	126	0.21	[0.15; 0.29]	0.3%	0.8%
Patil A et al. 2014	22	74	0.30	[0.20; 0.41]	0.2%	0.7%
Patnaik AMM et al. 2016	14	100	0.14	[0.08; 0.22]	0.2%	0.8%
Pawar CK et al. 2017	0	201	0.00	[0.00; 0.01]	0.4%	0.8%
Pawar V et al. 2011	295	923	0.32	[0.29; 0.35]	2.0%	0.8%
Peranantham S et al. 2014	67	110	0.61	[0.52; 0.70]	0.2%	0.8%
Prajapati T et al. 2013	133	366	0.36	[0.31; 0.41]	0.8%	0.8%
Prashar A et al. 2018	14	375	0.04	[0.02; 0.06]	0.8%	0.8%
Prayag A et al. 2016	2	110	0.02	[0.00; 0.05]	0.2%	0.8%
Raizada A et al. 2012	235	584	0.40	[0.36; 0.44]	1.3%	0.8%
Rajanandh M. G et al. 2013	100	224	0.45	[0.38; 0.51]	0.5%	0.8%
Rajanandh M. G et al. 2014	91	261	0.35	[0.29; 0.41]	0.6%	0.8%
Rajesh JJ et al. 2016	0	12	0.00	[0.00; 0.14]	0.0%	0.6%
Ram P et al. 2014	32	81	0.40	[0.29; 0.50]	0.2%	0.7%
Ramanath KV et al. 2012	10	73	0.14	[0.07; 0.23]	0.2%	0.7%
Rathore S et al. 2013	57	100	0.57	[0.47; 0.67]	0.2%	0.8%
Roy MP et al. 2017	95	195	0.49	[0.42; 0.56]	0.4%	0.8%
S Shah et al. 2018	5	60	0.08	[0.02; 0.17]	0.1%	0.7%
Saikia D et al. 2020	58	153	0.38	[0.30; 0.46]	0.3%	0.8%
Sandhu SS et al. 2010	6	78	0.08	[0.03; 0.15]	0.2%	0.7%
Sandhu SS et al. 2010	71	131	0.54	[0.46; 0.63]	0.3%	0.8%
Sangalad PN et al. 2010	1	39	0.03	[0.00; 0.11]	0.1%	0.7%
Santosh KS et al. 2013	136	261	0.52	[0.46; 0.58]	0.6%	0.8%
Sarkar AP et al. 2015	62	222	0.28	[0.22; 0.34]	0.5%	0.8%
Saxena V et al. 2014	23	105	0.22	[0.14; 0.30]	0.2%	0.8%
Shah SM et al. 2016	84	340	0.25	[0.20; 0.29]	0.7%	0.8%
Shakuntala et al. 2015	98	1575	0.06	[0.05; 0.07]	0.4%	0.8%
Sharma J et al. 2014	55	165	0.33	[0.26; 0.41]	0.4%	0.8%
Sharma R et al. 2019	87	505	0.17	[0.14; 0.21]	1.1%	0.8%
Siddamshetty AK et al. 2016	581	971	0.60	[0.57; 0.63]	2.1%	0.8%
Siddapur RK et al. 2011	0	228	0.00	[0.00; 0.01]	0.5%	0.8%
Singh B et al. 2017	6	180	0.03	[0.01; 0.07]	0.4%	0.8%
Singh J et al. 2015	44	178	0.25	[0.19; 0.31]	0.4%	0.8%
Singh O et al. 2011	30	138	0.22	[0.15; 0.29]	0.3%	0.8%
Singh RR et al. 2016	19	140	0.14	[0.08; 0.20]	0.3%	0.8%
Singh SP et al. 2013	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Sonar V et al. 2010	0	320	0.00	[0.00; 0.01]	0.7%	0.8%
Srihari C et al. 2017	34	317	0.11	[0.08; 0.14]	0.7%	0.8%
Srinivasa V et al. 2012	5	81	0.06	[0.02; 0.13]	0.2%	0.7%
Srinivasulu K et al. 2019	18	100	0.18	[0.11; 0.26]	0.2%	0.8%
Thakur S et al. 2017	25	110	0.23	[0.15; 0.31]	0.2%	0.8%
Thunga G et al. 2010	0	100	0.00	[0.00; 0.02]	0.2%	0.8%
Vaidya YP et al. 2012	110	1003	0.11	[0.09; 0.13]	2.2%	0.8%
VANISHREE et al. 2016	8	384	0.02	[0.01; 0.04]	0.8%	0.8%
Varma NM et al. 2011	41	143	0.29	[0.22; 0.36]	0.3%	0.8%
Verma P et al. 2018	30	120	0.25	[0.18; 0.33]	0.3%	0.8%
Vivekanandan K et al. 2012	68	232	0.29	[0.24; 0.35]	0.5%	0.8%
Waghmare CS et al. 2014	0	110	0.00	[0.00; 0.02]	0.2%	0.8%
Waghmare S et al. 2014	19	70	0.27	[0.17; 0.38]	0.2%	0.7%
Yadav VK et al. 2018	757	1622	0.47	[0.44; 0.49]	3.5%	0.8%
Fixed effect model		.	**0.18**	**[0.18; 0.19]**	**100.0%**	--
Random effects model			**0.15**	**[0.13; 0.18]**	--	**100.0%**

Heterogeneity: I^2 = 99%, τ^2 = 0.0533, χ^2_{130} = 9174.96 (p = 0)

0 0.2 0.4 0.6 0.8 1

Miscellaneous Toxicity Percentage

3Sb

Study	Miscellaneous	Total	Proportion	95% C.I.	WeightsR	weightsF
Moderator = Adult						
Abubakar S et al. 2014	18	165	0.1091	[0.0656; 0.1617]	0.8%	0.4%
Acharya S et al. 2014	15	100	0.1500	[0.0860; 0.2274]	0.8%	0.2%
Ahuja H et al. 2015	11	67	0.1642	[0.0839; 0.2635]	0.7%	0.1%
Aiswarya Aravind et al. 2014	12	47	0.2553	[0.1395; 0.3908]	0.7%	0.1%
Ali I et al. 2017	30	379	0.0792	[0.0539; 0.1086]	0.8%	0.8%
Ali K et al. 2019	14	334	0.0419	[0.0227; 0.0664]	0.8%	0.7%
Anandabaskar N et al. 2019	103	275	0.3745	[0.3182; 0.4327]	0.8%	0.6%
Anthony L et al. 2012	37	122	0.3033	[0.2246; 0.3881]	0.8%	0.3%
Arulmurugan C et al. 2015	50	169	0.2959	[0.2292; 0.3671]	0.8%	0.4%
Asawari R et al. 2017	64	1010	0.0634	[0.0491; 0.0793]	0.8%	2.2%
Awasthi PM et al. 2018	265	582	0.4553	[0.4150; 0.4959]	0.8%	1.3%
Bagali M et al. 2019	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Balasubramanian K et al. 2019	9	120	0.0750	[0.0337; 0.1299]	0.8%	0.3%
Bamathy B et al. 2017	30	218	0.1376	[0.0948; 0.1868]	0.8%	0.5%
Banerjee I et al. 2014	605	4432	0.1365	[0.1266; 0.1468]	0.8%	9.7%
Bannur V et al. 2019	22	306	0.0719	[0.0454; 0.1038]	0.8%	0.7%
Bansal A et al. 2018	1125	1918	0.5865	[0.5644; 0.6085]	0.8%	4.2%
Barman DD et al. 2017	14	124	0.1129	[0.0625; 0.1753]	0.8%	0.3%
Benjamin RN et al. 2018	26	313	0.0831	[0.0548; 0.1164]	0.8%	0.7%
Bhagora RV et al. 2015	4	165	0.0242	[0.0052; 0.0545]	0.8%	0.4%
Bhowmick K et al. 2019	33	492	0.0671	[0.0465; 0.0910]	0.8%	1.1%
Celine TM et al. 2015	430	2081	0.2066	[0.1895; 0.2243]	0.8%	4.6%
Chary RS et al. 2017	25	136	0.1838	[0.1228; 0.2537]	0.8%	0.3%
Chatterjee S et al. 2020	97	592	0.1639	[0.1351; 0.1948]	0.8%	1.3%
Chintale KN et al. 2016	0	136	0.0000	[0.0000; 0.0126]	0.8%	0.3%
Danagus A et al. 2016	3	100	0.0300	[0.0038; 0.0747]	0.8%	0.2%
Datir S et al. 2015	75	557	0.1346	[0.1075; 0.1643]	0.8%	1.2%
Garg V et al. 2010	11	95	0.1158	[0.0582; 0.1888]	0.8%	0.2%
Geetha K.B et al. 2019	0	150	0.0000	[0.0000; 0.0114]	0.8%	0.3%
Gopal BK et al. 2015	0	235	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Guntheti BK et al. 2010	0	35	0.0000	[0.0000; 0.0486]	0.7%	0.1%
Guntheti BK et al. 2011	19	502	0.0378	[0.0227; 0.0565]	0.8%	1.1%
Gupta A et al. 2017	17	200	0.0850	[0.0499; 0.1281]	0.8%	0.4%
Gupta B et al. 2016	20	128	0.1562	[0.0980; 0.2248]	0.8%	0.3%
Gupta P et al. 2015	5	368	0.0136	[0.0038; 0.0285]	0.8%	0.8%
Gupta P et al. 2016	22	243	0.0905	[0.0574; 0.1301]	0.8%	0.5%
Haloi M et al. 2013	45	96	0.4688	[0.3694; 0.5693]	0.8%	0.2%
Indu TH et al. 2015	492	1860	0.2645	[0.2447; 0.2848]	0.8%	4.1%
Jailkhani SMK et al. 2014	74	196	0.3776	[0.3108; 0.4467]	0.8%	0.4%
Jaiprakash H et al. 2011	0	225	0.0000	[0.0000; 0.0076]	0.8%	0.5%
Jayaprakash 2018	4	30	0.1333	[0.0309; 0.2823]	0.7%	0.1%
Jesslin J et al. 2010	233	1045	0.2230	[0.1982; 0.2487]	0.8%	2.3%
Joshi SC et al. 2013	10	372	0.0269	[0.0125; 0.0461]	0.8%	0.8%
Kaeley N et al. 2019	7	156	0.0449	[0.0170; 0.0839]	0.8%	0.3%
Kalita PP et al. 2019	19	234	0.0812	[0.0493; 0.1200]	0.8%	0.5%
Kanchan T et al. 2010	19	198	0.0960	[0.0584; 0.1413]	0.8%	0.4%
Karikalan et al. 2014	2	160	0.0125	[0.0002; 0.0373]	0.8%	0.4%
Katageri Set al. 2016	24	51	0.4706	[0.3344; 0.6089]	0.7%	0.1%
Kaur S et al. 2016	52	256	0.2031	[0.1559; 0.2548]	0.8%	0.6%
Khadilkar NP et al. 2016	3	40	0.0750	[0.0098; 0.1814]	0.7%	0.1%
Khosya S et al. 2016	195	799	0.2441	[0.2149; 0.2745]	0.8%	1.7%
Kondle Raghu et al. 2015	128	537	0.2384	[0.2032; 0.2754]	0.8%	1.2%
Kora SA et al. 2011	0	148	0.0000	[0.0000; 0.0116]	0.8%	0.3%
Koulapur V et al. 2015	0	210	0.0000	[0.0000; 0.0082]	0.8%	0.5%
Kumar MR et al. 2014	0	101	0.0000	[0.0000; 0.0170]	0.8%	0.2%
Kumar SV et al. 2010	200	2226	0.0898	[0.0783; 0.1021]	0.8%	4.9%
Lad KS et al. 2017	18	106	0.1698	[0.1037; 0.2478]	0.8%	0.2%
Latif M et al. 2020	10	207	0.0483	[0.0227; 0.0823]	0.8%	0.5%
Mahabalshetti AD et al. 2013	19	104	0.1827	[0.1137; 0.2633]	0.8%	0.2%
Maharani B et al. 2013	15	150	0.1000	[0.0565; 0.1537]	0.8%	0.3%
Mate VH et al. 2017	9	99	0.0909	[0.0410; 0.1566]	0.8%	0.2%
Memon A et al. 2012	11	236	0.0466	[0.0229; 0.0777]	0.8%	0.5%
Mittal N et al. 2013	27	166	0.1627	[0.1101; 0.2230]	0.8%	0.4%
Mori RK et al. 2017	0	69	0.0000	[0.0000; 0.0248]	0.7%	0.2%
Mugadlimath A et al. 2012	133	378	0.3519	[0.3044; 0.4008]	0.8%	0.8%
Nair PK et al. 2015	22	168	0.1310	[0.0838; 0.1865]	0.8%	0.4%
Nayak GH et al. 2015	12	138	0.0870	[0.0449; 0.1404]	0.8%	0.3%
Panda BB et al. 2015	15	78	0.1923	[0.1116; 0.2880]	0.7%	0.2%
Parekh U et al. 2019	142	1092	0.1300	[0.1107; 0.1507]	0.8%	2.4%
Pate RS et al. 2017	29	318	0.0912	[0.0618; 0.1255]	0.8%	0.7%
Patel DJ et al. 2011	0	288	0.0000	[0.0000; 0.0060]	0.8%	0.6%
Patel N et al. 2014	27	126	0.2143	[0.1466; 0.2906]	0.8%	0.3%
Patil A et al. 2014	22	74	0.2973	[0.1980; 0.4070]	0.7%	0.2%
Patnaik AMM et al. 2016	14	100	0.1400	[0.0781; 0.2156]	0.8%	0.2%
Pawar CK et al. 2017	0	201	0.0000	[0.0000; 0.0085]	0.8%	0.4%
Pawar V et al. 2011	295	923	0.3196	[0.2899; 0.3501]	0.8%	2.0%
Peranantham S et al. 2014	67	110	0.6091	[0.5159; 0.6985]	0.8%	0.2%
Prajapati T et al. 2013	133	366	0.3634	[0.3148; 0.4134]	0.8%	0.8%
Prashar A et al. 2018	14	375	0.0373	[0.0202; 0.0592]	0.8%	0.8%
Prayag A et al. 2016	2	110	0.0182	[0.0003; 0.0540]	0.8%	0.2%
Raizada A et al. 2012	235	584	0.4024	[0.3629; 0.4425]	0.8%	1.3%
Rajanandh M. G et al. 2013	100	224	0.4464	[0.3818; 0.5120]	0.8%	0.5%
Rajanandh M. G et al. 2014	91	261	0.3487	[0.2919; 0.4076]	0.8%	0.6%
Rajesh JJ et al. 2016	0	12	0.0000	[0.0000; 0.1386]	0.5%	0.0%
Ramanath KV et al. 2012	10	73	0.1370	[0.0664; 0.2265]	0.7%	0.2%
S Shah et al. 2018	5	60	0.0833	[0.0243; 0.1689]	0.7%	0.1%
Sandhu SS et al. 2010	6	78	0.0769	[0.0264; 0.1482]	0.7%	0.2%
Sandhu SS et al. 2010	71	131	0.5420	[0.4560; 0.6268]	0.8%	0.3%
Sangalad PN et al. 2010	1	39	0.0256	[0.0000; 0.1068]	0.7%	0.1%
Santosh KS et al. 2013	136	261	0.5211	[0.4603; 0.5815]	0.8%	0.6%
Sarkar AP et al. 2015	62	222	0.2793	[0.2221; 0.3403]	0.8%	0.5%
Saxena V et al. 2014	23	105	0.2190	[0.1446; 0.3037]	0.8%	0.2%
Shah SM et al. 2016	84	340	0.2471	[0.2026; 0.2944]	0.8%	0.7%
Shakuntala et al. 2015	98	1575	0.0622	[0.0508; 0.0747]	0.8%	3.4%
Sharma R et al. 2019	87	505	0.1723	[0.1405; 0.2065]	0.8%	1.1%
Siddamshetty AK et al. 2016	581	971	0.5984	[0.5673; 0.6290]	0.8%	2.1%
Siddapur RK et al. 2011	0	228	0.0000	[0.0000; 0.0075]	0.8%	0.5%
Singh B et al. 2017	6	180	0.0333	[0.0112; 0.0654]	0.8%	0.4%
Singh J et al. 2015	44	178	0.2472	[0.1864; 0.3134]	0.8%	0.4%
Singh O et al. 2011	30	138	0.2174	[0.1522; 0.2904]	0.8%	0.3%
Singh RR et al. 2016	19	140	0.1357	[0.0835; 0.1979]	0.8%	0.3%
Singh SP et al. 2013	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Sonar V et al. 2010	0	320	0.0000	[0.0000; 0.0054]	0.8%	0.7%
Srihari C et al. 2017	34	317	0.1073	[0.0754; 0.1439]	0.8%	0.7%
Srinivasa V et al. 2012	5	81	0.0617	[0.0178; 0.1264]	0.7%	0.2%
Srinivasulu K et al. 2019	18	100	0.1800	[0.1102; 0.2620]	0.8%	0.2%
Thakur S et al. 2017	25	110	0.2273	[0.1533; 0.3107]	0.8%	0.2%
Thunga G et al. 2010	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Vaidya YP et al. 2012	110	1003	0.1097	[0.0910; 0.1298]	0.8%	2.2%
VANISHREE et al. 2016	8	384	0.0208	[0.0086; 0.0379]	0.8%	0.8%
Varma NM et al. 2011	41	143	0.2867	[0.2153; 0.3638]	0.8%	0.3%
Verma P et al. 2018	30	120	0.2500	[0.1762; 0.3317]	0.8%	0.3%
Vivekanandan K et al. 2012	68	232	0.2931	[0.2362; 0.3535]	0.8%	0.5%
Waghmare CS et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Waghmare S et al. 2014	19	70	0.2714	[0.1729; 0.3823]	0.7%	0.2%
Yadav VK et al. 2018	757	1622	0.4667	[0.4425; 0.4910]	0.8%	3.5%
Fixed effect model		*43045*	*0.1698*	*[0.1662; 0.1734]*	--	*94.3%*
Random effects model			*0.1288*	*[0.1034; 0.1564]*	*88.7%*	--

Heterogeneity: I^2 = 99%, χ^2_{115} = 7991.46 (p = 0)

Moderator = Children						
Adhikari DD et al. 2017	401	629	0.6375	[0.5995; 0.6747]	0.8%	1.4%
Aggarwal B et al. 2014	27	81	0.3333	[0.2343; 0.4402]	0.7%	0.2%
Bhat NK et al. 2012	39	117	0.3333	[0.2505; 0.4216]	0.8%	0.3%
Brata Ghosh V et al. 2013	26	52	0.5000	[0.3638; 0.6362]	0.7%	0.1%
Das A et al. 2015	154	290	0.5310	[0.4734; 0.5883]	0.8%	0.6%
Devaranavadagi RA et al. 2017	13	38	0.3421	[0.1983; 0.5015]	0.7%	0.1%
Gangal R et al. 2015	16	149	0.1074	[0.0622; 0.1627]	0.8%	0.3%
Kumar A et al. 2019	23	91	0.2527	[0.1682; 0.3476]	0.7%	0.2%
Manikyamba D et al. 2015	68	183	0.3716	[0.3028; 0.4430]	0.8%	0.4%
Modi NP et al. 2014	122	288	0.4236	[0.3670; 0.4812]	0.8%	0.6%
Ram P et al. 2014	32	81	0.3951	[0.2909; 0.5042]	0.7%	0.2%
Rathore S et al. 2013	57	100	0.5700	[0.4715; 0.6658]	0.8%	0.2%
Roy MP et al. 2017	95	195	0.4872	[0.4171; 0.5575]	0.8%	0.4%
Saikia D et al. 2020	58	153	0.3791	[0.3036; 0.4576]	0.8%	0.3%
Sharma J et al. 2014	55	165	0.3333	[0.2632; 0.4073]	0.8%	0.4%
Fixed effect model		*2612*	*0.4502*	*[0.4310; 0.4694]*	--	*5.7%*
Random effects model			*0.3960*	*[0.2918; 0.5051]*	*11.3%*	--

Heterogeneity: I^2 = 94%, χ^2_{114} = 246.59 (p < 0.01)

Fixed effect model		***45657***	***0.1834***	***[0.1798; 0.1870]***	--	***100.0%***
Random effects model			***0.1536***	***[0.1277; 0.1813]***	***100.0%***	--

Heterogeneity: I^2 = 99%, χ^2_{130} = 9174.96 (p = 0)

Residual heterogeneity: I^2 = 98%, χ^2_{129} = 8238.05 (p = 0)

0 0.2 0.4 0.6 0.8 1

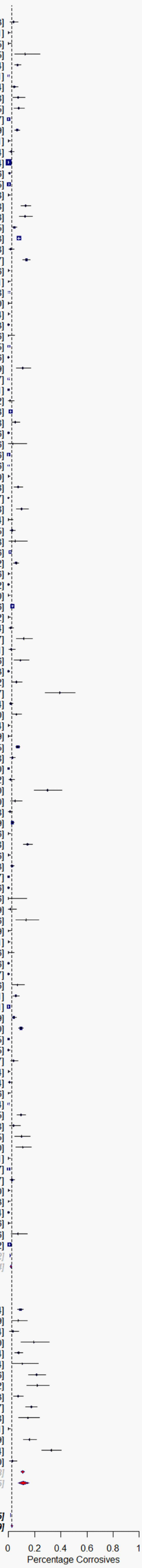
Percentage Miscellaneous

Supplementary Figure 4Sab: Prevalence of poisoning with Miscellaneous agents (4Sa) and Age wise distribution (4Sb)

4Sa

Study	corrosives	Total	Proportion	95% C.I.	WeightsR	weightsF
Moderator = Adult						
Abubakar S et al. 2014	6	165	0.0364	[0.0122; 0.0713]	0.8%	0.4%
Acharya S et al. 2014	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Ahuja H et al. 2015	0	67	0.0000	[0.0000; 0.0255]	0.7%	0.1%
Aiswarya Aravind et al. 2014	6	47	0.1277	[0.0449; 0.2405]	0.6%	0.1%
Ali I et al. 2017	26	379	0.0686	[0.0451; 0.0964]	0.8%	0.8%
Ali K et al. 2019	0	334	0.0000	[0.0000; 0.0051]	0.8%	0.7%
Anandabaskar N et al. 2019	12	275	0.0436	[0.0222; 0.0714]	0.8%	0.6%
Anthony L et al. 2012	9	122	0.0738	[0.0331; 0.1278]	0.8%	0.3%
Arulmurugan C et al. 2015	13	169	0.0769	[0.0409; 0.1225]	0.8%	0.4%
Asawari R et al. 2017	0	1010	0.0000	[0.0000; 0.0017]	0.8%	2.2%
Awasthi PM et al. 2018	38	582	0.0653	[0.0465; 0.0869]	0.8%	1.3%
Bagali M et al. 2019	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Bamathy B et al. 2017	4	218	0.0183	[0.0039; 0.0414]	0.8%	0.5%
Banerjee I et al. 2014	0	4432	0.0000	[0.0000; 0.0004]	0.9%	9.8%
Bannur V et al. 2019	2	306	0.0065	[0.0001; 0.0196]	0.8%	0.7%
Bansal A et al. 2018	5	1918	0.0026	[0.0007; 0.0055]	0.9%	4.2%
Barman DD et al. 2017	0	124	0.0000	[0.0000; 0.0138]	0.8%	0.3%
Benjamin RN et al. 2018	41	313	0.1310	[0.0957; 0.1708]	0.8%	0.7%
Bhagora RV et al. 2015	21	165	0.1273	[0.0803; 0.1828]	0.8%	0.4%
Bhowmick K et al. 2019	21	492	0.0427	[0.0264; 0.0625]	0.8%	1.1%
Celine TM et al. 2015	165	2081	0.0793	[0.0681; 0.0913]	0.9%	4.6%
Chary RS et al. 2017	2	136	0.0147	[0.0002; 0.0438]	0.8%	0.3%
Chatterjee S et al. 2020	81	592	0.1368	[0.1103; 0.1657]	0.8%	1.3%
Chintale KN et al. 2016	0	136	0.0000	[0.0000; 0.0126]	0.8%	0.3%
Danagus A et al. 2016	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Datir S et al. 2015	2	557	0.0036	[0.0001; 0.0108]	0.8%	1.2%
Garg V et al. 2010	0	95	0.0000	[0.0000; 0.0180]	0.7%	0.2%
Geetha K.B et al. 2019	0	150	0.0000	[0.0000; 0.0114]	0.8%	0.3%
Gopal BK et al. 2015	0	235	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Guntheti BK et al. 2010	0	35	0.0000	[0.0000; 0.0486]	0.6%	0.1%
Guntheti BK et al. 2011	1	502	0.0020	[0.0000; 0.0085]	0.8%	1.1%
Gupta A et al. 2017	0	200	0.0000	[0.0000; 0.0086]	0.8%	0.4%
Gupta B et al. 2016	14	128	0.1094	[0.0605; 0.1699]	0.8%	0.3%
Gupta P et al. 2015	0	368	0.0000	[0.0000; 0.0047]	0.8%	0.8%
Gupta P et al. 2016	0	243	0.0000	[0.0000; 0.0071]	0.8%	0.5%
Haloi M et al. 2013	1	96	0.0104	[0.0000; 0.0442]	0.7%	0.2%
Indu TH et al. 2015	29	1860	0.0156	[0.0104; 0.0218]	0.9%	4.1%
Jailkhani SMK et al. 2014	10	196	0.0510	[0.0240; 0.0868]	0.8%	0.4%
Jaiprakash H et al. 2011	0	225	0.0000	[0.0000; 0.0076]	0.8%	0.5%
Jayaprakash 2018	1	30	0.0333	[0.0000; 0.1376]	0.6%	0.1%
Jesslin J et al. 2010	0	1045	0.0000	[0.0000; 0.0016]	0.8%	2.3%
Joshi SC et al. 2013	0	372	0.0000	[0.0000; 0.0046]	0.8%	0.8%
Kaeley N et al. 2019	0	156	0.0000	[0.0000; 0.0110]	0.8%	0.3%
Kalita PP et al. 2019	17	234	0.0726	[0.0425; 0.1098]	0.8%	0.5%
Kanchan T et al. 2010	0	198	0.0000	[0.0000; 0.0087]	0.8%	0.4%
Karikalan et al. 2014	16	160	0.1000	[0.0578; 0.1518]	0.8%	0.4%
Katageri Set al. 2016	0	51	0.0000	[0.0000; 0.0334]	0.7%	0.1%
Kaur S et al. 2016	7	256	0.0273	[0.0103; 0.0515]	0.8%	0.6%
Khadilkar NP et al. 2016	2	40	0.0500	[0.0009; 0.1448]	0.6%	0.1%
Khosya S et al. 2016	10	799	0.0125	[0.0058; 0.0216]	0.8%	1.8%
Kondle Raghu et al. 2015	31	537	0.0577	[0.0394; 0.0792]	0.8%	1.2%
Kora SA et al. 2011	0	148	0.0000	[0.0000; 0.0116]	0.8%	0.3%
Koulapur V et al. 2015	0	210	0.0000	[0.0000; 0.0082]	0.8%	0.5%
Kumar MR et al. 2014	0	101	0.0000	[0.0000; 0.0170]	0.7%	0.2%
Kumar SV et al. 2010	65	2226	0.0292	[0.0226; 0.0366]	0.9%	4.9%
Lad KS et al. 2017	0	106	0.0000	[0.0000; 0.0162]	0.7%	0.2%
Latif M et al. 2020	3	207	0.0145	[0.0018; 0.0364]	0.8%	0.5%
Mahabalshetti AD et al. 2013	12	104	0.1154	[0.0602; 0.1847]	0.7%	0.2%
Maharani B et al. 2013	3	150	0.0200	[0.0025; 0.0501]	0.8%	0.3%
Mate VH et al. 2017	9	99	0.0909	[0.0410; 0.1566]	0.7%	0.2%
Memon A et al. 2012	0	236	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Mittal N et al. 2013	10	166	0.0602	[0.0284; 0.1022]	0.8%	0.4%
Mori RK et al. 2017	27	69	0.3913	[0.2789; 0.5097]	0.7%	0.2%
Mugadlimath A et al. 2012	6	378	0.0159	[0.0053; 0.0314]	0.8%	0.8%
Nair PK et al. 2015	10	168	0.0595	[0.0281; 0.1010]	0.8%	0.4%
Nayak GH et al. 2015	0	138	0.0000	[0.0000; 0.0124]	0.8%	0.3%
Panda BB et al. 2015	0	78	0.0000	[0.0000; 0.0219]	0.7%	0.2%
Parekh U et al. 2019	76	1092	0.0696	[0.0552; 0.0855]	0.9%	2.4%
Pate RS et al. 2017	9	318	0.0283	[0.0125; 0.0498]	0.8%	0.7%
Patel DJ et al. 2011	0	288	0.0000	[0.0000; 0.0060]	0.8%	0.6%
Patel N et al. 2014	2	126	0.0159	[0.0002; 0.0472]	0.8%	0.3%
Patil A et al. 2014	22	74	0.2973	[0.1980; 0.4070]	0.7%	0.2%
Patnaik AMM et al. 2016	5	100	0.0500	[0.0143; 0.1030]	0.7%	0.2%
Pawar CK et al. 2017	2	201	0.0100	[0.0002; 0.0298]	0.8%	0.4%
Pawar V et al. 2011	26	923	0.0282	[0.0184; 0.0399]	0.8%	2.0%
Peranantham S et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Prajapati T et al. 2013	53	366	0.1448	[0.1105; 0.1828]	0.8%	0.8%
Prayag A et al. 2016	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Raizada A et al. 2012	15	584	0.0257	[0.0142; 0.0403]	0.8%	1.3%
Rajanandh M. G et al. 2013	0	224	0.0000	[0.0000; 0.0077]	0.8%	0.5%
Rajanandh M. G et al. 2014	0	261	0.0000	[0.0000; 0.0066]	0.8%	0.6%
Rajesh JJ et al. 2016	0	12	0.0000	[0.0000; 0.1386]	0.4%	0.0%
Ramanath KV et al. 2012	1	73	0.0137	[0.0000; 0.0579]	0.7%	0.2%
S Shah et al. 2018	8	60	0.1333	[0.0573; 0.2326]	0.7%	0.1%
Sandhu SS et al. 2010	0	78	0.0000	[0.0000; 0.0219]	0.7%	0.2%
Sandhu SS et al. 2010	0	131	0.0000	[0.0000; 0.0131]	0.8%	0.3%
Sangalad PN et al. 2010	0	39	0.0000	[0.0000; 0.0436]	0.6%	0.1%
Santosh KS et al. 2013	0	261	0.0000	[0.0000; 0.0066]	0.8%	0.6%
Sarkar AP et al. 2015	0	222	0.0000	[0.0000; 0.0077]	0.8%	0.5%
Saxena V et al. 2014	7	105	0.0667	[0.0256; 0.1236]	0.7%	0.2%
Shah SM et al. 2016	19	340	0.0559	[0.0337; 0.0831]	0.8%	0.8%
Shakuntala et al. 2015	0	1575	0.0000	[0.0000; 0.0011]	0.9%	3.5%
Sharma R et al. 2019	21	505	0.0416	[0.0257; 0.0609]	0.8%	1.1%
Siddamshetty AK et al. 2016	92	971	0.0947	[0.0771; 0.1140]	0.8%	2.1%
Siddapur RK et al. 2011	0	228	0.0000	[0.0000; 0.0075]	0.8%	0.5%
Singh B et al. 2017	0	180	0.0000	[0.0000; 0.0095]	0.8%	0.4%
Singh J et al. 2015	7	178	0.0393	[0.0149; 0.0737]	0.8%	0.4%
Singh O et al. 2011	0	138	0.0000	[0.0000; 0.0124]	0.8%	0.3%
Singh RR et al. 2016	1	140	0.0071	[0.0000; 0.0304]	0.8%	0.3%
Singh SP et al. 2013	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Sonar V et al. 2010	0	320	0.0000	[0.0000; 0.0054]	0.8%	0.7%
Srihari C et al. 2017	30	317	0.0946	[0.0647; 0.1295]	0.8%	0.7%
Srinivasa V et al. 2012	3	81	0.0370	[0.0047; 0.0918]	0.7%	0.2%
Srinivasulu K et al. 2019	10	100	0.1000	[0.0478; 0.1675]	0.7%	0.2%
Thakur S et al. 2017	12	110	0.1091	[0.0568; 0.1750]	0.8%	0.2%
Thunga G et al. 2010	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Vaidya YP et al. 2012	0	1003	0.0000	[0.0000; 0.0017]	0.8%	2.2%
VANISHREE et al. 2016	10	384	0.0260	[0.0121; 0.0447]	0.8%	0.9%
Varma NM et al. 2011	0	143	0.0000	[0.0000; 0.0120]	0.8%	0.3%
Verma P et al. 2018	0	120	0.0000	[0.0000; 0.0143]	0.8%	0.3%
Vivekanandan K et al. 2012	0	232	0.0000	[0.0000; 0.0074]	0.8%	0.5%
Waghmare CS et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Waghmare S et al. 2014	5	70	0.0714	[0.0207; 0.1456]	0.7%	0.2%
Yadav VK et al. 2018	12	1622	0.0074	[0.0037; 0.0122]	0.9%	3.6%
Fixed effect model		42550	0.0130	[0.0118; 0.0142]	--	94.2%
Random effects model			0.0179	[0.0116; 0.0254]	88.7%	--
Heterogeneity: $I^2 = 95\%$, $\chi^2_{113} = 2253.32$ ($p = 0$)						
Moderator = Children						
Adhikari DD et al. 2017	57	629	0.0906	[0.0694; 0.1144]	0.8%	1.4%
Aggarwal B et al. 2014	6	81	0.0741	[0.0254; 0.1429]	0.7%	0.2%
Bhat NK et al. 2012	4	117	0.0342	[0.0074; 0.0764]	0.8%	0.3%
Brata Ghosh V et al. 2013	10	52	0.1923	[0.0951; 0.3120]	0.7%	0.1%
Das A et al. 2015	22	290	0.0759	[0.0479; 0.1094]	0.8%	0.6%
Devaranavadagi RA et al. 2017	4	38	0.1053	[0.0239; 0.2264]	0.6%	0.1%
Gangal R et al. 2015	32	149	0.2148	[0.1522; 0.2846]	0.8%	0.3%
Kumar A et al. 2019	20	91	0.2198	[0.1401; 0.3112]	0.7%	0.2%
Manikyamba D et al. 2015	13	183	0.0710	[0.0377; 0.1133]	0.8%	0.4%
Modi NP et al. 2014	50	288	0.1736	[0.1319; 0.2197]	0.8%	0.6%
Ram P et al. 2014	12	81	0.1481	[0.0781; 0.2348]	0.7%	0.2%
Rathore S et al. 2013	0	100	0.0000	[0.0000; 0.0171]	0.7%	0.2%
Roy MP et al. 2017	31	195	0.1590	[0.1107; 0.2139]	0.8%	0.4%
Saikia D et al. 2020	50	153	0.3268	[0.2545; 0.4034]	0.8%	0.3%
Sharma J et al. 2014	5	165	0.0303	[0.0086; 0.0630]	0.8%	0.4%
Fixed effect model		2612	0.1083	[0.0964; 0.1208]	--	5.8%
Random effects model			0.1121	[0.0726; 0.1585]	11.3%	--
Heterogeneity: $I^2 = 91\%$, $\chi^2_{14} = 154.28$ ($p < 0.01$)						
Fixed effect model		**45162**	**0.0162**	**[0.0149; 0.0175]**	**--**	**100.0%**
Random effects model			**0.0249**	**[0.0179; 0.0329]**	**100.0%**	**--**

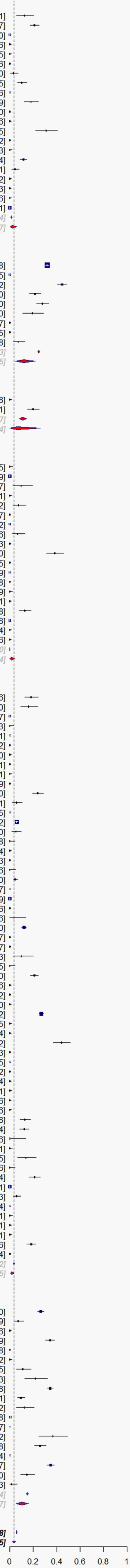
Heterogeneity: $I^2 = 96\%$, $\chi^2_{128} = 2853.52$ ($p = 0$)
Residual heterogeneity: $I^2 = 95\%$, $\chi^2_{127} = 2407.60$ ($p = 0$)



4Sb

Study	Venom	Total	Proportion	95% C.I.	WeightsR	weightsF
Phases = Central						
Aggarwal B et al. 2014	10	81	0.1235	[0.0595; 0.2051]	0.8%	0.2%
Ali I et al. 2017	80	379	0.2111	[0.1714; 0.2537]	0.8%	0.8%
Awasthi PM et al. 2018	0	582	0.0000	[0.0000; 0.0030]	0.8%	1.3%
Bhat NK et al. 2012	0	117	0.0000	[0.0000; 0.0146]	0.8%	0.3%
Gangal R et al. 2015	0	149	0.0000	[0.0000; 0.0115]	0.8%	0.3%
Gupta A et al. 2017	0	200	0.0000	[0.0000; 0.0086]	0.8%	0.4%
Gupta B et al. 2016	4	128	0.0312	[0.0067; 0.0700]	0.8%	0.3%
Gupta P et al. 2016	25	243	0.1029	[0.0675; 0.1445]	0.8%	0.5%
Joshi SC et al. 2013	0	372	0.0000	[0.0000; 0.0046]	0.8%	0.8%
Kaeley N et al. 2019	28	156	0.1795	[0.1229; 0.2439]	0.8%	0.3%
Patel DJ et al. 2011	0	288	0.0000	[0.0000; 0.0060]	0.8%	0.6%
Patel N et al. 2014	0	126	0.0000	[0.0000; 0.0136]	0.8%	0.3%
Rathore S et al. 2013	31	100	0.3100	[0.2227; 0.4045]	0.8%	0.2%
Saikia D et al. 2020	0	153	0.0000	[0.0000; 0.0112]	0.8%	0.3%
Saxena V et al. 2014	0	105	0.0000	[0.0000; 0.0163]	0.8%	0.2%
Sharma R et al. 2019	59	505	0.1168	[0.0902; 0.1464]	0.8%	1.1%
Singh J et al. 2015	8	178	0.0449	[0.0186; 0.0811]	0.8%	0.4%
Singh RR et al. 2016	0	140	0.0000	[0.0000; 0.0122]	0.8%	0.3%
Verma P et al. 2018	0	120	0.0000	[0.0000; 0.0143]	0.8%	0.3%
Waghmare CS et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Yadav VK et al. 2018	0	1622	0.0000	[0.0000; 0.0011]	0.8%	3.6%
Fixed effect model		5854	0.0140	[0.0109; 0.0174]	--	13.0%
Random effects model			0.0237	[0.0036; 0.0577]	16.4%	--
Heterogeneity: $I^2 = 97\%$, $\chi^2_{20} = 675.29$ ($p < 0.01$)						
Phases = East						
Banerjee I et al. 2014	1414	4432	0.3190	[0.3054; 0.3328]	0.8%	9.8%
Bhowmick K et al. 2019	0	492	0.0000	[0.0000; 0.0035]	0.8%	1.1%
Chatterjee S et al. 2020	264	592	0.4459	[0.4061; 0.4862]	0.8%	1.3%
Das A et al. 2015	62	290	0.2138	[0.1684; 0.2630]	0.8%	0.6%
Modi NP et al. 2014	80	288	0.2778	[0.2275; 0.3310]	0.8%	0.6%
Panda BB et al. 2015	15	78	0.1923	[0.1116; 0.2880]	0.7%	0.2%
Sarkar AP et al. 2015	0	222	0.0000	[0.0000; 0.0077]	0.8%	0.5%
Singh B et al. 2017	0	180	0.0000	[0.0000; 0.0095]	0.8%	0.4%
Thakur S et al. 2017	8	110	0.0727	[0.0305; 0.1298]	0.8%	0.2%
Fixed effect model		6684	0.2468	[0.2365; 0.2573]	--	14.8%
Random effects model			0.1202	[0.0490; 0.2165]	7.1%	--
Heterogeneity: $I^2 = 99\%$, $\chi^2_{8} = 1116.31$ ($p < 0.01$)						
Phases = NE						
Haloi M et al. 2013	0	96	0.0000	[0.0000; 0.0178]	0.8%	0.2%
Kalita PP et al. 2019	46	234	0.1966	[0.1480; 0.2501]	0.8%	0.5%
Fixed effect model		330	0.1093	[0.0774; 0.1457]	--	0.7%
Random effects model			0.0629	[0.0000; 0.2584]	1.6%	--
Heterogeneity: $I^2 = 98\%$, $\chi^2_{1} = 46$ ($p < 0.01$)						
Phases = North						
Ahuja H et al. 2015	0	67	0.0000	[0.0000; 0.0255]	0.7%	0.1%
Bansal A et al. 2018	0	1918	0.0000	[0.0000; 0.0009]	0.8%	4.2%
Brata Ghosh V et al. 2013	5	52	0.0962	[0.0283; 0.1937]	0.7%	0.1%
Danagus A et al. 2016	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Garg V et al. 2010	7	95	0.0737	[0.0283; 0.1362]	0.8%	0.2%
Kaur S et al. 2016	0	256	0.0000	[0.0000; 0.0067]	0.8%	0.6%
Khosya S et al. 2016	0	799	0.0000	[0.0000; 0.0022]	0.8%	1.8%
Kumar A et al. 2019	6	91	0.0659	[0.0225; 0.1276]	0.8%	0.2%
Latif M et al. 2020	0	207	0.0000	[0.0000; 0.0083]	0.8%	0.5%
Mittal N et al. 2013	64	166	0.3855	[0.3127; 0.4610]	0.8%	0.4%
Pawar CK et al. 2017	0	201	0.0000	[0.0000; 0.0085]	0.8%	0.4%
Raizada A et al. 2012	0	584	0.0000	[0.0000; 0.0029]	0.8%	1.3%
Roy MP et al. 2017	0	195	0.0000	[0.0000; 0.0088]	0.8%	0.4%
Sandhu SS et al. 2010	0	78	0.0000	[0.0000; 0.0219]	0.7%	0.2%
Sandhu SS et al. 2010	0	131	0.0000	[0.0000; 0.0131]	0.8%	0.3%
Sharma J et al. 2014	21	165	0.1273	[0.0803; 0.1828]	0.8%	0.4%
Siddamshetty AK et al. 2016	0	971	0.0000	[0.0000; 0.0018]	0.8%	2.1%
Singh O et al. 2011	0	138	0.0000	[0.0000; 0.0124]	0.8%	0.3%
Singh SP et al. 2013	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Fixed effect model		6324	0.0007	[0.0000; 0.0020]	--	14.0%
Random effects model			0.0124	[0.0000; 0.0424]	14.7%	--
Heterogeneity: $I^2 = 95\%$, $\chi^2_{18} = 398.79$ ($p < 0.01$)						
Phases = South						
Abubakar S et al. 2014	30	165	0.1818	[0.1264; 0.2446]	0.8%	0.4%
Acharya S et al. 2014	16	100	0.1600	[0.0940; 0.2390]	0.8%	0.2%
Adhikari DD et al. 2017	0	629	0.0000	[0.0000; 0.0027]	0.8%	1.4%
Aiswarya Aravind et al. 2014	0	47	0.0000	[0.0000; 0.0363]	0.7%	0.1%
Ali K et al. 2019	0	334	0.0000	[0.0000; 0.0051]	0.8%	0.7%
Anandabaskar N et al. 2019	0	275	0.0000	[0.0000; 0.0062]	0.8%	0.6%
Anthony L et al. 2012	0	122	0.0000	[0.0000; 0.0140]	0.8%	0.3%
Arulmurugan C et al. 2015	0	169	0.0000	[0.0000; 0.0101]	0.8%	0.4%
Bagali M et al. 2019	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Bamathy B et al. 2017	0	218	0.0000	[0.0000; 0.0079]	0.8%	0.5%
Bannur V et al. 2019	73	306	0.2386	[0.1924; 0.2880]	0.8%	0.7%
Barman DD et al. 2017	7	124	0.0565	[0.0216; 0.1051]	0.8%	0.3%
Benjamin RN et al. 2018	0	313	0.0000	[0.0000; 0.0055]	0.8%	0.7%
Celine TM et al. 2015	124	2081	0.0596	[0.0498; 0.0702]	0.8%	4.6%
Chary RS et al. 2017	7	136	0.0515	[0.0196; 0.0960]	0.8%	0.3%
Devaranavadagi RA et al. 2017	0	38	0.0000	[0.0000; 0.0448]	0.7%	0.1%
Geetha K.B et al. 2019	0	150	0.0000	[0.0000; 0.0114]	0.8%	0.3%
Gopal BK et al. 2015	0	235	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Guntheti BK et al. 2010	0	35	0.0000	[0.0000; 0.0486]	0.7%	0.1%
Guntheti BK et al. 2011	23	502	0.0458	[0.0291; 0.0660]	0.8%	1.1%
Gupta P et al. 2015	0	368	0.0000	[0.0000; 0.0047]	0.8%	0.8%
Indu TH et al. 2015	0	1860	0.0000	[0.0000; 0.0009]	0.8%	4.1%
Jaiprakash H et al. 2011	0	225	0.0000	[0.0000; 0.0076]	0.8%	0.5%
Jayaprakash 2018	1	30	0.0333	[0.0000; 0.1376]	0.7%	0.1%
Jesslin J et al. 2010	126	1045	0.1206	[0.1015; 0.1410]	0.8%	2.3%
Kanchan T et al. 2010	0	198	0.0000	[0.0000; 0.0087]	0.8%	0.4%
Karikalan et al. 2014	0	160	0.0000	[0.0000; 0.0107]	0.8%	0.4%
Katageri Set al. 2016	5	51	0.0980	[0.0288; 0.1973]	0.7%	0.1%
Khadilkar NP et al. 2016	0	40	0.0000	[0.0000; 0.0425]	0.7%	0.1%
Kondle Raghu et al. 2015	112	537	0.2086	[0.1752; 0.2440]	0.8%	1.2%
Kora SA et al. 2011	0	148	0.0000	[0.0000; 0.0116]	0.8%	0.3%
Koulapur V et al. 2015	0	210	0.0000	[0.0000; 0.0082]	0.8%	0.5%
Kumar MR et al. 2014	0	101	0.0000	[0.0000; 0.0170]	0.8%	0.2%
Kumar SV et al. 2010	600	2226	0.2695	[0.2513; 0.2882]	0.8%	4.9%
Mahabalshetti AD et al. 2013	0	104	0.0000	[0.0000; 0.0165]	0.8%	0.2%
Maharani B et al. 2013	0	150	0.0000	[0.0000; 0.0114]	0.8%	0.3%
Manikyamba D et al. 2015	81	183	0.4426	[0.3712; 0.5152]	0.8%	0.4%
Memon A et al. 2012	0	236	0.0000	[0.0000; 0.0073]	0.8%	0.5%
Mugadlimath A et al. 2012	0	378	0.0000	[0.0000; 0.0045]	0.8%	0.8%
Nair PK et al. 2015	0	168	0.0000	[0.0000; 0.0102]	0.8%	0.4%
Nayak GH et al. 2015	0	138	0.0000	[0.0000; 0.0124]	0.8%	0.3%
Patnaik AMM et al. 2016	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Peranantham S et al. 2014	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Prayag A et al. 2016	0	110	0.0000	[0.0000; 0.0156]	0.8%	0.2%
Rajanandh M. G et al. 2013	29	224	0.1295	[0.0884; 0.1768]	0.8%	0.5%
Rajanandh M. G et al. 2014	32	261	0.1226	[0.0854; 0.1654]	0.8%	0.6%
Rajesh JJ et al. 2016	0	12	0.0000	[0.0000; 0.1386]	0.5%	0.0%
Ram P et al. 2014	0	81	0.0000	[0.0000; 0.0211]	0.8%	0.2%
Ramanath KV et al. 2012	10	73	0.1370	[0.0664; 0.2265]	0.7%	0.2%
Sangalad PN et al. 2010	0	39	0.0000	[0.0000; 0.0436]	0.7%	0.1%
Santosh KS et al. 2013	55	261	0.2107	[0.1633; 0.2624]	0.8%	0.6%
Shakuntala et al. 2015	0	1575	0.0000	[0.0000; 0.0011]	0.8%	3.5%
Siddapur RK et al. 2011	13	228	0.0570	[0.0302; 0.0913]	0.8%	0.5%
Srihari C et al. 2017	0	317	0.0000	[0.0000; 0.0054]	0.8%	0.7%
Srinivasa V et al. 2012	0	81	0.0000	[0.0000; 0.0211]	0.8%	0.2%
Srinivasulu K et al. 2019	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
Thunga G et al. 2010	0	100	0.0000	[0.0000; 0.0171]	0.8%	0.2%
VANISHREE et al. 2016	70	384	0.1823	[0.1452; 0.2226]	0.8%	0.9%
Vivekanandan K et al. 2012	0	232	0.0000	[0.0000; 0.0074]	0.8%	0.5%
Fixed effect model		18923	0.0353	[0.0326; 0.0382]	--	41.9%
Random effects model			0.0195	[0.0066; 0.0375]	45.4%	--
Heterogeneity: $I^2 = 98\%$, $\chi^2_{58} = 3172.33$ ($p = 0$)						
Phases = West						
Asawari R et al. 2017	267	1010	0.2644	[0.2376; 0.2920]	0.8%	2.2%
Bhagora RV et al. 2015	12	165	0.0727	[0.0374; 0.1179]	0.8%	0.4%
Chintale KN et al. 2016	0	136	0.0000	[0.0000; 0.0126]	0.8%	0.3%
Datir S et al. 2015	191	557	0.3429	[0.3040; 0.3829]	0.8%	1.2%
Jailkhani SMK et al. 2014	0	196	0.0000	[0.0000; 0.0088]	0.8%	0.4%
Lad KS et al. 2017	0	106	0.0000	[0.0000; 0.0162]	0.8%	0.2%
Mate VH et al. 2017	11	99	0.1111	[0.0557; 0.1815]	0.8%	0.2%
Mori RK et al. 2017	15	69	0.2174	[0.1271; 0.3233]	0.7%	0.2%
Parekh U et al. 2019	376	1092	0.3443	[0.3164; 0.3728]	0.8%	2.4%
Pate RS et al. 2017	30	318	0.0943	[0.0645; 0.1291]	0.8%	0.7%
Patil A et al. 2014	9	74	0.1216	[0.0556; 0.2072]	0.7%	0.2%
Pawar V et al. 2011	4	923	0.0043	[0.0009; 0.0098]	0.8%	2.0%
Prajapati T et al. 2013	0	366	0.0000	[0.0000; 0.0047]	0.8%	0.8%
S Shah et al. 2018	22	60	0.3667	[0.2486; 0.4932]	0.7%	0.1%
Shah SM et al. 2016	88	340	0.2588	[0.2136; 0.3068]	0.8%	0.8%
Sonar V et al. 2010	0	320	0.0000	[0.0000; 0.0054]	0.8%	0.7%
Vaidya YP et al. 2012	350	1003	0.3490	[0.3197; 0.3787]	0.8%	2.2%
Varma NM et al. 2011	21	143	0.1469	[0.0931; 0.2100]	0.8%	0.3%
Waghmare S et al. 2014	1	70	0.0143	[0.0000; 0.0603]	0.7%	0.2%
Fixed effect model		7047	0.1518	[0.1434; 0.1604]	--	15.6%
Random effects model			0.1002	[0.0524; 0.1607]	14.8%	--
Heterogeneity: $I^2 = 99\%$, $\chi^2_{18} = 1728.6$ ($p = 0$)						
Fixed effect model		**45162**	**0.0585**	**[0.0563; 0.0608]**	**--**	**100.0%**
Random effects model			**0.0334**	**[0.0215; 0.0475]**	**100.0%**	**--**

Heterogeneity: $I^2 = 99\%$, $\chi^2_{128} = 11244.51$ ($p = 0$)
Residual heterogeneity: $I^2 = 98\%$, $\chi^2_{123} = 7137.31$ ($p = 0$)



Supplementary File 1: Search strategy:

(((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india) of all studies -57417.

(((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india) in humans 23303

(((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india)-428

(((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india)of obcervational studies - 460

Search: (((((((prevalence) AND (poisoning)) OR (organophosphate poisoning)) OR (pesticides)) OR (corrosives)) OR (venom)) OR (drugs)) AND (india) Filters: in the last 10 years-428

((((((((((((("epidemiology"[MeSH Subheading] OR "epidemiology"[All Fields]) OR "prevalence"[All Fields]) OR "prevalence"[MeSH Terms]) OR "prevalance"[All Fields]) OR "prevalences"[All Fields]) OR "prevalence s"[All Fields]) OR "prevalent"[All Fields]) OR "prevalently"[All Fields]) OR "prevalents"[All Fields]) AND (((((((("poisoned"[All Fields] OR "poisoning"[MeSH Terms]) OR "poisoning"[All Fields]) OR "poisonings"[All Fields]) OR "poisoning"[MeSH Subheading]) OR "poisonous"[All Fields]) OR "poisons"[Pharmacological Action]) OR "poisons"[MeSH Terms]) OR "poisons"[All Fields]) OR "poison"[All Fields])) OR (("organophosphate poisoning"[MeSH Terms] OR ("organophosphate"[All Fields] AND "poisoning"[All Fields])) OR "organophosphate poisoning"[All Fields])) OR (((((("pesticidal"[All Fields] OR "pesticide s"[All Fields]) OR "pesticides"[Pharmacological Action]) OR "pesticides"[MeSH Terms]) OR "pesticides"[All Fields]) OR "pesticide"[All Fields])) OR (((((((("caustics"[Pharmacological Action] OR "caustics"[MeSH Terms]) OR "caustics"[All Fields]) OR "corrosive"[All Fields]) OR "corrosives"[All Fields]) OR "corrosion"[MeSH Terms]) OR "corrosion"[All Fields]) OR "corrosions"[All Fields]) OR "corrosiveness"[All Fields]) OR "corrosivity"[All Fields])) OR (((((((("venom s"[All Fields] OR "venome"[All Fields]) OR "venomic"[All Fields]) OR "venomics"[All Fields]) OR "venomous"[All Fields]) OR "venoms"[MeSH Terms]) OR "venoms"[All Fields]) OR "venom"[All Fields])) OR ((((("drug s"[All Fields] OR "pharmaceutical preparations"[MeSH Terms]) OR ("pharmaceutical"[All Fields] AND "preparations"[All Fields])) OR

"pharmaceutical preparations"[All Fields]) OR "drugs"[All Fields])) AND ((("india"[MeSH Terms] OR "india"[All Fields]) OR "india s"[All Fields]) OR "indias"[All Fields])

Translations

prevalence: "epidemiology"[Subheading] OR "epidemiology"[All Fields] OR "prevalence"[All Fields] OR "prevalence"[MeSH Terms] OR "prevalance"[All Fields] OR "prevalences"[All Fields] OR "prevalence's"[All Fields] OR "prevalent"[All Fields] OR "prevalently"[All Fields] OR "prevalents"[All Fields]

poisoning: "poisoned"[All Fields] OR "poisoning"[MeSH Terms] OR "poisoning"[All Fields] OR "poisonings"[All Fields] OR "poisoning"[Subheading] OR "poisonous"[All Fields] OR "poisons"[Pharmacological Action] OR "poisons"[MeSH Terms] OR "poisons"[All Fields] OR "poison"[All Fields]

organophosphate poisoning: "organophosphate poisoning"[MeSH Terms] OR ("organophosphate"[All Fields] AND "poisoning"[All Fields]) OR "organophosphate poisoning"[All Fields]

pesticides: "pesticidal"[All Fields] OR "pesticide's"[All Fields] OR "pesticides"[Pharmacological Action] OR "pesticides"[MeSH Terms] OR "pesticides"[All Fields] OR "pesticide"[All Fields]

corrosives: "caustics"[Pharmacological Action] OR "caustics"[MeSH Terms] OR "caustics"[All Fields] OR "corrosive"[All Fields] OR "corrosives"[All Fields] OR "corrosion"[MeSH Terms] OR "corrosion"[All Fields] OR "corrosions"[All Fields] OR "corrosiveness"[All Fields] OR "corrosivity"[All Fields]

venom: "venom's"[All Fields] OR "venome"[All Fields] OR "venomic"[All Fields] OR "venomics"[All Fields] OR "venomous"[All Fields] OR "venoms"[MeSH Terms] OR "venoms"[All Fields] OR "venom"[All Fields]

drugs: "drug's"[All Fields] OR "pharmaceutical preparations"[MeSH Terms] OR ("pharmaceutical"[All Fields] AND "preparations"[All Fields]) OR "pharmaceutical preparations"[All Fields] OR "drugs"[All Fields]

india: "india"[MeSH Terms] OR "india"[All Fields] OR "india's"[All Fields] OR "indias"[All Fields]

Supplementary Table S1a: Characteristics of all studies

Study Id with year	Sample Size	Most common age group(Y)	Sex Ratio (M/F)	Geographical Region of India	Types of Poison
Abubakar S et al. 2014[1]	165	21-30	1.46	South	Pesticides-78, Corrosives-6, Venom-30, Drugs-33, Others-18
Acharya S et al. 2014[2]	100	21-30	0.9	South	Pesticides-64, Corrosives-0, Venom-16, Drugs-5, Others-15
Adhikari DD et al. 2017[3]	629	0-16	NA	South	Pesticides-171, Corrosives-57,Venom-0, Drugs-0, Others-401
Aggarwal B et al. 2014[4]	81	1-18	1.25	Central	Pesticides-24, Corrosives-6, Venom-10, Drugs-14, Others-27
Ahuja H et al. 2015[5]	67	20-40	2.2	North	Pesticides-36, Corrosives-0,Venom-0, Drugs-20, Others-11
Aiswarya A et al. 2014[6]	47	25-44	1.35	South	Pesticides-18, Corrosives-6,Venom-0, Drugs-11, Others-12
Ali I et al. 2017[7]	379	21-30	1.5	Central	Pesticides-208, Corrosives-26,Venom-80, Drugs-35, Others-30
Ali K et al. 2019[8]	334	19-29	NA	South	Pesticides-251, Corrosives-0, Venom-0, Drugs-69, Others-14
Anandabaskar N et al. 2019[9]	275	21-30	0.7	South	Pesticides-123, Corrosives-12, Venom-0, Drugs-37, Others-103
Anthony L et al. 2012[10]	122	21-30	1.1	South	Pesticides-76, Corrosives-9, Venom-0, Drugs-0, Others-37
Arulmurugan C et al. 2015[11]	169	10-30	1.5	South	Pesticides-84, Corrosives-13, Venom-0, Drugs-22, Others-50

Asawari R et al. 2017[12]	1010	20-35	1.3	West	Pesticides-570, Corrosives-0, Venom-267, Drugs-109, Others-64
Awasthi PM et al. 2018[13]	582	21-30	1.7	Central	Pesticides-244, Corrosives-38, Venom-0, Drugs-35, Others-265
Bagali M et al. 2019[14]	100	21-30	2.5	South	Pesticides-98, Corrosives-0, Venom-0, Drugs-2, Others-0
Balasubramanian K et al.2019[15]	120	20-30	1.2	South	Pesticides-111, Corrosives-0, Venom-0, Drugs-0, Others-9
Bamathy B et al. 2017[16]	218	19-30	1.1	South	Pesticides-110, Corrosives-4, Venom-0, Drugs-74, Others-30
Banerjee I et al. 2014[17]	4432	21-30	0.56	East	Pesticides-1699, Corrosives-0,Venom-1414, Drugs-714, Others-605
Bannur V et al. 2019[18]	306	21-30	1.5	South	Pesticides-168, Corrosives-2, Venom-73, Drugs-41, Others-22
Bansal A et al. 2018[19]	1918	NA	NA	North	Pesticides-787, Corrosives-5, Venom-0, Drugs-41, Others-22
Barman DD et al. 2017[20]	124	21-30	0.7	South	Pesticides-103, Corrosives-0, Venom-7, Drugs-0, Others-14
Benjamin RN et al. 2018[21]	313	25-44	1.6	South	Pesticides-151, Corrosives-41, Venom-0, Drugs-95, Others-26
Bhagora RV et al. 2015[22]	165	21-30	1.36	West	Pesticides-126, Corrosives-21, Venom-12, Drugs-2, Others-4
Bhat NK et al. 2012[23]	117	1-18	1.4	Central	Pesticides-44, Corrosives-4, Venom-0, Drugs-30, Others-39
Bhowmick K et al. 2019[24]	492	21-28	1.5	East	Pesticides-393, Corrosives-21,Venom-0, Drugs-45, Others-33

Brata Ghosh V et al. 2013[25]	52	0-11	1.9	North	Pesticides-3, Corrosives-30, Venom-5, Drugs-8, Others-26
Celine TM et al. 2015[26]	2081	26-45	1.3	South	Pesticides-946, Corrosives-165, Venom-124, Drugs-416, Others-430
Chary RS et al. 2017[27]	136	21-30	1.96	South	Pesticides-91, Corrosives-22, Venom-7, Drugs-11, Others-25
Chatterjee S et al. 2020[28]	592	21-30	1.3	East	Pesticides-72, Corrosives-81, Venom-264, Drugs-78, Others-97
Chintale KN et al. 2016[29]	136	21-30	2.9	West	Pesticides-136, Corrosives-0, Venom-0, Drugs-0, Others-0
Danagus A et al. 2016[30]	100	31-40	4.6	North	Pesticides-64, Corrosives-0, Venom-0, Drugs-33, Others-3
Das A et al. 2015[31]	290	0-12	1.5	East	Pesticides-34, Corrosives-22, Venom-62, Drugs-18, Others-154
Datir S et al. 2015[32]	557	21-30	1.4	West	Pesticides-275, Corrosives-2, Venom-191, Drugs-14, Others-75
Devaranavadagi RA et al. 2017[33]	38	1-18	0.7	South	Pesticides-8, Corrosives-4, Venom-0, Drugs-13, Others-13
Gangal R et al. 2015[34]	149	0-10	1.3	Central	Pesticides-82, Corrosives-32, Venom-0, Drugs-19, Others-16
Garg V et al. 2010[35]	95	21-30	4	North	Pesticides-65, Corrosives-0, Venom-7, Drugs-12, Others-11
Geetha K.B et al. 2019[36]	150	21-30	2.7	South	Pesticides-150, Corrosives-0, Venom-0, Drugs-0, Others-0
Gopal BK et al. 2015[37]	235	21-30	2.1	South	Pesticides-223, Corrosives-0, Venom-0, Drugs-12, Others-0

Guntheti BK et al. 2010[38]	35	15-30	2.2	South	Pesticides-35, Corrosives-0, Venom-0, Drugs-0, Others-0
Guntheti BK et al. 2011[39]	502	21-30	6.1	South	Pesticides-419, Corrosives-1, Venom-23, Drugs-40, Others-19
Gupta A et al. 2017[40]	200	21-30	0.6	Central	Pesticides-165, Corrosives-0, Venom-0, Drugs-18, Others-17
Gupta B et al. 2016[41]	128	21-30	1.4	Central	Pesticides-62, Corrosives-14, Venom-4, Drugs-28, Others-20
Gupta Pet al. 2015[42]	368	21-30	NA	South	Pesticides-270, Corrosives-0, Venom-0, Drugs-93, Others-5
Gupta P et al. 2016[43]	243	21-30	1.4	Central	Pesticides-169, Corrosives-0, Venom-25, Drugs-27, Others-22
Haloi M et al. 2013[44]	96	20-29	1.66	North-East	Pesticides-47, Corrosives-1, Venom-0, Drugs-3, Others-45
Indu TH et al. 2015[45]	1860	21-30	1.6	South	Pesticides-1170, Corrosives-29, Venom-0, Drugs-169, Others-492
Jailkhani SMK et al. 2014[46]	196	21-30	1.1	West	Pesticides-95, Corrosives-10, Venom-0, Drugs-17, Others-74
Jaiprakash H et al. 2011[47]	225	21-30	1.6	South	Pesticides-185, Corrosives-0, Venom-0, Drugs-40, Others-0
Jayaprakash 2018[48]	30	20-40	0.6	South	Pesticides-17, Corrosives-1, Venom-1, Drugs-7, Others-4
Jesslin J et al. 2010[49]	1045	18-29	1.51	South	Pesticides-413, Corrosives-0, Venom-126, Drugs-273, Others-233
Joshi SC et al. 2013[50]	372	21-30	1.2	Central	Pesticides-362, Corrosives-0, Venom-0, Drugs-0, Others-10

Kaeley N et al. 2019[51]	156	NA	3.2	Central	Pesticides-31, Corrosives-0, Venom-28, Drugs-90, Others-7
Kalita PP et al. 2019[52]	234	18-30	1.66	North-East	Pesticides-108, Corrosives-17, Venom-46, Drugs-44, Others-19
Kanchan Tet al. 2010[53]	198	20-29	2.5	South	Pesticides-159, Corrosives-0, Venom-0, Drugs-20, Others-19
Karikalan et al. 2014[54]	160	11-20	0.4	South	Pesticides-122, Corrosives-16, Venom-0, Drugs-20, Others-2
Katageri Set al. 2016[55]	51	21-30	3.6	South	Pesticides-21, Corrosives-0, Venom-5, Drugs-1, Others-24
Kaur S et al. 2016[56]	256	18-25	1.2	North	Pesticides-106, Corrosives-7, Venom-0, Drugs-91, Others-52
Khadilkar NP et al. 2016[57]	40	21-30	2.1	South	Pesticides-31, Corrosives-2, Venom-0, Drugs-4, Others-3
Khosya S et al. 2016[58]	799	21-30	1.26	North	Pesticides-440, Corrosives-10, Venom-0, Drugs-154, Others-195
Kondle Raghu et al. 2015[59]	537	20-30	0.92	South	Pesticides-201, Corrosives-31, Venom-112, Drugs-65, Others-128
Kora SA et al. 2011[60]	148	21-30	0.78	South	Pesticides-148, Corrosives-0, Venom-0, Drugs-0, Others-0
Koulapur V et al. 2015[61]	210	21-30	2.6	South	Pesticides-210, Corrosives-0, Venom-0, Drugs-0, Others-0
Kumar A et al. 2019[62]	91	0-12	1.6	North	Pesticides-34, Corrosives-20, Venom-6, Drugs-8, Others-23
Kumar MR et al. 2014[63]	101	21-30	2.5	South	Pesticides-101, Corrosives-0, Venom-0, Drugs-0, Others-0

Kumar SV et al. 2010[64]	2226	21-30	1.1	South	Pesticides-597, Corrosives-65, Venom-600, Drugs-764, Others-200
Lad KS et al. 2017[65]	106	21-30	1.4	West	Pesticides-88, Corrosives-0, Venom-0, Drugs-0, Others-18
Latif M et al. 2020[66]	207	20-30	2.3	North	Pesticides-194, Corrosives-3, Venom-0, Drugs-0, Others-10
Mahabalshetti AD et al. 2013[67]	104	20-29	1.1	South	Pesticides-62, Corrosives-12, Venom-0, Drugs-11, Others-19
Maharani B et al. 2013[68]	150	21-30	1.6	South	Pesticides-126, Corrosives-3, Venom-0, Drugs-6, Others-15
Manikyamba D et al. 2015[69]	183	1-15	1.56	South	Pesticides-12Corrosives-3, Venom-81, Drugs-9, Others-68
Mate VH et al. 2017[70]	99	21-30	2.5	West	Pesticides-32, Corrosives-9, Venom-11, Drugs-38, Others-9
Memon A et al. 2012[71]	236	21-30	0.8	South	Pesticides-191, Corrosives-0, Venom-0, Drugs-34, Others-11
Mittal N et al. 2013[72]	166	19-39	2.3	North	Pesticides-47, Corrosives-10, Venom-64, Drugs-18, Others-27
Modi NP et al. 2014[73]	288	0-14	2.3	East	Pesticides-36, Corrosives-50, Venom-80, Drugs-0, Others-122
Mori RK et al. 2017[74]	69	NA	NA	West	Pesticides-24, Corrosives-27, Venom-15, Drugs-3, Others-0
Mugadlimath A et al. 2012[75]	378	21-30	1.2	South	Pesticides-200, Corrosives-6, Venom-0, Drugs-39, Others-133
Muley A et al. 2014[76]	76	15-25	1.5	West	Pesticides-76, Corrosives-0, Venom-0, Drugs-0, Others-0

Nagaraju K et al. 2015[77]	2169	21-40	1.7	South	Pesticides- 2169,Corrosives-NA,Venom-NA, Drugs-NA, Others-NA
Nair PK et al. 2015[78]	168	21-30	0.7	South	Pesticides-63, Corrosives-10,Venom-0, Drugs-73,Others-22
Nayak GH et al. 2015[79]	138	21-30	2.5	South	Pesticides-114, Corrosives-0, Venom-0, Drugs-12, Others-12
Panda BB et al. 2015[80]	78	21-30	1.4	East	Pesticides-30, Corrosives-0, Venom-15, Drugs-18, Others-15
Parekh U et al. 2019[81]	1092	21-30	1.5	West	Pesticides-443, Corrosives-76, Venom-376, Drugs-55, Others-142
Pate RS et al. 2017[82]	318	21-30	1.8	West	Pesticides-222, Corrosives-9, Venom-30, Drugs-28, Others-29
Patel DJ et al. 2011[83]	288	21-30	1.3	Central	Pesticides-288, Corrosives-0, Venom-0, Drugs-0, Others-0
Patel N et al. 2014[84]	126	21-30	1.6	Central	Pesticides-91, Corrosives-2, Venom-0, Drugs-6, Others-27
Patil A et al. 2014[85]	74	20-29	1.1	West	Pesticides-11, Corrosives-22, Venom-9, Drugs-10, Others-22
Patnaik AMM et al. 2016[86]	100	NA	1.86	South	Pesticides-77, Corrosives-5, Venom-0, Drugs-4, Others-14
Pawar CK et al. 2017[87]	201	21-30	3.67	North	Pesticides-191,Corrosives-2, Venom-0, Drugs-8, Others-0
Pawar V et al. 2011[88]	923	20-29	1.4	West	Pesticides-441, Corrosives-26, Venom-4, Drugs-157, Others-295
Peranantham S et al. 2014[89]	110	21-30	3.1	South	Pesticides-43, Corrosives-0, Venom-0, Drugs-0, Others-67

Peshin SS et al. 2014[90]	4929	18-35	1.6	North	Pesticides-4929, Corrosives-NA, Venom-NA, Drugs-NA, Others-NA
Prajapati T et al. 2013[91]	366	21-30	2.4	West	Pesticides-124, Corrosives-53, Venom-0, Drugs-56, Others-133
Prashar A et al. 2018[92]	375	21-30	3.2	North	Pesticides-361, Corrosives-NA, Venom-NA, Drugs-NA, Others-14
Prayag A et al. 2016[93]	110	18-28	1.68	South	Pesticides-106, Corrosives-0, Venom-0, Drugs-2, Others-2
Raizada A et al. 2012[94]	584	20-30	2.5	North	Pesticides-185, Corrosives-15, Venom-0, Drugs-149, Others-235
Rajanandh M. G et al. 2013[95]	224	21-35	1.1	South	Pesticides-55, Corrosives-0, Venom-29, Drugs-40, Others-100
Rajanandh M. G et al. 2014[96]	261	21-35	1.35	South	Pesticides-88, Corrosives-0, Venom-32, Drugs-50, Others-91
Rajesh JJ et al. 2016[97]	12	20-29	5	South	Pesticides-12, Corrosives-0, Venom-0, Drugs-0, Others-0
Ram P et al. 2014[98]	81	1-15	1.02	South	Pesticides-31, Corrosives-12, Venom-0, Drugs-6, Others-32
Ramanath KV et al. 2012[99]	73	21-40	1.7	South	Pesticides-48, Corrosives-1, Venom-10, Drugs-4, Others-10
Rathore S et al. 2013[100]	100	1-15	2.3	Central	Pesticides-12, Corrosives-0, Venom-31, Drugs-0, Others-57
Roy MP et al. 2017[101]	195	0-12	1.7	North	Pesticides-35, Corrosives-31, Venom-0, Drugs-34, Others-95
S Shah et al. 2018[102]	60	21-40	3.5	West	Pesticides-23, Corrosives-8, Venom-22, Drugs-2, Others-5

Saikia D et al. 2020[103]	153	0-12	1.86	Central	Pesticides-28, Corrosives-50, Venom-0, Drugs-17, Others-58
Sandhu SS et al. 2010[104]	78	21-30	2.9	North	Pesticides-67, Corrosives-0, Venom-0, Drugs-5, Others-6
Sandhu SS et al. 2010[105]	131	21-30	3.1	North	Pesticides-55, Corrosives-0, Venom-0, Drugs-5, Others-71
Sangalad PN et al. 2010[106]	39	41-50	3.9	South	Pesticides-27, Corrosives-0, Venom-0, Drugs-11, Others-1
Santosh KS et al. 2013[107]	261	21-35	1.35	South	Pesticides-47, Corrosives-0, Venom-55, Drugs-23, Others-136
Sarkar AP et al. 2015[108]	222	20-29	0.96	East	Pesticides-132, Corrosives-0, Venom-0, Drugs-28, Others-62
Saxena V et al. 2014[109]	105	21-30	1.2	Central	Pesticides-64, Corrosives-7, Venom-0, Drugs-11, Others-23
Shah SM et al. 2016[110]	340	21-30	1.74	West	Pesticides-133, Corrosives-19, Venom-88, Drugs-16, Others-84
Shakuntala et al. 2015[111]	1575	21-30	2.5	South	Pesticides-1477, Corrosives-0, Venom-0, Drugs-0, Others-98
Sharma J et al. 2014[112]	165	1-18	1.2	North	Pesticides-63, Corrosives-5, Venom-21, Drugs-21, Others-55
Sharma R et al. 2019[113]	505	21-30	1.4	Central	Pesticides-310, Corrosives-21, Venom-59, Drugs-28, Others-87
Siddamshetty AK et al. 2016[114]	971	21-30	2.1	North	Pesticides-196, Corrosives-92, Venom-0, Drugs-102, Others-581
Siddapur RK et al. 2011[115]	228	21-30	2.3	South	Pesticides-205, Corrosives-0, Venom-13, Drugs-10, Others-0

Singh B et al. 2017[116]	180	15-29	1.2	East	Pesticides-170, Corrosives-0, Venom-0, Drugs-4, Others-6
Singh J et al. 2015[117]	178	21-30	1.28	Central	Pesticides-114, Corrosives-7, Venom-8, Drugs-5, Others-44
Singh O et al. 2011[118]	138	21-30	1.02	North	Pesticides-6, Corrosives-0, Venom-0, Drugs-102, Others-30
Singh RR et al. 2016[119]	140	21-30	1.6	Central	Pesticides-101, Corrosives-1, Venom-0, Drugs-19, Others-19
Singh SP et al. 2013[120]	110	20-30	2.67	North	Pesticides-110, Corrosives-0, Venom-0, Drugs-0, Others-0
Sonar V et al. 2010[121]	320	21-30	2.7	West	Pesticides-320, Corrosives-0, Venom-0, Drugs-0, Others-0
Srihari C et al. 2017[122]	317	15-24	0.8	South	Pesticides-157, Corrosives-30, Venom-0, Drugs-96, Others-34
Srinivasa V et al. 2012[123]	81	21-30	2.5	South	Pesticides-68, Corrosives-3, Venom-0, Drugs-5, Others-5
Srinivasulu K et al. 2019[124]	100	21-40	1.6	South	Pesticides-60, Corrosives-10, Venom-0, Drugs-12, Others-18
Thakur S et al. 2017[125]	110	21-30	0.8	East	Pesticides-41, Corrosives-12, Venom-8, Drugs-24, Others-25
Thunga G et al. 2010[126]	100	21-30	2.1	South	Pesticides-100, Corrosives-0, Venom-0, Drugs-0, Others-0
Vaidya YP et al. 2012[127]	1003	21-30	1.8	West	Pesticides-400, Corrosives-0, Venom-350, Drugs-143, Others-110
Vanishree et al. 2016[128]	384	21-30	2.2	South	Pesticides-241, Corrosives-10, Venom-70, Drugs-55, Others-8

Varma NM et al. 2011[129]	143	21-30	1.86	West	Pesticides-81, Corrosives-0, Venom-21, Drugs-0, Others-41
Verma P et al. 2018[130]	120	21-30	1.66	Central	Pesticides-90, Corrosives-0, Venom-0, Drugs-0, Others-30
Vivekanandan K et al. 2012[131]	232	16-30	1.5	South	Pesticides-110, Corrosives-0, Venom-0, Drugs-54, Others-68
Waghmare CS et al. 2014[132]	110	NA	NA	Central	Pesticides-110, Corrosives-0, Venom-0, Drugs-0, Others-0
Waghmare S et al. 2014[133]	70	21-30	2.3	West	Pesticides-26, Corrosives-5, Venom-1, Drugs-19, Others-19
Yadav VK et al. 2018[134]	1622	22-32	1.2	Central	Pesticides-716, Corrosives-12, Venom-0, Drugs-137, Others-757

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Supplementary Table S1b: List of Poisons consumed in the included studies

Classification of poison consumed in our study				
Pesticides	**Corrosives**	**Venom**	**Drugs**	**Miscellaneous**
Organophosphates: Chlorpyriphos, Dimethoate, Malathion, Monocrotophos, Parathion, Quinolphos, Phorate **Organochlorines:** Endosulphan. Lindale, DDT Carbamates-Aldicarb, Aminocarb, Propoxur **Rodenticides:** Aluminium Phosphide, Zinc Phosphide, Bromodialone Pyrethroids- Cypermethrine, Imidacloprid, Transfluthrine, Prallenthrine **Herbicides:** Paraquat, Pretilachor	**Acids-** Mineral-Boric Acid, Sulphuric Acid, Hydrochloric Acid, Nitric acid Organic-Carbolic acid (phenol) **Alkalis**-Sodium Hydroxide (Caustic soda), Button Battery Ingestion	**Snake Bite** (Cobra, Krait, Russel's Viper, Saw scaled Viper), **Scorpion stings**, **Spider bite, Hymenoptera stings** (Ants, Bees, Wasps)	**Alcohol**- Ethyl Alcohol, Methanol **Pharmacologic Active Ingredient:** Agents-Analgesics, Antidepressants, Antiepileptic, Antiretroviral drugs, Anti-tuberculosis, Antipsychotics, Anti-hypertensives, Barbiturates, Benzodiazepines, Beta blockers, Calcium channel blockers, Salicylates, Ointments, Opioids, Paracetamol, Diazepam, NSAIDs, Narcotics, Alprazolam, Chloroquine, Sedative overdose,	**Hydrocarbons**-Petrol, Diesel, Kerosene **Plant Origin**- Castor Oil, Cannabis Indica, Bhang, Opium, Dhatura, Oleander, Tobacco, Jatropha Curcas, Food Poisoning Inorganic Irritants-Copper Sulphate, Iron, Mercury, Lithium, Lead, EDTA, Potassium Permanganate **Industrial Chemical**-Aniline dyes, Cyanide, Toxic Fumes, Dettol, Disinfectant, House cleaner, Detergents Hair dye, Herbal, Thinner Turpentine Oil Unknown Chemical analysis report awaited.

Fumigants-Camphor, Naphthalene, Nitrobenzene			Amlodipine+Atenolol, Haloperidol, Valproate, Ibuprofen, Phenytoin, Thyroxine and Ear Drops	

PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	3-4
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	5
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	5
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	4/6
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	6
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	6
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	6
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	6
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	6
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	6
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	-
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	7
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	7

PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	-
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	-
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	9
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	9, Table 1 and Table 1S
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	-
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	9-11
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	9-11
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	-
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	-
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	12-
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	15
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	15
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	16

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

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